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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Luz G. Chan Registration Manager Drexel Chemical Company P.O. Box 13327 Memphis, TN 38113-0327 APR 1 2010

Subject: Label Notification(s) for Pesticide Registration Notice 98-10 and 2007-4

Dear Ms. Chan:

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notice (PRN) 2007-4 and 98-10 dated March 16, 2010 for:

EPA Registration 19713-579
EPA Registration 19713-615
EPA Registration 19713-614
Drexel Pendiguard Turf 0.86%
Drexel Pendiguard Turf 0.75%

The Registration Division (RD) has conducted a review of this request for applicability under PR Notice 2007-4 and 98-10 and finds that the label changes requested falls within the scope of PR Notice 2007-4 and 98-10. The label has been date-stamped "Notification" and will be placed in our records.

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

If you have any questions, please contact me directly at 703-305-6249 or Nicole Williams of my staff at 703-308-5551.

Sincerely,

Linda Arrington

Notifications & Minor Formulations Team Leader Registration Division (7505P)

Office of Pesticide Programs

Please read instructions on reverse before comp g for	rm. Form Approve	)MB No. 2070-0060, Approval expires 2	-28-95	
United Environmental Pro	States tection Agency	Registration Amendment Other		
Арр	lication for Pesticide - Section I			
1. Company/Product Number 19713-615	2. EPA Product Manager JIM TOMPKINS	3. Proposed Classification  None Restriction		
4. Company/Product (Name) DREXEL PENDIGUARD TURF 0.86%	PM# 25/Herbicide Branch	A Mouse Leasting	Clea	
5. Name and Address of Applicant (Include ZIP Code)  Drexel Chemical Company P.O. Box 13327  Memphis, TN 38113-0327  Check if this is a new address  6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No.  Product Name				
	Section - II			
Amendment - Explain below.  Resubmission in response to Agency letter dated Me Too" Application.  Notification - Explain below.  Other - Explain below.  Explanation: Use additional page(s) if necessary. (For section I and Section II.)  Submission of revised label. Details are in the cover letter accompanying this submission.  Thank you.				
	Section - III		<u> </u>	
1. Material This Product Will Be Packaged In:				
	Water Soluble Packaging  Yes  No  Per If "Yes"  No. per container	2. Type of Container  Metal Plastic Glass Paper Other (Specify) Polywoven by	bag	
3. Location of Net Contents Information 4. Siz	te(s) Retail Container 5. Loc 10, 25, 50, 2000 LBS.	ation of Label Directions On the label		
6. Manner in Which Label is Affixed to Product	Lithograph Other Paper glued Stenciled	0000		
Section - IV				
1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this epplication.)				
Name LUZ G CHAN	Title REGISTRATION MANAGER	ို Velleghone No. (Include Area Co (901) 774-4870 ့ိ	ode)	
Certification  I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete.  I acknowledge that any knowlingly false or misleading statement may be punishable by fine or imprisonment of the control of the c				
2. Signature CuzCo. Chan 2010.03.16	3. Title REGISTRATION MANAGER			
4. Typed Name LUZ G CHAN	5. Date March 16, 2010	-		



March 16, 2010

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
Rm S-4900, One Potomac Yard
2777 S Crystal Drive
Arlington, VA 22202

Re: Submission of Revised Label per PR Notice 98-10 and PR Notice 2007-4
DREXEL PENDIGUARD TURF 0.86% (EPA Reg. No. 19713-615)

#### Herewith:

- 1. Completed EPA Form 8570-1
- 2. A copy of the label (615SP-0310\*) with the following changes:
  - i) Under the ingredient statement, the spelling was corrected to "Nitrogen"
  - ii) On page 2, under 'Broadleaved Weeds', the spelling was corrected to "Trifolium".
  - iii) On page 3, "Poa annua" was italicized.
  - iv) On page 4, under 'Trees' the spelling was corrected to "Populus'.

Also, under "Wildflowers", the first statement "This product herbicide... listed on the label" was restated to read "This product...... listed on the label".

- v) Per PR Notice 2007-4, under 'Container Disposal', 'this product only' was changed to 'pesticide only' for 'Refillable Containers'.
- vi). The trademark ownership statement was updated:

The changes were highlighted

3. Certification Statements

If you have questions/clarification regarding this submission, I can be reached at (901) 774-4390 or e-mail Lchan@drexchem.com. Thank you.

Respectfully yours FOR DREXEL CHEMICAL COMPANY Crog Goldon Luz G Chan Registration Manager



NOTIFICATION APR 1 - 2010

# Pendiguard Turf 0.86% Preemergent Weed Control

0.86% Pendimethalin + XX-XX-XX Fertilizer

FOR USE ON TURFGRASSES, ORNAMENTAL PLANTINGS. AND GROUND COVERS AS LISTED.

#### **ACTIVE INGREDIENT:**

Pendimethalin: N-(1-ethylpropyl)-3,4-dimethyl-	
2,6-dinitrobenzenamine	0.86%
OTHER INGREDIENTS:	99.14%
TOTAL:	
(50 pounds of this product contains 0.43 pound of the active	ingredient,
Pendimethalin)	

#### XX-XX-XX

GUARANTEED ANALYSIS:	
Total Nitrogen (N)	xx.xx%
xx.xx% Ammoniacal Nitrogen	
xx.xx% Urea Nitrogen	
Available Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )	xx.xx%
Soluble Potash (K <sub>2</sub> O)	xx.xx%
Sulfur (S), Free	xx.xx%
Derived from: (materials will vary with fertilizer blend	<b>d</b> )
Chlorine (CI) Not More Than	xx.xx%

## **KEEP OUT OF REACH OF CHILDREN** CAUTION

See FIRST AID Below

EPA Reg. No. 19713-615 EPA Est. No. 19713-XX-XXX

**Net Content:** 

#### **FIRST AID**

#### IF SWALLOWED:

- · Call a poison control center or doctor immediately for treatment
- · Have person sip a glass of water if able to swallow.
- · Do not induce vomiting unless told to do so by a poison control center or doctor.
- · Do not give anything by mouth to an unconscious or convulsing

#### IF ON SKIN OR CLOTHING:

- · Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 20 minutes.
- · Call a poison control center or doctor for treatment advice.

#### IF IN EYES:

- · Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
- · Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- · Call a poison control center or doctor for treatment advice.

#### IF INHALED:

- · Move person to fresh air.
- · If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

(Continued)

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

FOR CHEMICAL SPILL, LEAK, FIRE OR EXPOSURE CALL CHEMTREC: 1-800-424-9300

#### PRECAUTIONARY STATEMENTS

**Hazards to Humans and Domestic Animals** 

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

Personal Protective Equipment (PPE): Some materials that are chemical-resistant to this product are any waterproof material (refer to Category A on an EPA chemical-resistance selection chart).

Applicators and other handlers must wear: Long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, shoes plus socks, and protective eyewear.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **USER SAFETY RECOMMENDATIONS**

Users should: 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) 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 or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Do not contaminate water when disposing of equipment washwater.

#### **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 possession of fife applicator at the time of pesticide application.

persons, either directly or through drift. Only protected handlers may be in the area during application. Keep children and pets out of the treated area until dusts have settled. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. 000000



Do not apply this product in greenhouses adehouses or other enclosed structures. Not for use in commercial seed production. Do not apply this product through any type of irrigation system.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, 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 (REI). The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the REI of 24 hours.

PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil or water is: Coveralls, chemical-resistant gloves made of any waterproof material, and shoes plus socks.

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to use of this product that are not within the scope of the WPS 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 the precautions on this label may result in poor weed control, crop injury, or illegal residues.

#### **USE INFORMATION**

PENDIGUARD TURF 0.86% is a combination preemergent herbicide with fertilizer formulated to provide control of most annual grass weeds and certain broadleaf weeds found in Turfgrass grown in golf courses, lawns in residential, commercial establishments, or grounds around military or other institutions, sod farms, parks, airports, school or cemeteries, prairiegrass areas, athletic fields or recreational areas, roadsides, pipe yards, industrial, unimproved Turf areas, and other sites where Turf may be maintained. This product is labeled for use on the following Turfgrass species: Kentucky bluegrass, Perennial ryegrass, Fine fescue, Tall fescue, Bentgrass (except putting greens and tees), Poa annua (except putting greens and tees), Bermudagrass, St. Augustinegrass, Bahiagrass, Centipedegrass, Zoysiagrass, and blends of these grasses.

This product controls weeds as their seeds germinate, but will not control established weeds. Use a postemergent herbicide, such as 2,4-D or MSMA, to control established weeds. Consult all herbicide label directions for proper use and precautions.

Applied according to label directions and under normal growing conditions, this product will not cause Turf injury. Over application can result in Turf stand loss, Turf injury, or soil residues. Uneven application can decrease weed control or cause Turf injury.

Seedling diseases, cold weather, excessive moisture, high soil pH, soil salt concentration, or drought can weaken Turfgrass and increase the possibility of Turf damage from this product.

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.

This product can be used around established Ornamentals and in established Wildflower plantings. This product may be used for hardwood and conifer regeneration on conservation reserve program land.

#### **APPLICATION**

Apply this product uniformly at the listed rate using a properly calibrated spreader (see table below for approximate settings). Avoid overlaps that will increase rates above those listed. The efficacy of this product will be improved if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. This will remove the product from the Turfgrass foliage and establish a preemergent herbicide barrier in the soil. If this product is not activated by rainfall or irrigation within 30 days of application, erratic weed control may result. Avoid contact of this product with porous surfaces such as driveways, stone, or wood. Removing particles will help prevent staining.

This product provides amergence control of the weed species listed. Applications can made around and over the top of the Ornamentals and to the sites listed on this label.

Use Site	This Product/A (Lbs.)	This Product/ 1,000 sq. ft. (Lbs.)	Pounds a.i./A
Residential* and Sod farm turf	233	5.3	2.0
Golf course, Commercial and other Non-residential	349	8.0	3.0

#### **TABLE OF EQUIVALENTS:**

This Product Per Acre (Lbs.)	This Product Per 1,000 Sq. Ft. (Lbs.)	
116	2.6	
175	4.0	
233	5.3	
349	8.0	

GRASS WEEDS		
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	Erochloa villosa	

BROADLEAVED WEEDS		
Common Name	Scientific Name	
Burweed, Lawn	Soliva pterospenna	
Carpetweed	Mollugo verticillata	
Chickweed, Common	Stellaria media	
Chickweed, Mouseear	Cerastium vulgatum	
Clover, Hop	Trifolium procumbens <sub>c</sub>	
Cudweed	Gnaphalium spβ. °	
Evening primrose	Oenothera biennis	
Fiddleneck	Amsinckia intermedia 🖔	
Filaree	Erodium spp. °° °°	
Henbit	ยูลภาพูภิศูamplexicaนโอ	
Knotweed, prostrate	Polygorum aviculare	
Kochia	Kechia scoparia	
Lambsquarters	Chenopodium album ം	
Pigweed	Amaranthus spp. ° ° °	
Puncturevine	Tribulusterrestris Portulaca oleracea	
Pursiane	Portulaca oleracea	
Pusley, Florida	Richardia scabrล็ออออิอ	
Rocket, London	Sisymbrium irio°	
Shepherdspurse	Capsella bursa-pastoris	
Smartweed, Pennsylvania	Polygonum pensylvanicum	
Speedwell, Corn	Veronica arvensis	
Spurge, Annual	Euphorbia spp.	
Spurge, Prostrate	Euphorbia numistrata	
Woodsorrei, Yellow	Oxalis stricta	
Velvetleaf (Buttonweed)	Abutilon theophrasti	

(Residential, Golf course, Commercial, Other Non-residential Turfgrass Uses) For Preemergence Weed Control

TURFGRASS	WEEDS	APPLICATION	COMMENTS
SPECIES	CONTROLLED	RATES*	COMMENTS
Cool Season Grasses Kentucky bluegrass Perennial ryegrass Fine fescue Tall fescue	Crabgrass Foxtail Poa annua Barnyardgrass Fall panicum Oxalis Prostrate spurge Purslane Knotweed Evening primrose Hop clover	All Turf Uses: 175 to 233 pounds per acre as the initial application prior to weed germination in the Spring.	Apply a repeat application of 116 to 175 pounds per acre after 5 to 8 weeks for extended control or where heavy weed infestations are expected.
	Goosegrass	Residential** and Sod Turf Uses Only: 175 to 233 pounds per acre in the Spring prior to weed germination.	Apply a repeat application of 116 pounds per acre after 5 to 8 weeks if the lower rate was used initially or for extended Goosegrass control.
	Goosegrass	Golf course, Commercial, Non-residen- tial Turf Uses Only: 175 to 349 pounds per acre in the Spring prior to weed germination.	Apply a repeat application of 116 pounds per acre after 5 to 8 weeks if the lower rate was used initially or for extended Goosegrass control.
	Cudweed Poa annua Chickweed Lawn burweed Henbit Corn speedwell	All Turf Uses: 175 to 233 pounds per acre.	Apply in late Summer or early Fall prior to weed germination. Apply a repeat application of 175 to 233 pounds per acre after 5 to 8 weeks for extended Poa annua control.
Bentgrass or established Poa annua*** (one-half inch height or taller. Not for use on greens and tees.)	Crabgrass Foxtail Poa annua Barnyardgrass Fall panicum Oxalis Prostrate spurge Purslane Knotweed Evening primrose Hop clover	All Turf Uses (Non-Greens and Tees): 175 pounds per acre in the Spring prior to weed germination.	Apply a repeat application of 116 to 175 pounds per acre after 5 to 8 weeks where heavy weed infestations are expected.  (Continued)

(Cont.)	(	······································	
TURFGRASS SPECIES	WEEDS CONTROLLED	APPLICATION RATES*	COMMENTS
Bentgrass or established Poa annua*** (one-half inch height or taller. Not for use on greens and tees.) (Cont.)	Goosegrass	All Turf Uses (Non-Greens and Tees): 175 pounds per acre.	Apply in the Spring prior to weed germination. Apply a repeat application of 175 pounds per acre after 5 to 8 weeks for extended control.
	Cudweed Poa annua Chickweed Lawn burweed Henbit Corn speedwell	All Turf Uses (Non-Greens and Tees): 175 to 233 pounds per acre.	Apply in late Summer or early Fall prior to weed germination.
Warm Season Grasses Bermuda- grass St. Augustine- grass Bahiagrass Centipede- grass Zoysiagrass Tall fescue Buffalograss	Crabgrass Foxtail Poa annua Barnyardgrass Fall panicum Oxalis Prostrate spurge Purslane Knotweed Evening primrose Hop clover	Residential and Sod Farm Turf Uses Only: 175 to 233 pounds per acre prior to weed germination in the Spring.  Golf course, Commercial and Other Non-Residential Turf Uses Only: 175 to 349 pounds per acre in the Spring prior to weed germination.	Apply a repeat application of 116 to 175 pounds per acre after 5 to 8 weeks if necessary.
	Goosegrass	All Turf Uses (Non-Greens and Tees): 175 pounds per acre prior to weed germination in the Spring.	An additional application of 175 pounds per acre may be applied for extended Goosegrass control 8 weeks after the second application. Apply a repeat application of 175 to 233 pounds per acre after 5 to 8 weeks.
	Cudweed Henbit Poa annua Chickweed Lawn burweed Corn speedwell		Apply in late Summer or early Fall prior to weed germination. Apply a repeat application of 175 to 233 pounds per acre after 5 to 8 weeks for extended Pog annua control.

\* DO NOT exceed a maximum rate of 233 pounds per acre percapplication for use on Residential Turfgrass and Sod farm Turfgrass. DO NOT exceed a maximum rate of 349 pounds per acre per application for use on Golf course, Turfgrass, Commercial or other Non-residential

\*\*\* Not for use on Bentgrass or Poa annua greens or tees.



Turfgrass.

\*\* Residential is defined as Turf in any residential situation as well as home lawns, schools, parks and playgrounds.

#### **USE PRECAUTIONS**

- · Avoid application when wind conditions may cause drift.
- Use on well established Turfgrass with a dense and uniform stand.
   On newly planted areas, applications should not be made until the Turfgrass has filled in and has been mowed at least four times. On Turf that has been thinned or damaged due to Winter injury, excessive moisture, etc., allow for Turf recovery prior to making an application.
- Applications made to overseeded warm-season Turfgrasses may cause thinning or injury of the overseeded species.
- Do not use on Bentgrass or Poa annua greens and tees or injury may occur.
- Delay reseeding or Winter overseeding of treated Turfgrass for at least three (3) months following the last application of this product.
   Delay sprigging Turfgrass for five (5) months after application.

#### **INDUSTRIAL (UNIMPROVED) TURF**

Industrial, or unimproved Turf areas often have a different spectrum of weeds to be controlled than those found in fine Turf as described elsewhere in this label. This product will control Annual grasses and Broadleaved weeds mentioned in that section of this label as well as the following weeds that might germinate in established grasses in rights-of-way, roadsides, construction sites, parks, substations, lots, or similar areas:

Crowfootgrass, Itchgrass, Johnsongrass (from seed), Junglerice, Lovegrass (from seed), Browntop Panicum, Texas Panicum, Field Sandbur, Signalgrass, Mexican Sprangletop, Red Sprangletop, Witchgrass, Woolly Cupgrass, Carpetweed, Fiddleneck, Filaree, Kochia, Lambsquarters, Pigweed, Puncturevine, Florida Pusley, London Rocket, Shepherdspurse, Pennsylvania Smartweed, Annual Spurge, and Velvetleaf. Apply before weeds germinate. A postemergence herbicide such as 2,4-D, MSMA, or similar product is recommended to control established weeds.

#### LANDSCAPE AND GROUNDS MAINTENANCE

This product can be incorporated into landscape and ground maintenance programs to provide extended preemergence control of most annual grasses and certain broadleaved weeds. Areas to be treated include but are limited to established trees or Ornamentals in the landscape or in mulch beds; or, other commercially maintained landscape areas such as borders, around statuary or monuments in parks or in parking areas. If emerged weeds are present at time of application, either shallow cultivate to destroy existing weeds or, where practical, remove by hand, or apply a postemergence product labeled for such use prior to an application of this product. This product may be used before or after applications of herbicides registered for postemergence use (i.e., Glyphosate) for the control of established weeds. Do not apply sprays containing Glyphosate over the top of desirable plants. and follow the label restrictions. A treatment of this product may be followed by any registered herbicide to control weeds not listed on this product's label.

#### **ORNAMENTAL BULBS**

This product may be applied for control of susceptible annual weeds in Ornamental bulbs listed on the label (Crocus, Daffodil (Narcissus), Gladiolus, Tulip, etc.). Apply this product prior to, during or after bulb emergence. If weeds have already germinated use a labeled postemergence herbicide to control emerged weeds.

#### **WILDFLOWERS**

This product may be applied for control of susceptible annual weeds in plantings of wildflowers listed on the label (Black-eyed Susan, California Poppy, Coreopsis, Oxeye Daisy, etc.). This product may be applied to established perennial wildflowers before emergence of weeds or wildflowers. For wildflowers being established from seed, apply this product 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 this product may vary greatly. Careful testing on desirable species is recommended to determine if area-wide applications can be made.

## **ORNAMENTAL PLANTINGS AND GROUND COVER**Use Precautions

Apply this product to established plantings. May be applied around and over the top of established plants listed below. Care must be taken that soil or planting mixes have settled firmly following transplanting

and that there are no sets that would allow direct contact of this product with roots. Applied 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 Pendimethalin containing product or injury may occur.

TREES	
Common Name	Scientific Name
Alder, European Black	Alnus glutinosa
Apple	Malus spp.
Arborvitae, American Arbutus	Thuja occidentalis
Ash, Red	Arbutus spp. Fraxinus pennsylvanica
Ash, White	Fraxinus permsylvanica Fraxinus americana
Aspen, Bigtooth	Populus grandidentata
Aspen, Quaking	Populus tremuloides
Basswood	Tilia spp.
Birch, European Weeping	Betula pendula
Birch, River	Betula nigra
Buckeye, Red Cedar, White	Aesculus pavia Thuja occidentails
Chamaecyparis, Boulevard	Chamaecyparis pisifera
Cherry, Black	Prunus serotina
Cherry, Choke	Prunus virginiana
Cherry, Kwanzan	Prunus serrulata
Cherry, Nanking	Prunus tomentosa
Cottonwood	Populus deltoides
Crabapple Crapa Murtin	Malus spp.
Crepe Myrtle Cryptomeria, Japanese Cedar	Lagerstroemia indica Cryptomeria japonica
Cypress, Bald	Taxodium distichum
Cypress, Leyland	Cupressocyparis leylandii
Dogwood, Flowering	Cornus florida
Dogwood, Korean	Cornus kousa
Dogwood, Silky	Cornus amomum
Dogwood, Shrub Elm	Cornus spp.
Fir, Balsam	Ulmus japonica 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 Haw, Black	Nyssa sylvatica
Hawthorn	Viburnum prunifolium Crataegus spp.
Hemlock, Canada	Tsuga canadensis
Hemlock, Eastern	Tsuga canadensis
Holly, American	llex opaca
Honeylocust	Gleditsia triacanthos
Lilac, Common	Syringa vulgaris
Lilac, Japanese Tree	Syringa reticulata
Linden Magnolia, Saucer	Tilia spp. Magnolia soulangiana
Magnolia, Southern	Magnolia grandiflora
Magnolia, Star	Magnolia stellata
Maidenhair Tree	Ginkgo biloba
Maple, Paper-bark	Acer griseum c c c c
Maple, Norway	Acer platanoides c c c
Maple, Japanese	Acerepalmatum o
Maple, Red	Acer rubrum c
Maple, Sugar Nannyberry, Rusty	Ager sagcharurti cooo oo
Oak, Chinquapin	Viburูกูเกา rufidulum Quercus muehlenbergii
Oak, Live	Quercus virginiana
Oak, Pin	ପ୍ରିଧିନିଟ୍ରିଓ palustris ୍ଦ
Oak, Red	Quercus rubra coccoo
Oak, Swamp Chestnut	Quercus michaŭxii
Oak, Water	Quercus nigra
Oak, White	Quercus aiba occo
· ·	
Oak, Willow	Quercus phellos
Oak, Willow Olive	Olea europaea
Oak, Willow	· ·

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TREES	
Common Name	Scientino Name
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
Sequoia, Giant	Sequoiadendron giganteum
Serviceberry	Arnelanchier 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
Sycamore	Plantanus occidentalis
Trachycarpus	Trachycarpus spp.
Tulip tree	Liriodendron tulipifera
Walnut, Black	Juglans nigra
Willow, Weeping	Salix babylonica
Yellowwood	Cladrastis lutea

rellowwood	Claurasiis lutea	
SHRUBS		
Common Name	Scientific Name	
Abelia, Glossy	Abelia grandiflora	
Aucuba, Gold	Aucuba japonica	
Azalea	Rhododendron spp.	
Bamboo, Heavenly	Nandina domestica	
Barberry	Berberis gladwynesis	
Barberry, Japanese	Berberis thunbergii	
Blue Indigo Bush	Dalea gregii	
Bottlebrush, Lemon	Callistemon citrinus	
Boxwood, Common	Buxus sempervirens	
Boxwood, Japanese	Buxus microphylla	
Brittlebush	Encelia farinosa	
Buttonbush	Cephalanthus occidentalis	
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	

(Continued)

SHRUBS	
Common Name	Scientific Name
Holly, Japanese	llex crenata
Holly, Fosters	Ilex attenuata 'Fosteri'
Holly, Savannah Holly, Yaupon	llex attenuata llex vomitoria
Honeysuckle, Bush	Diervilla Ionicera
Hopseed Bush	Dodonaea viscosa
Hopbush	Dodonaea viscosa
Hydrangea	Hydrangea macrophylla
Juniper Juniper, Chinese	Juniperus spp.
Juniper, Shore	Juniperus chinesis v. pfitzer Juniperus conferta
Juniper, Trailing	Juniperus horizontalis
Laurel, Cherry	Prunus laurocerasus
Laurel, Mountain	Kalmia latifolia
Laurel, Otto Luyken	Prunus laurocerasus
Laurel, Schipka Laurustinus	Prunus schipkanesis   Viburnum tinus
Lavender, English	Lavandula angustifolia
Leucothoe	Leucothoe fontanesiana
Leucothoe, Coast	Leucothoe axillaris
Lilac, Cut-leaf	Syringa laciniata
Lily-of-the-Nile Mahonia	Agapanthus africanus Mahonia aquifolium
Mock Orange	Pittosporum tobira
Myrtle, Compact	Myrtus communis
Myrtle, Wax	Myrica cerifera
Nandina	Nandina domestica
Oleander Oregon Grape	Nerium oleander
Osmanthus	Mahonia aquifolium Osmanthus fragrans
Palm, European Fan	Chamaerops humilis
Palm, Mediterranean Fan	Chamaerops spp.
Phlox, Prickly	Leptodactylon californicum
Photinia, Fraser Pieris, Japanese	Photinia x Fraseri
Pine, Mugo	Pieris japonica Pinus mugo
Plum, Natal	Carissa grandiflora
Privet, California	Ligustrum ovalifolium
Privet, Glossy	Ligustrum lucidum
Privet, Variegated Privet, Waxleaf	Ligustrum sinensis Ligustrum japonicum
Pyracantha	Pyracantha coccinea
Quince, Flowering	Chaenomeles japonica
Ranger, Texas	Leucophyllum frutescens
Redroot	Ceanothus spp.
Rhododendron Robira	Rhododendron spp.
Rose	Pittosporum tobira   Rosa spp.
Spice Plant	Illicium parviflorum
Spiraea	Spiraea vanhouttei
Spiraea, Anthony Waterer	Spiraea x bumalda
Spiraea, Japanese	Spiraea joponica
Sweet Bay Trumpet Bush	Laurus nobilis Tecoma stans
Verbena, Lemon	Aloysia triphylla oooo o
Viburnum	Viburnum susperรมกา
Vitex	Vites spp.
Weigela	Weigela florida coco
Wild Lilac Wisteria	Çeanothus spp.     Wisteria spp.
Xylosma	Xylosma congection co
Yellowbells	Tecomastans
Yew	Taxus media
Yew, Japanese	ฯัลxัยระบุรpidata
Yew, Southern Yucca, Adam's Needle	Podeoarpus macrophyllus Yucca filamentesa
Yucca, Weeping	Yucca pendula c c c c c c c c c c c c c c c c c c c
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GROUND	COV
Common Name	Scientine 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
Dymondia	Dymondia margaretae
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
Morninglory	Convolvulus spp.
Myoporum	Myoporum parviflolium
Pachysandra	Pachysandra terminalis
Potentilla	Potentilla fruticosa
Periwinkle, Common	Vinca minor
Red Apple	Aptenia cordifolia
Rosemary	Rosemarinus officinalis
Rose-Of-Sharon	Hypericum calycinum
Sand Strawberry	Fragaria chiloensis
Sedum	Sedum spurium
St. Johnswort, Creeping	Hypericum calycinum
Stonecrop	Sedum spurium
Verbena, Peruvian	Verbena peruviana
Vervain	Verbena peruviana
Vetch, Crown	Vicia sativa
Vinca or Greater Periwinkle	Vinca major
Wintercreeper	Euonymous fortunei

PERENNIALS		
Common Name	Scientific Name	
Acacia	Acacia redolens	
Asparagus	Asparagus spp.	
Aster, New York	Aster novi-belgii	
Aster, Stokes	Stokesia laevis	
Astilibe (False Spirea)	Astibe spp.	
Babys Breath	Gypsophila elegans	
Beard-Tongue	Penstemon spp.	
Beliflower	Campanula spp.	
Bird of Paradise	Caesalpinia pulcherrima	
Black-eyed Susan	Rudbeckia hirta	
Blanket Flower	Gaillardia x grandiflora	
Bleeding Heart	Dicentra spectabilis	
Butterfly Weed	Asclepias tuberosa	
California Poppy	Eschscholzia california	
Calla Lily	Zantedeschia aethiopica	
Canna, Common Garden	Canna generalis 'Lucifer'	
Carex	Carex spp.	
Cast Iron Plant	Aspidistra elatior	
Chincherinchee	Ornithogalum thyrsoides	
Clover, Crimson	Trifolium incarnatum	
Columbine	Aquilegia 'McKana Giant'	
Coreopsis	Coreopsis lanceolata	
Crinum Lily	Crinum spp.	
Crocus	Crocus spp.	
Daffodil	Narcissus spp.	
Daylily	Hemerocallis spp.	
False dragonhead	Physostegia virginiana	
Fairy Duster	Calliandra eriophylla	
Fern, Asparagus	Asparagus officinalis	
Fern, Tree	Asparagus virgatus	
Fern, Boston	Nephrolepis exaltata	
Fern, Leatherleaf*	Rumohra adiantiformis	
Fortnight Lily	Moraea spp.	
Foxglove, Common	Digitalis purpurea	
Freesia	Freesia x hybrida	
Freesia	, roodia k nyanaa	

( 'ERENNIALS		
Common Name	Scientific Name	
Fushcia, Arizona	Zauschneria californica	
Gayfeather	Liatris spp.	
Gaillardia	Gaillardia pulchella	
Geum	Geum spp.	
Gladiolus	Gladiolus spp.	
Heather, Dwarf	Calluna vulgaris	
Hosta	Hosta spp.	
Hyssop, Sunset	Agastache rupestris	
Indian Blanket	Gaillardia pulchella	
Lantana, Weeping	Lantana montevidensis	
Leopards Bane	Doronicum cordatum	
Lily	Lilium spp.	
Liriope, Big Blue	Liriope muscari	
Liriope, Creeping	Liriope spicata	
Lirope, Variegated	Liriope muscari	
Loosestrife, Garden	Lysimachia punctata	
Moonbeam	Coreopsis verticillata	
Montbretia	Crocosmia crocosmiiflora	
Nightshade	Solanum spp.	
Orchid, Peacock	Acidanthera bicolor	
Oxeye Daisy	Chrysanthemum leucanthemum	
Peony, Chinese	Paeonia lactiflora	
Purple Coneflower	Echinacea purpurea	
Purple Loosestrife	Lythrum virgatum	
Rosemary	Rosmarinus officinalis	
Ruscus, Israeli	Ruscus hypophyllum	
Sage, Russian	Perovskia atriplicifolia	
Sedge	Carex spp.	
Shasta Daisy	Chrysanthemum x superbum	
Sweet Flag	Acorus calamus	
Tickseed	Coreopsis lanceolata	
Texas Bluebonnet	Lupinus texenis	
Tulip	Tulipa spp.	
Twinspur	Diasciascia barbaerae	
Wonder Flower	Ornithogalum thyrsoides	
Yarrow	Achillea millefolium	
Zephyr Lily	Zephyranthes spp.	

Applications of this product to immature ferns (during periods of new growth of fronds) may result in some injury.

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	

BEDDING PLANTS*	
Common Name	Scientific Name
Ageratum	Ageratum houstonianum o
Alyssum	Alyssum saxatile
Anemone, Poppy-flowered	Anemone coronaria c c c c
Artemesia	Artemesia spp.
Balloonflower	Platycoden grandiflorum
Begonia	Begonia spp o
Cabbage, Ornamental	Begănia šppo Brassica eleteacea
Caladium	Caladiulin spp.
China Aster	Callistephus chinensis 4 6 Crocosmia xcrocosmiiflora
Crocosmia, Montebretia	Crocosmia x.crocosmiiflora
Dahlia	Dahlla spβ.° °
Dianthus	Dianthus barbatus 🖰 🗸 🖒 💍
Dusty Miller	Senecio cineraria °
Gazania, Treasure Flower	Gazania rigens
Gazania, Trailing	Gazania rigens leucolacna.
Geranium	Geranium spp.
Gloxinia	Gloxinia simningia
Impatiens	Impatiens spp.
	(Continued)

BEDDING PLAN	
Common Name	Scientific Name
Kale, Ornamental	Brassica napus
Marigold, African	Tagetes erecta
Moss Rose	Portulaca grandiflora
Mum, Garden	Chrysanthemum spp.
Pansy, Garden	Viola x Wittrockiana
Periwinkle, Rose	Catharanthus roseus or Vinca rosea
Petunia	Petunia spp.
Plumosa Cockscomb	Celosia cristata
Portulaca	Portulaca grandiflora
Salvia	Salvia splendens
Snapdragon	Antirrhinum majus
Statice	Limonium spp.
Sweet William	Dianthus barbatus
Vinca or Periwinkle	Catharanthus roseus
Zinnia	Zinnia spp.

 After planting bedding plants and before applying this product, area to be treated should be watered sufficiently to pack soil around roots.

This product 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 listed rate. Treated plants should be evaluated for possible injury 1 to 2 months following treatment. To the extent consistent with applicable law, the User assumes responsibility for any crop damage or other liability when this product is used on plant species not listed on this label. Do not treat plants grown for food or feed. Do not use treated plants for food or feed.

#### STORAGE AND DISPOSAL

**PROHIBITIONS:** Do not contaminate water, food or feed by storage and disposal. Open dumping is prohibited. Do not reuse empty containers.

PESTICIDE STORAGE: Store in a clean, dry place. Reseal opened bag by folding top down and securing. Do not store above 120°F. PESTICIDE DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. CONTAINER DISPOSAL:

Nonrefillable Container (flexible-bag-all weights): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Container (rigid-fifty lbs. or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Container (rigid-greater than fifty lbs.): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Refillable Container: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full (Continued)

### STORAG (ND DISPOSAL (Cont.)

with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. For Residential/Household Use:

PESTICIDE DISPOSAL: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. **If empty,** place in trash or offer for recycling if available. **If partially filled,** call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

#### WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

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