

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

May 8, 2021

Debbie Ziehr Compliance Supervisor The Andersons Inc. P.O. Box 119 Maumee, OH 43537

Subject: Registration Review Label Mitigation for Pendimethalin Product Name: THE ANDERSONS PROPENDI DG EPA Registration Number: 9198-191 Application Date: 6/11/2018 Decision Number: 575434

Dear Ms. Ziehr:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Pendimethalin Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Srijana Shrestha by phone at 703-305-6471, or via email at Shrestha.srijana@epa.gov.

Sincerely,

2 2

Linda Arrington, Branch Chief Risk Management and Implementation Branch 4 Pesticide Re-Evaluation Division Office of Pesticide Programs

Enclosure: Stamped Label

PENDIMETHALIN Group

HERBICIDE

K1

# The Andersons ProPendi DG

- Preemergent control of many grassy and broadleaf weeds
- For use in turfgrass, ornamentals, tree plantations and noncropland areas
- Labeled for use in commercial ornamental nurseries
- Patented Dispersing Granule formula greatly reduces loss due to ball, shoe & mower pickup
- Self incorporates with irrigation or rainfall
- Uniform granules for accurate application
- DGPro<sup>®</sup> Dispersible Carrier
- Utilizes DGPro® Dispersing Granule, which disperses upon contact with moisture.
- Small particle formulation provides more particles per square inch than a large particle formulation.
- Contains DGPro carrier that "disappears" upon contact with moisture
- Labeled for use on over XXX tolerant ornamentals
- Pendimethalin 1.71%



Dispersing Granule Technology

Net Weight XX lbs. (XX kg) This product contains 0.0171 lb. of Pendimethalin per lb. of product.

#### **ACTIVE INGREDIENT:**

Pendimethalin, N-(1-Ethylpropyl)-3, 4-dimethyl-2, 6 dinitrobenzenamine	. 1.71%
INERT INGREDIENTS:	98.29%
Total	100.00%

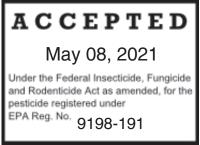
Product of USA EPA Reg. No. 9198-191 EPA Est. 9198-OH-1<u>M</u>, 9198-OH-2<u>B</u>, 9198-AL-001<u>A</u> Underlined letter is first letter used in run code on bag

The Andersons logo is a registered trademarks of The Andersons, Inc.

# KEEP OUT OF REACH OF CHILDREN CAUTION

#### PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals

CAUTION. Causes eye irritation. Avoid contact with eyes, skin or clothing. May be harmful if swallowed. Avoid inhalation.



## FIRST AID

**If swallowed**: Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If in eyes**: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contacts, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

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

**If inhaled**: 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 treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-757-8951 for emergency medical treatment information.

## **Personal Protective Equipment**

Applicators and other handlers must wear: Long-sleeved shirt and long pants, chemical resistant gloves, made of waterproof materials, such as butyl rubber>14 mils, nitirile rubber>14 mils, or neoprene rubber>14 mils, shoes plus socks.

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:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should 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.

## **Engineering Controls**

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

#### 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. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters. In case of spills, either collect for use or dispose of properly.

Non-target organism advisory statement: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize drift.

#### **Directions for Use**

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in greenhouses, Shadehouses, or other enclosed structures.

The Andersons, Inc. does not recommend or authorize the use of this product in manufacturing, processing or preparing custom blends with other products for application to turf or ornamentals.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Do not contaminate feed or foodstuffs. Do not graze treated areas. Do not feed clippings to livestock.

## WEED RESISTANCE MANAGEMENT

For resistance management, this product is a Group K1 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group K1 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same area. Appropriate resistance management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

- Rotate the use of this product or other Group K1 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and that considers mechanical control methods, cultural (e.g. timing to favor the desirable plants and not the weed), biological (weed-competitive varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include:
  - (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
  - (2) a spreading patch of non-controlled plants of a particular weed species;
  - (3) surviving plants mixed with controlled individuals of the same species. if resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or a mechanical method.

Prevent movement of resistant weed seeds to other areas by cleaning equipment.

- If a weed pest population continues to progress after treatment with this product, discontinue use of this product and switch to another management strategy or herbicide with a different mode of action, if available.
- Report any incidence of non-performance of this product against a particular weed species to your Andersons retailer, representative or call 1-800-757-8951. If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemical means to remove escapes, as practical, with the goal of preventing further seed production.
- Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your location conditions.

## 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 apply only to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is: coveralls, chemical resistant gloves, made of waterproof materials, such as butyl rubber>14 mils, nitirile rubber>14 mils, or neoprene rubber>14 mils, shoes plus socks.

#### Non-Agricultural Use Requirements

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

Do not apply this product in a way that will contact any person or pet, either directly or through drift. Keep people and pets out of the area during application. Do not allow people or pets to enter the treated area until dusts have settled.

## **USE INFORMATION**

This product is a preemergence herbicide that provides residual control of many grass and broadleaf weeds in and around any established turfgrass site (lawns, sod, turf areas), container grown, liner grown and field grown ornamental nurseries, established landscape ornamentals, established perennial & wildflower plantings, conifer and hardwood seedling nurseries, tree plantation site preparation and maintenance, non-crop areas on or surrounding managed rights-of-way for transportation systems and utilities, facilities including substations, tankfarms, pumping stations, parking & storage areas, ungrazed fencerows, and paved or gravel surfaces.

This product controls susceptible weeds by inhibiting weed seed germination and root development. Most effective weed control will be obtained when this product is activated by at least 0.2 inch of rainfall or irrigation prior to weed seed germination and within 30 days following application.

Do not graze or feed livestock forage cut from areas treated with this product. Do not use on plants grown for food or feed. Do not use treated plants for food or feed.

If weed germination is delayed or extended over a longer period of time due to unusually wet, cold or hot and dry environmental conditions, weed control may be reduced.

This product will not cause injury to desired plants listed on this label when applied according to label directions under normal growing conditions. Over or uneven application can cause injury, soil residues or decreased weed control.

Application of this product to plant and seedlings weakened or stressed by conditions such as disease, drought, low fertility, cold weather, high soil pH or salt concentration, or pest damage may result in plant injury.

This product may cause temporary staining of surfaces such as cement, shoes or clothing. Product should be removed promptly by sweeping. Do not allow product to get on metallic surfaces.

## **APPLICATION DIRECTIONS**

Apply uniformly through suitable, calibrated application equipment.

## WEEDS CONTROLLED

GRASSES			
Common Name	Scientific Name	Common Name	Scientific Name
Barnyardgrass	Echinochioa crus-galli	Lovegrass (from	Eragrostis spp.
Bluegrass, annual	Poa annua	seed)	
Crabgrass	Digitaria spp.	Panicum, browntop	Panicum fasciculatum
Crowfootgrass	Dactyloctenium aegyptium	Panicum, fall	Panicum
Foxtail, giant	Setaria faberi	7	dichotomiflorum
Foxtail, green	Setaria viridis	Panicum, Texas	Panicum texanum
Foxtail, yellow	Setaria glauca	Sandbur, field	Cenchrus incertus
Goosegrass	Eleusine indica	Signalgrass	Brachiaria platphylla
Itchgrass	Rottboellia exaltata	Sprangletop, Mexican	Leptochloa uninervia
Johnsongrass (from	Eragrostis spp.	Sprangletop, red	Leptochloa filiformis
seed)		Witchgrass	Panicum capillare
Junglerice	Echinochloa colona	Wooly cupgrass	Eriochloa villosa

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

## TURFGRASS

For use on any turfgrass site (lawns, sod, turf areas). These sites include: grounds or lawns around residential and commercial establishments, golf courses, parks, multi-family dwellings, military and other institutions, athletic fields, schools, cemeteries, roadsides, airports, houses of worship, prairiegrass areas and sod farms.

For residential turf and sod farm use, the maximum application rate is 2 lbs. active ingredient (117 lbs. product) per acre. Residential turf is any turf in a residential setting, including schools, parks and playgrounds.

**NOT** for use on dichondra.

## Application Rates for Turf Uses:

Application Rates to Turfgrass Species	Weeds	Rates of Turf Weedgrass Control	Comments
Cool Season Grasses			
Kentucky bluegrass Perennial ryegrass Fine fescue Tall fescue	Barnyardgrass Crabgrass Evening primrose Fall panicum Foxtail Hop clover Knotweed Oxalis <i>Poa annua</i> Prostrate spurge Purslane	88 – 117 lbs./acre as the initial application prior to weed germination	Apply a repeat application of $59 - 88$ lbs./acre after $5 - 8$ weeks for extended control or where heavy weed infestations are expected.
	Goosegrass	Residential Turf/Sod Farm Uses only: 88 – 117 lbs/acre in the spring prior to weed germination. Industrial and Commercial Turf Uses: 88 – 175 lbs./acre in the spring prior to weed germination.	Apply a repeat application after 5 – 8 weeks at 88 lbs/acre if lower rate was used initially or for extended goosegrass control.
	Chickweed Corn Speedwell Cudweed Henbit Lawn Burweed <i>Poa annua</i>	88 – 117 lbs/acre	Apply in late summer or early fall prior to weed germination.
Turfgrass Species	Weeds	Rates of Turf Weedgrass Control	Comments
Cool Season Grasses			
Bentgrass and established <i>Poa</i> <i>annua</i> (½ inch height or taller.) Not for use on Bentgrass or <i>Poa</i> <i>annua</i> greens and tees	Barnyardgrass Crabgrass Evening primrose Fall panicum Foxtail Hop clover Knotweed Oxalis Poa annua Prostrate spurge Purslane	88 lbs./acre in the spring prior to weed germination.	Apply a repeat application of 59 – 88 lbs./acre after 5 – 8 weeks where heavy weed infestations are expected.
	Goosegrass	88 lbs/acre in the spring prior to weed germination with a repeat application of 88 lbs./acre after 5 – 8 weeks.	
	Chickweed Corn Speedwell Cudweed Henbit Lawn Burweed <i>Poa annua</i>	88 – 117 lbs/acre	Apply in late summer or early fall prior to weed germination.

Warm Season Grasses	6		
Bahiagrass Bermudagrass Buffalograss Centipedegrass <i>Paspalum</i> , seashore St. Augustinegrass Tall fescue Zoysiagrass	Barnyardgrass Crabgrass Evening primrose Fall panicum Foxtail Hop clover Knotweed Oxalis <i>Poa annua</i> Prostrate spurge Purslane	Residential Turf/Sod Farm Uses only: 88 – 117 lbs./acre in the spring prior to weed germination. Industrial and Commercial Turf Uses: 88 – 175 lbs/acre in the spring prior to weed germination.	Apply a repeat application of 59 – 88 lbs./acre after 5 – 8 weeks if necessary.
	Goosegrass	88 –117 lbs/acre prior to weed germination.	Apply a repeat application of 88 – 117 lbs/acre to extend control of goosegrass or if the lower rate is used initially. For extended goosegrass control, an additional application of 88 lbs./acre may be applied 8 weeks after second application.
	Chickweed Corn Speedwell Cudweed Henbit Lawn Burweed <i>Poa annua</i>	88 – 117 lbs./acre	Apply in late summer or early fall prior to weed germination.

## Application Timing and Information

Apply product uniformly to dry foliage at the listed rate with a properly calibrated spreader. Water after application (0.2 -0.5 inch) to remove the granules from the foliage and to move the product to the surface of the soil. Do not mow treated area until product has been watered in and turf foliage has dried. Do not destroy the chemical barrier created at the soil surface by raking or aerifying subsequent to application.

This product is a preemergence herbicide and will not control emerged weeds. Best weed control is obtained when this product is applied to soil free of clods, weeds, and debris such as leaves and mulch. Prior to application of this product, control existing vegetation by hand weeding, shallow cultivation or the use of an appropriate postemergence herbicide. To control weeds not listed on this label, an application of an appropriate herbicide may follow application of this product.

This product can be applied before or after postemergence herbicides that are used for control of emerged weeds.

#### Poa annua control

Applied in mid-August to mid-October before germination, this product prevents the emergence of *Poa annua* seedlings. Do not make a repeat application until the following spring.

Applied in the fall, this product also controls annual dicot weeds germinating during this time of year, such as henbit and chickweed.

#### **Restrictions for Turf Uses:**

Do not apply this product to cool season turfgrasses when temperatures are regularly in the high 80s.

Do not apply more than a cumulative total of 177 lbs. of product/acre (3.0 lbs. active ingredient/acre) per year on bentgrass and *Poa annua*; 354 lbs. of product/acre (6.0 lbs. active

ingredient/acre) per year on cool season turfgrasses; and 528 lbs. of product/acre (9.0 lbs. active ingredient/acre) per year on warm season turfgrasses.

Do not apply to cement, stone, clothing or shoes. If contact occurs, brush off particles to prevent staining. If necessary, rinse with water. If metallic surfaces (golf course equipment, automobiles, etc.) are present at the application site, do not use this product under windy conditions (5-10 MPH) due to its staining potential.

#### Precautions for Turf Uses:

On turf that has been severely thinned due to winter damage, excessive soil moisture, low temperature – below 40°F, scalping, insects, disease, etc. wait until turf has filled in and rooting of stolons/rhizomes is complete and desired turf density is achieved before applying.

Delay seeding, reseeding, or winter overseeding by 3 months and sprigging by 5 months after last application.

On newly planted areas, wait until the grass has been mowed at least 4 times and has filled in.

#### Bermudagrass and ½ inch Height or Taller Bentgrass and Poa annua

When applied to dormant bermudagrass, green-up may be delayed 2 to 3 weeks in the spring. The delay in green-up may be more extensive on low-cut bermudagrass and on sandy soils.

Where turf thinning or damage has occurred due to winter injury, wait until green-up, fill-in and good rooting before making an application.

Application of this product to bermudagrass overseeded with cool season turfgrass species may injure and thin the overseeding.

Do not apply to bentgrass or *Poa annua* after late summer.

#### SPREADER SETTINGS FOR TURF USES

Spreader Settings These spreader settings are not intended to replace calibration. Please calibrate your spreader before applying product.

XX lbs. treats X,XXX sq. ft. at 59 lbs. product/acre - (1.3 lbs./1,000 sq. ft. rate) LOW RATE XX lbs. treats X,XXX sq. ft. at 88 lbs. product/acre - (2.0 lbs./1,000 sq. ft. rate) MEDIUM RATE XX lbs. treats X,XXX sq. ft. at 117 lbs. product/acre - (2.7 lbs./1,000 sq. ft. rate) HIGH RATE XX lbs. treats X,XXX sq. ft. at 175 lbs. product/acre - (4.0 lbs./1,000 sq. ft. rate) HEAVY RATE

				SPREADER	SETTINGS	
SPREADER	GROUND SPEED	WIDTH OF COVERAGE	LOW RATE 1.0 lbs. ai/A	MEDIUM RATE 1.5 lbs. ai/A	HIGH RATE 2.0 lbs. ai/A	HEAVY RATE 3.0 lbs. ai/A
aa	X mph	XX ft/	Х	Х	Х	Х
bb	X mph	XX ft	Х	Х	Х	Х
сс	X mph	XX ft	Х	Х	Х	Х

Note:. This list of spreaders and settings will vary dependent on market availability of spreaders. (this note will not appear on final label)

**Note:** These spreader settings were established using standard equipment available from the spreader manufacturer at swath widths and speeds typically used within the industry. It is recommended that all spreader equipment be calibrated at the time of application to achieve the desired application rate.

## CONTAINER, FIELD GROWN AND LANDSCAPE ORNAMENTALS

This product may be applied for residual preemergence weed control in ornamentals, including trees, shrubs, ground covers, perennials, bedding plants and ornamental grasses.

## **Application Rates for Ornamental Uses**

Apply this product at the following rates in the fall and/or spring prior to weed emergence.

Length of Control	lb. ai / A	Ib. Product / Acre	lb. Product / 1,000 sq. ft.
2 – 4 months	2.0	117	2.7
6 – 8 months	4.0	234	5.4

Application amounts for individual containers:

Pot	ot 117# per acre		234# p	er acre
Diameter (inches)	Gram(s) ProPendi DG/pot	Teaspoon(s) ProPendi DG/pot	Gram(s) ProPendi DG/pot	Teaspoon(s) ProPendi DG/pot
4	0.11	1/34	0.21	1/18
5	0.17	1/22	0.33	1/11
6	0.24	1/15	0.48	1/8
7	0.33	1/11	0.65	1/6
8	0.42	1/9	0.85	1/4
9	0.54	1/7	1.08	2/7
10	0.66	1/6	1.33	1/3
11	0.8	1/5	1.61	1/2
12	0.96	1/4	1.91	1/2
13	1.12	2/7	2.24	2/3
14	1.3	1/3	2.6	5/8
15	1.49	2/5	2.99	3/4
16	1.7	1/2	3.4	1
17	1.92	1/2	3.84	1
18	2.15	5/9	4.3	1 1/7
19	2.4	2/3	4.79	1 1/4
20	2.66	3/4	5.31	1 2/5
21	2.93	3/4	5.86	1 1/2
22	3.21	5/6	6.43	1 3/4
23	3.51	1	7.02	1 3/4
24	3.82	1	7.65	2
25	4.15	1 1/9	8.3	2 1/4
26	4.49	1 1/5	8.98	2 2/5
27	4.84	1 1/3	9.68	2 1/2
28	5.2	1 2/5	10.41	2 3/4
29	5.58	1 1/2	11.17	3
30	5.98	1 2/3	11.95	3 1/5
31	6.38	1 3/4	12.76	3 1/3
32	6.8	1 5/6	13.6	3 2/3
33	7.23	2	14.46	3 3/4
34	7.67	2	15.35	4 1/9
35	8.13	2 1/6	16.27	4 1/3
36	8.6	2 1/3	17.21	4 2/3
37	9.09	2 1/2	18.18	4 3/4
38	9.59	2 1/2	19.17	5 1/8
39	10.1	2 3/4	20.2	5 1/2
40	10.62	2 3/4	21.24	5 2/3
41	11.16	3	22.32	6
42	11.71	3 1/8	23.42	6 1/4

#### Application Timing and Information

This product is a preemergence herbicide and will not control emerged weeds. Best weed control is obtained when this product is applied to soil free of clods, weeds, and debris such as leaves and mulch. Prior to application of this product, control existing vegetation by hand weeding,

shallow cultivation or the use of an appropriate postemergence herbicide. To control weeds not listed on this label, an application of an appropriate herbicide may follow application of this product.

Apply this product to dry foliage only. Overhead irrigation or rainfall soon after application will wash granules off plant foliage and activate this product in the soil.

#### **Ornamental Bulbs**

For control of susceptible annual weeds in bulbs listed on the label, apply this product anytime before, during or after bulb emergence.

#### Wildflowers

For control of susceptible annual weeds in established wildflower plantings listed on the label, apply this product prior to emergence of weeds or wildflowers. For wildflowers being grown from seed, apply after emergence of the wildflowers, but prior to weed emergence or germination. Weed control may vary due to the species and varieties of wildflowers. Treat desirable plants to determine if acceptable for wide spread use.

#### **Restrictions for Ornamental Uses**

Do not apply this product in greenhouses, Shadehouses, or other enclosed structures.

#### Precautions for Ornamental Uses

Apply this product to established ornamentals. Applications to plants grown in seedbeds, liners or transplant beds should be delayed until the roots are well established. For transplanted plants, be sure the soil or potting mix has settled with no cracks that would allow this product to come in contact with the plant roots. For container grown ornamentals using a bare root liner, delay application 2 -4 weeks after transplanting.

In soil that was previously treated with this product, plant only species listed on this label.

Best weed control will be obtained when this product is uniformly applied to soil and media surfaces.

#### Will not control established weeds.

#### Ornamentals

This product is safe to apply over the top and around the following established plants. Refer to the Application Rate Table for rates.

TREES		
Common Name	Scientific Name	Con
Alder, European Black	Alnus, glutinosa	Mapl
Apple	<i>Malus</i> spp.	Mapl
Arborvitae, American	Thuja occidentalis	Mapl
Arbutus	Arbutus spp.	Mapl
Ash, red	Fraxinus pennsylvanica	Mapl
Ash, white	Fraxinus americana	Nanr
Aspen, bigtooth	Populus grandidentata	Oak,
Aspen, quaking	Populus tremuliodes	Oak,
Basswood	<i>Tilla</i> spp.	Oak,
Birch, European weeping	Betula pendula	Oak,
Birch, river	Betula nigra	Oak,
Buckeye, red	Aesculus pavia	Oak,
Cedar, white	Thuja occidentalis	Oak,
Chamaecyparis, boulevard	Chamaecyparis pisifera	Oak,
Cherry, black	Prunus serotina	Olive
Cherry, choke	Prunus virginiana	Palm
Cherry, Kwanzan	Prunus serrulata	Palm
Cherry, Nanking	Prunus tomentosa	Palm

TREES (continued)		
Common Name	Scientific Name	
Maple, Japanese	Ace palmatum	
Maple, Norway	Acer platanoides	
Maple, paper-bark	Acer griseum	
Maple, red	Acer rubrum	
Maple, sugar	Acer saccharum	
Nannyberry, rusty	Viburmum rufidulum	
Oak, chinquapin	Quercus mehlenbergii	
Oak, live	Quercus virginiana	
Oak, pin	Quercus palustris	
Oak, red	Quercus rubra	
Oak, swamp chestnut	Quercus michauxii	
Oak, water	Quercus nigra	
Oak, white	Quercus alba	
Oak, willow	Quercus phellos	
Olive	Olea europaea	
Palm, date	Phoenix spp.	
Palm, fan	Washingtonia spp.	
Palm, pindo	<i>Butia</i> spp.	

Cottonwood	Populus deltoides
Crabapple	Malus spp.
Crepe myrtle	Lagerstroenia indica
Cryptomeria, Japanese cedar	Cryptomeria japonica
Cypress, bald	Taxodium distichum
Cypress, Leyland	Cupressocyparis leylandii
Dogwood, flowering	Cornus florida
Dogwood, Korean	Cornus kousa
Dogwood, shrub	Cornus spp.
Dogwood, silky	Cornus amomum
Elm	Ulmus japonica
Fir, balsam	Abies balsamae
Fir, Douglas	Pseudotsuga menziesii
Fir, Fraser	Abies fraseri
Fir, white	Abies concolor
Franklinia	Franklinia spp.
Ginkgo	Ginkgo biloba
Gum, black	Nyssa sylvatica
Gum, sour	Nyssa sylvatica
Haw, black	Viburnum prunifolium
Hawthorn	Crataegus spp
Hemlock, Canada	Tsuga canadensis
Hemlock, Eastern	Tsuga canadensis
Holly, American	Llex opaca
Honeylocust	Gleditsia triacanthos
Lilac, common	Syringa vulgaris
Lilac, Japanese tree	Syringa reticulate
Linden	Tilia spp.
Magnolia, saucer	Magnolia soulangiana
Magnolia, Southern	Magnolia graandiflora
Magnolia, star	Magnolia stellata
Maidenhair tree	Ginkgo biloba

Palm, Washington	Washingtonia spp.
Peach	Prunus persica
Pear, Bradford	Pyrus calleryana "Bradford"
Peacn	Garya illioensis
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	Amelanchier laevis
Sourwood	Oxydendrum arboreum
Spruce, Colorado Blue	Picea pungens
Spruce, dwarf Alberta	Picea glacua "Albertiana"
Spruce, Norway	Picea abies
Spruce, white	Picea glauca
Sweetgum	Liquidambar styraciflua
Sycamore	Platanus occidentalis
Trachycarpus	Trachycarpus spp.
Tulip tree	Liriodendron tulipifera
Walnut, black	Juglans nigra
Willow, weeping	Salix babylonica
Yellowwood	Cladrastis lutea

SHRUBS	
Common Name	Scientific Name
Abelia, glossy	Abelia graandiflora
Althaea	Hibiscus syriacus
Aucuba, gold	Aucuba japonica
Azalea	Rhodedendron spp.
Bamboo, heavenly	Nandina domestica
Barberry	Berberis gladwynensis
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
Butterfly bush	Buddleia davidii
Camellia	Camellia japonica
Cape jasmine	Gardenia jasminoides
Cassia, feathery	Cassia artemisioides
Cordyline	Cordyline spp.
Correa	Correa spp.
Cotoneaster	Cotoneaster apiculatus
Cotoneaster, bearberry	Cotoneaster dammeri
Cotoneaster, rock	Cotoneaster horizontalis
Cyrpress, Italian	Cupressus sempervirens

SHRUBS (continued)	
Common Name	Scientific Name
Laurel, Schipka	Prunus schipkanensis
Laurustinus	Viburmum tinus
Lavender, English	Lavandula angustifolia
Leucothoe	Leucothoe fontanesiana
Leucothoe, coast	Leucothoe axillaris
Lilac, cut-leaf	Syringa laciniata
Lily-of-the-Nile	Agapanthus africanus
Mahonia	Mahonia aquifolium
Mock orange	Pittosporum tobira
Myrtle, compact	Myrtus communis
Myrtle, wax	Myrica cerifera
Nandina	Nandina domestica
Oleander	Nerium oleander
Oregon grape	Mahonia aquifolium
Osmanthus	Osmanthus fragrans
Palm, European fan	Chamaerops humllis
Palm, Mediterranean fan	Chamaerops spp.
Phlox, prickly	Leptodactylon californicum
Photinia, Fraser	Photinia x Fraseri
Pieris, Japanese	Pieris japonica
Pine, mugo	Pinus mugo
Plum, natal	Carissa graandiflora
Privet California	Ligustrum ovalifolium

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 frangrans
Fuschia, California	Zauschineria californica
Gardenia	Gardenia jasminoides
Hawthorne, Indian	Raphiolepis indica
Hisbuscus	Hibiscus syriacus
Holly, Chinese	llex cornuta
Holly, Foster's	llex attenuate 'Fosteri'
Holly, Japanese	llex crenata
Holly, Savannah	llex attenuate
Holly, yaupon	llex vomitoria
Honeysuckle, bush	Diervilla Lonicera
Hopbush	Dodonaea viscosa
Hopseed bush	Dodonaea viscosa
Hydrangea	Hydrangea macrophylla
Juniper	Juniperus spp.
Juniper, Chinese	Juniperus chinensis v. pfitzer
Juniper, shore	Juniperus conferta
Juniper, trailing	Juniperus horizontalis
Laurel, cherry	Prunus laurocerasus
Laurel, mountain	Kalmia latifolia
Laurel, Otto Luyken	Prunus laurocerasus

Privet, glossy	Ligustrum lucidum
Privet, variegated	Ligustrum sinensis
Privet, waxleaf	Ligustrum japonicum
Pyracantha	Pyracantha coccinea
Quince, flowering	Chaenomeles japonica
Ranger, Texas	Leucophyllum frutescens
Redroot	Caenothus spp.
Rhododendron	Rhododendron spp.
Robira	Pittosporum tobira
Rose	<i>Rosa</i> spp.
Rose-of-Sharon	Hibiscus syriacus
Spice plant	Illicium parviflorum
Spiraea	Spiraea vanhouttei
Spiraea, Anthony Waterer	Spiraea x bumalda
Spirea, Japanese	Spiraea japonica
Sweet bay	Laurus nobilis
Trumpet bush	Tecoma stans
Verbana, lemon	Aloysia triphylla
Viburnum	Viburnum suspensum
Vitex	Vitex spp.
Wiegela	Weigela florida
Wild lilac	Ceanothus spp.
Wisteria	<i>Wisteria</i> spp.
Xylosma	Xylosma congestum
Yellowbells	Tecoma stans
Yew	Taxus media
Yew, Japanese	Taxus cuspidata
Yew, Southern	Podocarpus macrophyllus
Yucca, Adam's needle	Yucca filamentosa
Yucca, weeping	Yucca pendual

GROUND COVERS	
Common Name	Scientific Name
Ajuga	Ajuga reptans
Baby sun rose	Aptenia cordifolia
Beach strawberry	Fragaria chiloensis
Capeweed	Arctotheaca 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	Gelesmium sempervirens
Mansanita, bearberry	Arctostaphylos uva-ursi
Miscanthus	Miscanthus spp.
Mondograss	Ophiopogon japonica
Morningglory	Convolvulus spp.
Myoporum	Myoporum parviflolium
Pachysandra	Pachysandra terminalis
Potentilla	Potentialla fruitcosa
Red apple	Aptenia cordifolia
Rosemary	Rosemarinus officinalis
Rose-of-Sharon	Hibiscus syriacus L.

PERENNIALS (continued)	
Common Name	Scientific Name
California poppy	Eschschoilzia California
Calla lilly	Zantedeschia aethiopica
Canna, common garden	Canna-generalis 'Lucifer'
Canadian ginger <sup>1</sup>	Asarum canadese
Carex	Carex spp.
Cast iron plant	Aspidistra elatiro
Chincherinchee	Orrithogalum thyrsoides
Clover crimson	Trifolium incarnatum
Columbine	Aquilegia 'McKana Giant'
Coral bells <sup>1</sup>	Heuchera sanguinea
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, Boston	Nephrolepis exaltata
Fern, leatherleaf <sup>2</sup>	Rumohra adiantiformis
Fern, tree	Asparagus virgatus
Flax, blue	Linum perenne
Foamflower, heartleaf	Tirella cordifolia
Fortnight lily	Moraea spp.
Foxglove, common	Digitalis purpurea
Freesia	Freesia x hybrida

St. Johnswort, creeping	Hypericum calycinum
Sand strawberry	Fragaria chiloensis
Sedum	Sedum spurium
Stonecrop	Sedum spurium
Verbena, Peruvian	Verbena peruviana
Vervain	Verbena peruviana
Vetch, crown	Vicia sativa
Vinca	Vinca minor
Wintercreeper	Euonymous fortunei

PERENNIALS	
Common Name	Scientific Name
Acacia	Acacia redolens
Alumroot <sup>1</sup>	Heuchera sanguinea
Asparagus	Asparagus spp.
Aster, New York	Aster novi-belgii
Aster, Stokes	Stokesia laevis
Astilibe (False spirea)	Astilibe spp.
Baby's breath	Gypsophila Elegans
Beard's tongue	Penstemon dgitalis, P. x mexicali
Bee balm <sup>1</sup>	Monarda didyma
Bellflower	Campanula spp.
Bergenia, heart-leaved <sup>1</sup>	Bergenia cordifolia
Bird of paradise	Caesalpinia pulcherrima
Black-eyed Susan	Rudbeckia hirta
Blanket flower	Gaillardia x grandiflora
Bleeding heart	Bicentra spectabilis
Bluestar <sup>1</sup>	Amsonia hubrichtii
Blue false indigo	Baptisia australis
Butterfly weed	Asclepias tuberosa
	S (continued)
Common Name	Scientific Name
Liriope, variegated	Liriope muscari
Looseestrife, garden	Lysimachia puntata
Montbretia	Crocosmia crocosmilflora
Moonbeam	Coreopsis verticillata
Nightshade	Solanum spp.
Orchid, peacock	Acidanthera bicolor
Oxeye daisy	Chrysanthemum leucanthemum
Oxeye, smoth <sup>1</sup>	Heliopsis helianthoides
Peony, Chinese	Paeonia lactiflora
Phlox, creeping	Phlox subulata
Purple coneflower	Echinacea purpurea
Purple loosestrife	Lythrum virgatum
Pussy-toes, small-leaf <sup>1</sup>	A. parvifolia
Pussy-toes, stoloniferous <sup>1</sup>	Antennaria dioica
Red-hot-poker	Kniphofia uvaria
Rock cress	Aubrieta spp.
Rosemary	Rosmarinum officinalis
Ruscus, Israeli	Ruscu hypophyllum
Sage, Russian	Perovskia atriplicifolia
Sedge	Carex spp.
Shasta daisy	Chrysanthemum x superbum
Shrub verbena	L. montevidensis
Sneezeweed, common	Helenium autumnale
	Tradexcantia virginiana,
Spiderwort <sup>1</sup>	T. x andersoniana

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Fuschia, Arizona	Zauschneria Californica
Gaillardia	Gailardia pulchella
Gaura <sup>1</sup>	Gaura lindheimeri
Geum	Geum spp.
Gladiolus	Gladiolus spp.
Globe amaranth <sup>1</sup>	Gomphrena globosa
Golden rockets <sup>1</sup>	Ligularia stenocephala
Goldenrod, seaside <sup>1</sup>	S. sempervirens
Goldenrod, showy <sup>1</sup>	S. specia
Goldenrod, wrinkleleaf	Solidago rugosa
Heather, dwarf	Calluna vulgaris
Hens and chicks	Sempervivum arachnoideum, S. tectorum
Hopflower orengano	Origanum libanoticum
Hosta	Hosta spp.
Hyssop, Coronado <sup>1</sup>	Agastache aurantiaca
Hyssop, sunset	Agastache rupestris
Ice plant, hardy or yellow	Deloperma nugigenum
Indian blanket	
	Gaillardia pulchella
Ironweed, New York <sup>1</sup>	Vernonia noveboracensis
Jacob's ladder	Polemonium boreale
Joepye weed, sweetscented <sup>1</sup>	E. purureum
Lady's-mantle	Alchemilla mollis
Lantana, weeping	Lantana montevidensis
Lavender, English	Lavandula angustifolia
Leopard's bane	Doronicum cordatum
Lily	Lillium spp.
	Linium spp.
Lily, plantain	Hosta fortunei
Liriope, big blue	Liriope muscari
Liriope, creeping	Liriope spicata
Liriope, creeping BEDDING	Liriope spicata G PLANTS*
Liriope, creeping	Liriope spicata
Liriope, creeping BEDDING Common Name	Liriope spicata G PLANTS* Scientific Name
Liriope, creeping BEDDING Common Name Ageratum	Liriope spicata <b>3 PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum
Liriope, creeping BEDDING Common Name Ageratum Alyssum	Liriope spicata <b>3 PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile
Liriope, creeping BEDDING Common Name Ageratum Alyssum Anemone, poppy-flowered	Liriope spicata <b>3 PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria
Liriope, creeping BEDDING Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia	Liriope spicata <b>3 PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp.
Liriope, creeping BEDDING Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower	Liriope spicata <b>3 PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum
Liriope, creeping BEDDING Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia	Liriope spicata <b>3 PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp.
Liriope, creeping BEDDING Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental	Liriope spicata <b>3 PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea
Liriope, creeping BEDDING Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental Caladium	Liriope spicata <b>S PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea Caladium spp.
Liriope, creeping BEDDING Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental Caladium China aster	Liriope spicata <b>S PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea Caladium spp. Callistephus chinensis
Liriope, creeping BEDDING Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental Caladium	Liriope spicata <b>S PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea Caladium spp.
Liriope, creeping BEDDING Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental Caladium China aster	Liriope spicata <b>S PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea Caladium spp. Callistephus chinensis Crocosmia x crocosmilflora Dahlia spp.
Liriope, creeping BEDDINO Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental Caladium China aster Crocosmi, Montebretia	Liriope spicata <b>3 PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea Caladium spp. Callistephus chinensis Crocosmia x crocosmilflora
Liriope, creeping BEDDINO Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental Caladium China aster Crocosmi, Montebretia Dahlia Dianthus	Liriope spicata <b>S PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea Caladium spp. Callistephus chinensis Crocosmia x crocosmilflora Dahlia spp.
Liriope, creeping BEDDINO Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental Caladium China aster Crocosmi, Montebretia Dahlia Dianthus Dusty miller	Liriope spicata <b>S PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea Caladium spp. Callistephus chinensis Crocosmia x crocosmilflora Dahlia spp. Dianthus barbatus Senecio cineraria
Liriope, creeping BEDDINO Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental Caladium China aster Crocosmi, Montebretia Dahlia Dianthus Dusty miller Gayfeather	Liriope spicata <b>S PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea Caladium spp. Callistephus chinensis Crocosmia x crocosmilflora Dahlia spp. Dianthus barbatus Senecio cineraria Liatris spp.
Liriope, creeping BEDDINO Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental Caladium China aster Crocosmi, Montebretia Dahlia Dianthus Dusty miller Gayfeather Gazania, trailing	Liriope spicata <b>3 PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea Caladium spp. Callistephus chinensis Crocosmia x crocosmilflora Dahlia spp. Dianthus barbatus Senecio cineraria Liatris spp. Cazania rigens luecolaena
Liriope, creeping BEDDING Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental Caladium China aster Crocosmi, Montebretia Dahlia Dianthus Dusty miller Gazfather Gazania, trailing Gazania, trailing	Liriope spicata <b>S PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea Caladium spp. Callistephus chinensis Crocosmia x crocosmilflora Dahlia spp. Dianthus barbatus Senecio cineraria Liatris spp. Cazania rigens luecolaena Gazania rigens
Liriope, creeping BEDDING Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental Caladium China aster Crocosmi, Montebretia Dahlia Dianthus Dusty miller Gazfeather Gazania, trailing Gazania, trailing Gazania, trailing	Liriope spicata <b>3 PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea Caladium spp. Callistephus chinensis Crocosmia x crocosmilflora Dahlia spp. Dianthus barbatus Senecio cineraria Liatris spp. Cazania rigens luecolaena Gazania rigens Geranium spp.
Liriope, creeping BEDDINO Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental Caladium China aster Crocosmi, Montebretia Dahlia Dianthus Dusty miller Gayfeather Gazania, trailing Gazania, treasure flower Geranium Gloxinia	Liriope spicata <b>3 PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea Caladium spp. Callistephus chinensis Crocosmia x crocosmilflora Dahlia spp. Dianthus barbatus Senecio cineraria Liatris spp. Cazania rigens luecolaena Gazania rigens Geranium spp. Gloxinia simningia
Liriope, creeping BEDDING Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental Cabbage, ornamental Caladium China aster Crocosmi, Montebretia Dahlia Dianthus Dusty miller Gayfeather Gazania, trailing Gazania, trailing Gazania, trailing Gazania, trailing Gazania, trailing Gazania, trailing Gazania, trailing	Liriope spicata <b>S PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea Caladium spp. Callistephus chinensis Crocosmia x crocosmilflora Dahlia spp. Dianthus barbatus Senecio cineraria Liatris spp. Cazania rigens luecolaena Gazania rigens Geranium spp. Gloxinia simningia Impatiens spp.
Liriope, creeping BEDDING Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental Caladium China aster Caladium China aster Crocosmi, Montebretia Dahlia Dianthus Dusty miller Gayfeather Gazania, trailing Gazania, trailing	Liriope spicata <b>S PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea Caladium spp. Callistephus chinensis Crocosmia x crocosmilflora Dahlia spp. Dianthus barbatus Senecio cineraria Liatris spp. Cazania rigens luecolaena Gazania rigens Geranium spp. Gloxinia simningia Impatiens spp. Brassica napus
Liriope, creeping BEDDING Common Name Ageratum Alyssum Anemone, poppy-flowered Artemesia Balloonflower Begonia Cabbage, ornamental Caladium China aster Crocosmi, Montebretia Dahlia Dianthus Dusty miller Gayfeather Gazania, trailing Gazania, trailing	Liriope spicata <b>S PLANTS*</b> <b>Scientific Name</b> Ageratum houstonianum Alyssum saxatile Anemone coronaria Artemesia spp. Platycodon grandiflorum Begonia spp. Brassica olerecea Caladium spp. Callistephus chinensis Crocosmia x crocosmilflora Dahlia spp. Dianthus barbatus Senecio cineraria Liatris spp. Cazania rigens luecolaena Gazania rigens Geranium spp. Gloxinia simningia Impatiens spp.
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Sunflower <sup>1</sup>	Helianthus spp.
Sweet flag	Acorus calamus
Thrift, sea pink <sup>1</sup>	Armeria martima
Tickseed	Coreopsis landeolata
Transvaal daisy <sup>1</sup>	Cerbera jamesonii
Tulip	Tulipa spp.
Turtlehead, snakehead	Chelone spp.
Twinspur	Diasciascia barbaerae
Wonderflower	Ornithogalum thyrsoides
Vervain <sup>1</sup>	Verbena Canadensis
Yarrow	Achillea millefolium
Zephyr lily	Zephyrantes spp.
<sup>1</sup> Not for use in California	

<sup>2</sup>Injury may occur if this product is applied to ferns

during periods of growth of new fronds.

Plumosa, cockscomb	Celosia cristata
Portulaca	Portulaca graandiflora
Salvia	Salvia splendens
Snapdragon	Antirrhinum majus
Statice	Limonium spp.
Sweet William	Dianthus barbatus
Vinca	Vinca major
Zinnia	Zinnia app.

\*Water area thoroughly after planting and prior to application of this product. Use sufficient water to pack soil around the roots of the plants.

ORNAMENTAL GRASSES	
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

This product may be applied to plant species not listed on this label. Determine the suitability for use by treating a small number of ornamental plants at a listed rate. Prior to treatment of larger areas, treated plants should be observed for any symptoms of herbicidal injury, such as foliar damage, reduced vigor or stand reduction, during 30 to 60 days of normal growing conditions to determine if the treatment is non-injurious.

The user assumes responsibility for any crop damage or other liability.

Do not use on plants grown for food or feed. Do not use treated plants for food or feed.

#### NONBEARING FRUIT AND NUT CROPS AND VINEYARDS

This product may be applied to the following nonbearing crops:

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

Apply at rates listed in the Application Rates for Ornamental Uses table. Make application to the ground below the trees or vines. For transplanted plants, be sure the soil or potting mix has settled with no cracks that would allow this product to come in contact with the plant roots. Apply only to newly transplanted and one-year-old grapevines when they are dormant.

Best weed control will be obtained when this product is uniformly applied to soil and media surfaces.

Do not apply if buds have started to swell.

#### NONCROPLAND AREAS INCLUDING TREE PLANTATIONS

This product may be applied in and around established ornamentals planted in noncropland areas, such as rights-of-way, highway guardrails, sign posts, delineators, bridge abutments and approaches, petroleum tank farms, storage areas, fence rows, utility substations, pumping installations, paved or gravel surfaces; in and around established tree plantations, including Christmas tree plantations; and for ground maintenance in non-crop areas. This product may

also be used for hardwood and conifer regeneration on conservation reserve program land or other similar areas.

Apply at rates listed in the Application Rates for Ornamental Uses table. Make application at planting or to established trees. Root stunting may occur if this product comes in direct contact with the tree roots or is washed into the root zone. When applying at planting, be sure that the slit closure be achieved.

Best weed control will be obtained when this product is uniformly applied to soil and media surfaces.

## LANDSCAPE AND GROUNDS MAINTENANCE

This product may be used as a part of a landscape and grounds maintenance program on areas such as mulch beds, roadsides, parking areas, around statuary and fencelines. It will help provide extended preemergence control of listed weed species.

Apply at rates listed in the Application Rates for Ornamental Uses table. The treated areas should be free of weeds. Prior to application of this product, control existing vegetation by hand weeding, shallow cultivation or the use of an appropriate postemergence herbicide.

This product may cause temporary staining of surfaces such as cement, shoes or clothing. Product should be removed promptly by sweeping. If granules are crushed into surface, rinse with water. Do not allow product to get on metallic surfaces.

## **VEGETATION CONTROL**

This product may be used for total vegetation control or to provide bare ground. It can be used in sequence with any appropriately labeled herbicide. This product may be used for 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.

Rates should be determined from the application rates table.

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a clean, dry place. Reseal opened bag by folding top down and securing.

**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:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Completely empty bag into application equipment. Then 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.

#### IMPORTANT: READ BEFORE USE:

Read the entire Directions for Use and the Warranty Disclaimer and Limitation of Liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or Buyer accepts the following Warranty Disclaimer and Limitation of Liability:

#### WARRANTY DISCLAIMER and LIMITATION of LIABILITY:

Manufacturer warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions. Manufacturer makes NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. To the extent consistent with applicable law, it is Manufacturer's intent to LIMIT ANY LIABILITY FOR SPECIAL, CONSEQUENTIAL OR INCIDENTAL ECONOMIC DAMAGES to refund of purchase price or

replacement of product, at Buyer's choice. To the extent consistent with applicable law, Manufacturer DISCLAIMS ANY LIABILITY FOR COMPENSATORY OR OTHER DAMAGES ARISING OUT OF ANY USE CONTRARY TO LABEL DIRECTIONS. Use contrary to label directions is not permitted.

LEGAL RIGHTS: THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS; YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE/JURISDICTION TO STATE/JURISDICTION.

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