

A combination of selective preemergence herbicides for the control of listed grass and broadleaf weeds in ornamentals.

### **ACTIVE INGREDIENTS:**

ΤΟΤΔΙ·	_	100 00%
OTHER INGREDIENTS:	•	99.35%
lsoxaben**	•	0.25%
Prodiamine*	•	0.40%

\* CAS No. 29091-21-2 \*\* CAS No. 82558-50-7

# CAUTION

EPA Reg. No. 58185-180
EPA Est. 82757-OH-1<sup>MF</sup>
Letter(s) in lot number correspond(s) to superscript in EPA Est. No.

### **PRECAUTIONARY STATEMENTS**

### **Hazards to Humans and Domestic Animals**

CAUTION. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear protective eyewear. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators, mixers, loaders, and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR Part 170) - agricultural plant uses are covered - must wear:

- · Long-sleeved shirt and long pants
- 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.

E95765

**NET WEIGHT:** 50 lb (22.68 kg)

Manufactured for: Everris NA Inc. PO Box 3310 • Dublin, OH 43016

Customer Service: 1-800-492-8255 or 314-983-7500



### **Engineering Controls**

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker 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.

### **User Safety Recommendations**

Users should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using the toilet. Remove and wash contaminated clothing before reuse.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### **FIRST AID**

If in eyes

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

For additional information in case of emergency call toll free 1-888-241-6409. Have product label with you when calling a poison control center or going for treatment.

### **Environmental Hazards**

This product may be toxic to fish. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Do not contaminate water when disposing of equipment wash water. Do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area.

Sweeping any product that lands on a driveway, sidewalk, or street, back onto the treated area of the landscape will help to prevent runoff to water bodies or drainage systems.

**Groundwater Advisory:** This pesticide has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

**Surface Water Advisory:** This pesticide may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soil and soils with shallow groundwater. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of isoxaben from runoff and sediment.

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 and spreading granules only on target areas.

### **Physical-Chemical Hazards**

Do not mix or allow coming in contact with oxidizing agent. Hazardous chemical reaction may occur.

### **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 a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- coveralls
- chemical-resistant gloves made of any waterproof material
- chemical-resistant footwear 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, or nurseries.

Keep unprotected persons out of treated areas until dusts have settled.

### WEED RESISTANCE MANAGEMENT

For resistance management, please note that Gemini Granular contains both a Group 3/Prodiamine and a Group 21/Isoxaben herbicide. Any weed population may contain plants naturally resistant to Group 3 and/or Group 21 herbicides. The resistant individuals may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed. To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of Gemini Granular or other Group 3 or 21 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field or other use sites.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g. higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weedcompetitive crops or varieties) and other management practices.
- Fields should be scouted prior to application to identify the weed species present and their growth stage to determine if the intended application will be effective. Fields should be scouted after application to verify that the treatment was effective.
- Scout 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; and (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 by a mechanical method, such as hoeing or tillage. Prevent movement of resistant weed seeds to other sites by cleaning equipment and avoid moving plant material between sites.

- Contact your local company sales representative, extension specialist, and/or certified crop advisor, for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes. Ask if suspected resistant weeds to these modes of action have been found in your region. Do not assume that each listed weed is being controlled by multiple modes of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in the product.
- Report any incidence of non-performance of this product against a particular weed species to Everris at 800-492-8255. If resistance is suspected, treat weed escapes with a 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.

#### **BEST MANAGEMENT PRACTICES**

Proactively implementing diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides is recommended. A diversified weed management program may include the use of multiple herbicides with different modes of action and overlapping weed spectrum with or without tillage operations and/or other cultural practices. Research has demonstrated that using the labeled rate and directions for use is important to delay the selection for resistant weeds. Scouting after herbicide application is important because it can facilitate the early identification of weed shifts and/or weed resistance and thus provide direction on future weed management practices. One of the best ways to contain resistant weed populations is to implement measures to avoid allowing weeds to reproduce by seed or to proliferate vegetatively. Cleaning equipment between sites and avoiding movement of plant material between sites will greatly aid in reducing the spread of resistant weed seed.

### PRODUCT INFORMATION Formulation and Mode of Action

Gemini<sup>®</sup> Granular is a herbicide containing the active ingredient, prodiamine, a member of the dinitroaniline family of herbicides (Group 3) which inhibits mitotic processes in plants, and isoxaben,

which has a cellulose biosynthesis inhibitor (CBI) mode of action (Group 21). The actives control susceptible weeds by preventing growth and development of newly germinated seeds. Each bag contains 0.325 pounds active ingredient (0.2 pounds prodiamine per bag plus 0.125 pounds isoxaben per bag). Gemini<sup>®</sup> Granular is used for pre-emergent control of listed grasses and broadleaf weeds. Weed control is most effective when Gemini<sup>®</sup> Granular is activated by at least 0.5 inches of rainfall or irrigation.

### **Uses and Application**

Apply Gemini<sup>®</sup> Granular for selective pre-emergence control of listed grass and broadleaf weeds in the following areas:

- Container, field-grown, and landscape ornamentals
- Non-crop areas including managed rights-of-way for transportation systems and utilities (such as roadways, roadsides, railways, and equipment yards)
- Non-crop facilities including substations, tank farms, pumping stations, parking and storage areas
- Non-grazed fence rows
- Christmas tree farms

### New Plantings, Replanting and Rotational Plantings

For a period of 1 year after treating an approved use site with Gemini<sup>®</sup> Granular, plant only ornamental species listed as tolerant on this label unless the following test has shown that indicator species grow normally:

• Sow several test strips of an indicator plant such as wheat, sorghum or corn into the treated area. If the indicator plants germinate and grow normally to a height of 12 inches with normal root development, it is safe to plant.

In areas disturbed by new plantings or replanting of labeled species, it may be necessary to retreat exposed soil to maintain satisfactory weed control, but to prevent exceeding the maximum annual limit of prodiamine do not apply more than 375 lbs. of product per acre per year.

### **PRODUCT USE RESTRICTIONS**

- Do not graze or feed livestock forage cut from areas treated with Gemini<sup>®</sup> Granular.
- Do not apply Gemini<sup>®</sup> Granular to plants that will be consumed for food use.
- Do not apply to golf course putting greens and tees.
- Do not exceed a dosage of 2.43 pounds active

ingredient per acre (375 pounds of Gemini<sup>®</sup> Granular per acre) (1.5 pounds prodiamine and 0.93 pounds isoxaben) per year on any use site.

- The state of Arizona has not approved this product for use on agricultural commodities. If grown for commercial production, use on the following sites/crops is prohibited: container grown field ornamentals, field-grown ornamentals, ornamental bulbs, and Christmas tree/conifer plantations.
- Not for use on ornamental bulbs grown for commercial production in California.
- Not for sale, distribution, or use in New York State.
- Do not apply by air.

Treatment of Turfgrass or Ornamental Species Not Listed on the Label for Gemini® Granular: Users who wish to use Gemini® Granular are limited to nonfood, ornamental plant species in labeled use sites. Prior to large scale application, user should trial plant species not listed on this label.

### Gemini® Granular Rates:

Table 1. Gemini® Granular Application Rates				
	Low Rate	Medium Rate	High Rate	Do Not Exceed The Maximum Annual Rate Of:
Pounds per Acre	100	150	200	375
Bags per Acre	2	3	4	7.5
Pounds per 1000 sq.ft.	2.3	3.4	4.6	8.6
Grams per sq. ft.	1.0	1.6	2.1	3.9

Table 2. Weeds Controlled or Suppressed by Gemini® Granular

		Rates (lbs./acre)		
Common Name	Scientific Name	C=Control S=Suppression		ion
		100	150	200
	Broadleaf Weeds			
Amaranth, Livid	Amaranthus blitum	ГС		
Aster, Heath	Symphyotrichum ericoides		С	
Aster, Slender	Symphyotrichum divaricatum	С		
Betony, Florida	Stachys floridana Cardamine hirsuta	C		
Bittercress, Hairy	1	ļ	С	
Bittercress, Little Western	Cardamine oligosperma		С	
Burclover, California	Medicago polymorpha			C
Burnweed, American	Erechtites hieraciifolius			C
Bursage, Annual	Ambrosia acanthicarpa	С		
Burweed, Field	Soliva sessilis	С		
Carpetweed	Mollugo verticillata	C		
Carrot, Wild	Daucus carota	Ť	С	
Chamber-bitter	Phyllanthus urinaria		C	
Chamomile, Stinking	Anthemis cotula	+	C	
(Mayweed)	7 III CITIIS COLUIU		`	
Chickweed, Common	Stellaria media	С		
Chickweed, Mouseear	Cerastium fontanum ssp.		С	
	vulgare			
Clover, White	Trifolium repens	С		
Cudweed, Purple	Gamochaeta (Gnaphalium)	C		
Dandalian	purpurea - fficiona de	-		
Dandelion	Taraxacum officianale	<u> </u>	С	
Dogfennel	Eupatorium capillifolium			С
Eclipta (False Daisy)	Eclipta prostrata (alba)		S	
Evening-Primrose	Oenothera spp.		S	
Feverfew, Santa Maria	Parthenium hysterophorus		С	
Fiddleneck, Common	Amsinckia menziesii var. intermedia	С		
Filaree, Whitestem	Erodium moschatum			С
Fleabane, Dwarf	Conyza ramosissima	С		
Fleabane, Hairy	Conyza (Erigeron) bonariensis	C		
Galinsoga, Hairy	Galinsoga quadriradiata		С	
Geranium, Carolina	Geranium carolinianum		С	
Groundcherry, Cutleaf	Physalis angulata	С		
Groundsel, Common	Senecio vulgaris	<del>                                     </del>		С
Henbit	Lamium amplexicaule		<del>                                     </del>	S
Horseweed (Marestail)	Conyza (Erigeron) canadensis	С		
Jimsonweed	Datura stramonium			С
Knotweed, Prostrate	Polygonum aviculare	С	-	μ_
-		-		С
Knotweed, Silversheath	Polygonum argyrocoleon	_		<u> </u>
Knotweed	Polygonum spp.	С		
Kochia (Burningbush)	Bassia (Kochia) scoparia	<u> </u>		С
Ladysthumb	Persicaria maculosa (Polygonum persicaria)		С	
Lambsquarters, Common	Chenopodium album	С		
Lettuce, Prickly	Lactuca serriola			S
Mallow, Common	Malva neglecta		С	
Mallow, Little	Malva parviflora			S
Mallow, Venice	Hibiscus trionum	İ		S
Medic, Black	Medicago lupulina			С

Common Name	Scientific Name	Rates (lbs./acre) C=Control S=Suppression		
		100	150	200
Broa	dleaf Weeds (cont'd)	1		
Morningglory, lvyleaf	Ipomoea hederacea		С	
Mullein, Turkey	Croton setigerus			С
Mustard, Black	Brassica nigra		C	
Mustard, Indian	Brassica juncea	С		_
Mustard, Wild Nettle, Burning	Sinapis arvensis Urtica urens	C		(
Nightshade, Black	Solanum nigrum	С		
Oxalis, Buttercup	Oxalis pes-caprae	C		
Oxtongue, Bristly	Helminthotheca (Picris)			С
	echioides			
Parsley, Marsh	Cyclospermum leptophyllum	C		
Pennywort	Hydrocotyle spp.	С		
Pepperweed, Virginia	Lepidium virginicum	С		
Phyllanthus, Long-stalked	Phyllanthus tenellus			C
Pigweed	Amaranthus spp.	C		
Pigweed, Redroot	Amaranthus retroflexus	С		
Pimpernel, Scarlet	Anagallis arvensis	С		
Pineappleweed	Matricaria discoidea	С		
Plaintain, Bracted	Plantago aristata		С	
Plantain, Broadleaf	Plantago major			С
Plantain, Buckhorn	Plantago lanceolata		С	Ť
Plantain, Slender	Plantago heterophylla	С		
Poinsettia, Wild (Mexican	Euphorbia (Poinsettia)		_	<del>                                     </del>
Fireplant)	heterophylla	C		
Pokeweed, Common	Phytolacca americana		С	
Purslane, Common	Portulaca oleracea	С		
Pusley, Florida	Richardia scabra	<u> </u>	С	
Radish, Wild	Raphanus raphanistrum	С		
Ragweed, Common	Ambrosia artemisiifolia	С	-	$\vdash$
-	Calandrinia ciliata		С	-
Redmaids, Fringed Rockcress, Virginia Winged	Sibara (Planodes) virginica	С		
Shepherdspurse	Capsella bursa-pastoris	C		
Sida, Prickly	Sida spinosa		С	
	. "	-	<del>-</del>	
Sorrel, Red	Rumex acetosella		C	
Sowthistle, Annual	Sonchus oleraceus	С		
Sowthistle, Spiny	Sonchus asper	<u> </u>		C
Spanishneedles	Bidens alba			С
Speedwell, Purslane	Veronica peregrina	С		<u> </u>
Speedwell, Thymeleaf	Veronica serpyllifolia		С	
Spurge, Garden (Pillpod Sandmat)	Euphorbia (Chamaesyce) hirta			С
Spurge, Hyssop	Euphorbia (Chamaesyce) hyssopifolia		С	
Spurge, Petty	Euphorbia peplus			С
Spurge, Prostrate (Ground)	Euphorbia (Chamaesyce) humistrata	С		
Spurge, Spotted	Euphorbia (Chamaesyce) maculata		С	
Sunflower	Helianthus spp.			С
Sweetclover, Yellow	Melilotus officinalis		С	Ť
	Lepidium (Coronopus)		ا ا	
Swinecress, Lesser	didymum` Descurainia pinnata ssp.			С
Tansymustard, Green	brachycarpa	<u> </u>	С	
Telegraphplant	Heterotheca grandiflora	С		<u> </u>
Thistle, Musk	Carduus nutans			С
Vetch, Common	Vicia sativa	С		
Waterbuttons, Southern	Cotula australis		С	
Willowherb, Panicled	Epilobium brachycarpum	С		
Woodsorrel, Creeping	Oxalis corniculata			С
Woodsorrel, Yellow	Oxalis stricta			S

Gras	sy Weeds and Monocots			
Barnyardgrass	Echinochloa crus-galli	С		
Bluegrass, Annual	Poa annua			С
Crabgrass, Large	Digitaria sanguinalis	С		
Crabgrass, Smooth	Digitaria ischaemum			С
Crabgrass, Southern	Digitaria ciliaris	С		
Crowfootgrass	Dactyloctenium aegyptium	С		
Cupgrass, Woolly	Eriochloa villosa	С		
Dewflower, Nakedstem (Doveweed)	Murdannia nudiflora			С
Fescue, Rattail	Vulpia myuros	С		
Flatsedge, Baldwin's	Cyperus croceus	С		
Flatsedge, Rice	Cyperus iria			С
Foxtail, Giant	Setaria faberi	С		
Foxtail, Green	Setaria viridis	С		
Foxtail, Yellow	Setaria pumila (glauca/ lutescens)	С		
Goosegrass <sup>1</sup>	Eleusine indica <sup>1</sup>			С
Itchgrass	Rottboellia cochinchinensis	С		
Johnsongrass	Sorghum halepense			S
Jungle-Rice	Echinochloa colona			С
Lovegrass	Eragrostis spp.	С		
Millet, Texas	Urochloa texana (Panicum texanum)	С		
Panicum, Fall	Panicum dichotomiflorum	С		
Rescuegrass	Bromus catharticus			S
Signalgrass, Browntop	Urochloa fusca (Panicum fasciculatum)	С		
Signalgrass, Broadleaf	Urochloa (Brachiaria) platyphylla	С		
Sprangletop	Leptochloa (Diplachne) spp.		С	
Stiltgrass, Japanese	Microstegium vimineum			С
Witchgrass	Panicum capillare	С		

<sup>&</sup>lt;sup>1</sup> In many areas, a single application of 100-200 lbs./acre of Gemini® Granular will control goosegrass. However, under heavy goosegrass pressure and/or an extended growing season, weed control will be most effective by making an initial application of 100 lbs./acre followed by a second application of 100 lbs./acre 60-90 days later.

## CONTAINER, FIELD-GROWN AND LANDSCAPE ORNAMENTAL PLANTINGS INCLUDING CHRISTMAS TREE FARMS

### **Product Information**

Apply Gemini<sup>®</sup> Granular to soil surfaces for preemergence control of listed grass and broadleaf weeds around ornamental shrubs and trees, established perennial vegetation and wildflower plantings and Christmas tree farms. See **Table 2** for a list of weeds controlled.

## USE RESTRICTIONS - Container, Field-grown, and Landscape Ornamental Plantings and Christmas Tree Farms

- Do not apply Gemini<sup>®</sup> Granular to seedbeds, or seedling transplant beds. Only apply to established plantings.
- Do not apply to unrooted liners or cuttings.
- Do not apply to pots less than six inches wide.
- Do not apply to ground covers until they are established and well rooted.
- Do not apply to bedding plants or areas where bedding plants will be planted or transplanted within one year after application.
- Do not apply Gemini® Granular to plants inside enclosed structures.
- Do not cover plants treated with Gemini<sup>®</sup> Granular until 21 days have passed after application.
- Do not apply Gemini<sup>®</sup> Granular to newly transplanted ornamentals, nursery stock, or ornamental bulbs. Delay application until soil has settled and roots have formed.
- Do not apply after emergence of ornamental bulbs.
- Do not apply to wet foliage.
- Do not apply by air.

## USE PRECAUTIONS - Container, Field-grown, and Landscape Ornamental Plantings and Christmas Tree Farms

- Disturbing the herbicide barrier with cultural practices that disturb the soil surface such as, but not limited to, moving planted containers, pulling emerged weeds, digging, disking, harrowing, and deep raking can result in reduced weed control.
- Applications of Gemini<sup>®</sup> Granular over the top of plants with newly forming buds may cause injury. Possible plant injury may be avoided by application as a direct application to the soil surface beneath ornamental plants.

### **Timing and Method of Application**

Gemini<sup>®</sup> Granular is a preemergence herbicide and will not control listed grass or broadleaf weeds post-

germination. It works best when applied to soil that is free of clods, weeds and debris and is activated by at least 0.5 inches of irrigation or rainfall or shallow incorporation to a depth of 1 to 2 inches. Weed control is improved if Gemini<sup>®</sup> Granular is activated in the soil before weed seeds germinate and within 14 days after application. Apply Gemini<sup>®</sup> Granular to application sites as directed in **Table 4**.

### **Plant Sensitivity**

Direct application of Gemini<sup>®</sup> Granular to rapidly growing tissue or buds can injure plants. In the spring when buds are rapidly growing and expanding, overthe-top application of Gemini<sup>®</sup> Granular can injure new growth. However, these effects are temporary. To reduce the possibility of injury, wait to apply Gemini<sup>®</sup> Granular over the top of newly emerged vegetation until it has hardened off, unless your experience indicates that the plant in question will not be injured by the over-the-top application. After application, immediately apply overhead irrigation to the foliage to rinse Gemini<sup>®</sup> Granular from plant surfaces onto soil. Apply only to dry foliage to minimize the risk of crop injury.

Table 3. Amount of Gemini<sup>®</sup> Granular to Apply to Container, Field Grown, and Landscape Ornamental Plantings and Christmas Trees Farms

Amount to Apply Per Application	When to Apply	Comments/ Instructions
100-200 lbs. to the acre or 37-75 oz./1,000 sq. ft.	Any time weed germination is expected.	Use the higher amount for longer control. Gemini® Granular can be applied more than once per year as long as the total amount of product applied does not exceed 375 lbs./ acre (2.43 lbs. active ingredient/acre) per year.

Table 4. Application Sites and Instructions for Gemini® Granular Use on Container, Field Grown, and Landscape Ornamental Plantings and Christmas Tree Farms

Site	Application Instructions
Newly-Transplanted Container or Field Nursery Stock	<ul> <li>Do not apply until soil has settled around transplants and roots have formed.</li> <li>Do not apply to wet foliage as damage may occur.</li> <li>Apply after cuttings form roots and are established.</li> <li>To avoid inhibition of the tissue union, apply before budding/grafting or after buds/ grafts have taken.</li> <li>Do not apply to pots less than six inches wide</li> </ul>
Established Container, Field Nursery Stock, or Landscape Plants	Apply at any time as an over-the-top, or soil directed application.
Landscape (or Ornamental) Plantings	<ul> <li>Apply as an over-the-top, or as a soil directed application.</li> <li>Delay applications to newly transplanted ornamentals until soil has settled around transplants.</li> </ul>
Bare Ground Application for Container Placement	<ul> <li>Apply to soil (including mulch, gravel, wood chips, or other permeable base) upon which containerized ornamentals are placed.</li> <li>After Gemini® Granular is applied, use post-emergence herbicides to control break through weeds. Or if necessary, perform shallow cultivation or hand weeding to avoid disturbing the herbicide barrier.</li> </ul>
In Shadehouses and Uncovered Polyhouses	<ul> <li>After Gemini® Granular is applied, houses must remain uncovered for at least 21 days.</li> <li>In addition, plants must receive 2 irrigations totaling at least 0.5 inches of water before covering.</li> </ul>
Ornamental Bulbs (Not for use on ornamental bulbs grown for commercial production in California).	Gemini® Granular can be applied to bulbs. Apply before bulbs emerge. Do not apply after emergence.

### **Ornamental Plant Sensitivity**

Gemini<sup>®</sup> Granular will not likely harm the trees, shrubs, vines and flowers listed below in **Table 5** at the listed application rates. Gemini<sup>®</sup> Granular can be applied over the top of the listed species. The species that are sensitive to Gemini<sup>®</sup> Granular when grown in containers are indicated.

When plants are under stress (such as heat, drought, or frost/freeze exposure), some cultivars of listed plants may be sensitive to Gemini® Granular.

Gemini<sup>®</sup> Granular is not recommended for weed control in the plants listed in **Table 6**.

Table 5. Plants Not Likely To Be Injured By Gemini® Granular at the Listed Maximum Application Rates

Scientific Name	Common Name	Max Rate/ Application (lbs./acre)
<i>Abelia grandiflora '</i> Edward Goucher'	Abelia 'Edward Goucher'	200
Abelia grandiflora	Glossy Abelia	200
Abelia grandiflora 'Sherwood' <sup>†</sup>	Abelia 'Sherwood' <sup>†</sup>	200
Abies balsamea**	Balsam Fir**	200
Abies concolor**	Concolor Fir**	200
Acacia abyssinica	Flat Top Acacia	200
Acacia redolens	Prostrate Acacia	200
Acacia stenophylla	Shoestring Acacia	200
Achillea millefolium 'Paprika'	Yarrow 'Paprika'	100
Achillea millefolium 'Saucy Seduction'	Yarrow 'Saucy Seduction'	100
Actinidia chinensis*	Kiwi*	200
Agapanthus africanus	Lily-of-the-Nile	100
Agapanthus africanus 'Queen Anne'	Lily-of-the-Nile 'Queen Anne'	100
Agapanthus orientalis <sup>†</sup>	Lily-of-the-Nile <sup>†</sup>	100
Akebia quinata <sup>†</sup>	Chocolate Vine <sup>†</sup>	200
Albizia julibrissin	Mimosa	200
Allium cernuum <sup>†</sup>	Lady's Leek, Nodding Onion <sup>†</sup>	200
Alsophila australis	Australian Tree Fern	200
Amelanchier alnifolia	Saskatoon Serviceberry	200
Andromeda polifolia	Bog Rosemary	200
Anisodonte hypomandarum	Cape Mallow	200
<i>Aptenia cordifolia '</i> Red Apple'	Aptenia 'Red Apple'	200
Archontophoenix cunninghamiana	King Palm	200
Arctostaphylos densiflora	Vine Hill Manzanita	200
Arctostaphylos uva-ursi	Bearberry	200

Scientific Name	Common Name	Max Rate/ Application (lbs./acre)
Arctotheca calendula	Cape Weed	200
Ardisia japonica 'Chirimen'	Marlberry 'Chirimen'	200
<i>Argyranthemum frutescens</i> 'Butterfly'	Argyranthemum 'Butterfly'	200
Armeria maritima 'Bloodstone'	Sea Thrift 'Bloodstone'	200
Artemisia lactiflora′ <sup>†</sup>	White Mugwort' <sup>†</sup>	200
Asparagus densiflorus	Foxtail Fern	200
Asparagus retrofractus	Ming Asparagus Fern	200
Aucuba japonica	Japanese Aucuba	200
Aucuba japonica 'Goldstrike'	Acuba 'Goldstrike'	200
Baccharis pilularis	Coyote bush	200
Bauhinia galpinii	Red Bauhinia	200
Berberis thunbergii 'Crimson Pygmy'	Japanese Barberry 'Crimson Pygmy'	200
Berberis thunbergii 'Concord'	Japanese Barberry 'Concord'	200
Betula nigra	River Birch	200
Betula papyrifera	Paper Birch	200
Betula pendula	European White Birch	200
<i>Bidens ferulifolia</i> 'Peter's Gold'	Bidens 'Peter's Gold'	200
<i>Boltonia asteroides</i> 'Snowbank' <sup>†</sup>	Boltonia 'Snowbank' <sup>†</sup>	200
Bougainvillea x buttiana 'Barbara Karst'	Bougainvillea 'Barbara Karst'	200
Bougainvillea x buttiana 'California Gold'	Bougainvillea 'California Gold'	200
<i>Bougainvillea x buttiana</i> 'Pink Pixie'	Bougainvillea 'Pink Pixie'	200
Bougainvillea x buttiana 'Scarlet O'Hara'	Bougainvillea 'Scarlet O'Hara'	200
<i>Bougainvillea x buttiana</i> 'Temple Fire'	Bougainvillea 'Temple Fire'	200
Bougainvillea x buttiana 'Texas Dawn'	Bougainvillea 'Texas Dawn'	200
Bougainvillea x buttiana 'Purple Queen'	Bougainvillea 'Purple Queen'	200
Bougainvillea x buttiana 'Rosenka'	Bougainvillea 'Rosenka'	200
Brachychiton populneus	Bottle Tree	200
Brachycome x 'New Amethyst'	Brachycome 'New Amethyst'	200
Bucida buceras	Black Olive	200
Buxus 'Green Velvet'	Boxwood 'Green Velvet'	100
Buxus microphylla var. japonica	Japanese Boxwood	200
Buxus microphylla 'Green Beauty'	Boxwood 'Green Beauty'	200
Buxus sempervirens	Common Boxwood	200
Calluna vulgaris	Scotch Heather	200
Calluna vulgaris 'Spring Torch'	Scotch Heather 'Spring Torch'	200

Scientific Name	Common Name	Max Rate/ Application (lbs./acre)
Camellia japonica	Japanese Camellia	200
<i>Campsis x tagliabµana</i> 'Madame Galen' <sup>†</sup>	Trumpet Creeper 'Madame Galen' <sup>†</sup>	200
Carex albula 'Frosty Curls'	Sedge 'Frosty Curls'	200
Carpobrotus edulis	Ice Plant	200
Cassia artemisioides	Feathery Cassia	200
Cassia eremophila	Senna	200
Catharanthus roseus	Madagascar Periwinkle	100
Cephalotaxus harringtonia	Japanese Plum Yew	200
Ceratonia siliqua	Carob	200
Ceratostigma plumbaginoides <sup>†</sup>	Hardy Plumbago <sup>†</sup>	200
Ceratostigma willmottianum	Chinese Plumbago	200
Chanamalas ignonica	Redbud	200
Chaenomeles japonica Chamaecyparis obtusa	Orange Flowering Quince Fernspray Hinoki	200
'Filicoides'	Falsecypress	200
Chamaecyparis obtusa 'Gracilis'	Slender Hinoki Falsecypress	200
Chamaecyparis obtusa 'Kosteri'	Koster's Hinoki Falsecypress	200
<i>Chamaecyparis obtusa</i> 'Nana Gracilis'	Dwarf Hinoki Falsecypress	200
Chamaecyparis obtusa 'Torulosa'	Twisted Hinoki Falsecypress	200
Chamaecyparis pisifera	Sawara Falsecypress	200
<i>Chamaecyparis pisifera</i> 'Squarrosa Minima'	Dwarf Moss Falsecypress	200
Chamaecyparis pisifera 'Filifera'	Threadleaf Falsecypress	200
Chamaedorea cataractarum	Cat Palm	200
Chamaedorea costaricana	Cluster Palm	200
Chamaedorea elegans	Parlor Palm	200
Chamaerops humilis	European Fan Palm, Mediterranean Fan Palm	200
Clethra alnifolia	Summersweet	200
Cleyera japonica	Japanese Cleyera	200
Clivia miniata	Kafir Lily	200
Coleonema pulchrum	Breath of Heaven	200
Convolvulus cneorum	Bush Morning Glory	200
Convolvulus mauritanicus	Ground Morning Glory	200
Cornus florida 'Cloud Nine'	Dogwood 'Cloud Nine'	200
Cornus florida	Dogwood	200
Cornus kousa	Kousa Dogwood	200
<i>Cotinus coggygria '</i> Royal Purple'	Smoke Tree 'Royal Purple'	200
Cotoneaster adpressus	Creeping Cotoneaster	200
Cotoneaster apiculatus	Cranberry Cotoneaster	200

Scientific Name	Common Name	Max Rate/ Application (lbs./acre)
Cotoneaster buxifolius	Box Leafed Cotoneaster	200
Cotoneaster congestus	Pyrenees Cotoneaster	200
Cotoneaster dammeri	Bearberry Cotoneaster	200
Cotoneaster horizontalis	Rockspray Cotoneaster	200
Cotoneaster microphyllus	Littleleaf Cotoneaster	200
Cotoneaster simonsii	Himalayan Cotoneaster	200
Crataegus viridis	Green Hawthorn	200
Cryptomeria japonica	Japanese Cryptomeria	200
Cupaniopsis anacardioides	Carrot Wood	200
Cuphea hyssopifolia	Mexican Heather	200
x Cupressocyparis leylandii 'Emerald Isle'	Leyland Cypress 'Emerald Isle'	200
x Cupressocyparis leylandii 'Naylor's Blue'	Leyland Cypress 'Naylor's Blue'	200
Cupressus arizonica	Arizona Cypress	200
Cupressus arizonica 'Blue Pyramid'	Arizona Cypress 'Blue Pyramid'	200
Cupressus sempervirens	Italian Cypress	200
Cupressus sempervirens 'Glauca'	Italian Cypress 'Glauca'	200
Cycas revoluta	Sago Palm	200
Cyperus albostriatus	Dwarf Umbrella Grass	200
Cyrtomium fortunei	Holly Fern	200
Cytisus x praecox 'Warminster'	Broom 'Warminster'	200
Cytisus scoparius	Scotch Broom	200
Dalea greggii	Trailing Indigo Bush	200
Daphne cneorum	Rose Daphne	200
Daphne odora	Fragrant Daphne	200
Dietes (Moraea) iridioides	African Iris	200
Dietes vegeta	Fortnight Lily	200
Dodonaea viscosa	Hopseed Bush	200
Dymondia margaretae	Diamond Marguerite	200
Dypsis lutescens	Areca Palm	200
Elaeagnus x ebbingei	Elaeagnus	200
Elaeagnus pungens	Silverberry	200
Elaeagnus pungens 'Fruitlandii'	Silverberry 'Fruitlandii'	200
Enkianthus campanulatus	Red Veined Enkianthus	200
Ensete ventricosum	Abyssinian Banana	200
Erianthus ravennae	Hardy Pampasgrass	200
Erica cinerea	Purple Bell Heather	200
Erica x darleyensis 'Mediterranian Pink'	Heather 'Mediterranean Pink'	200
Erica vagans	Cornish Heather	200
Erigeron speciosus 'Darkest of All'	Fleabane 'Darkest of All'	200
Escalonia x exoniensis	Escallonia	200

Scientific Name	Common Name	Max Rate/ Application (lbs./acre)
Eucalyptus camaldulensis	River Red Gum	200
Eucalyptus cinerea	Silver Dollar Eucalyptus	200
Eucalyptus microtheca	Coolibah	200
Eucalyptus sideroxylon	Red Ironbark Eucalyptus	200
Eugenia myrtifolia 'Teenie Genie'	Brush Cherry 'Teenie Genie'	200
Eugenia myrtifolia	Brush Cherry	200
Euonymus fortunei 'Blondy'	Wintercreeper 'Blondy'	100
Euonymus japonicus	Japanese Spindle Tree	200
<i>Euonymus japonicas '</i> Gold Spot'	Euonymus 'Gold Spot'	200
Fagus sylvatica	European Beach	200
Fatsia japonica	Japanese Aralia	200
Festuca ovina glauca	Blue Fescue	200
Forsythia x intermedia	Border Forsythia	200
Forsythia x intermedia 'Spring Glory'	Forsythia 'Spring Glory'	200
Forsythia suspensa <sup>†</sup>	Weeping Forsythia <sup>†</sup>	200
Forsythia viridissima	Greenstem Forsythia	200
Fraxinus udhei	Shamel Ash	200
Fuchsia 'Santa Clause'	Fuchsia 'Santa Clause'	200
Gardenia jasminoides	Gardenia, Cape-Jasmine	100
<i>Gardenia jasminoides</i> 'Mystery'	Gardenia 'Mystery'	100
<i>Gardenia jasminoides</i> 'August Beauty'	Gardenia 'August Beauty'	100
<i>Gardenia jasminoides</i> 'Radicans'	Miniature Gardenia	100
Gaultheria procumbens	Wintergreen	200
Gelsemium sempervirens	Carolina Jessamine	200
Genista pilosa	Woadwaxen	200
Ginko biloba	Ginko	200
Gleditsia triacanthos	Honey Locust	200
Hakonechloa macra 'Aureola'	Hakonegrass 'Aureola'	200
Hamamelis virginia	Common Witch Hazel	200
Hardenbergia violacea	Lilac Vine	200
Hebe buxifolia	Boxleaf Hebe	200
Hedera canariensis	Algerian Ivy	200
Hedera helix	English Ivy	200
Helichrysum petiolare 'White Licorice'	Helichrysum 'White Licorice'	200
Hemerocallis spp.†	Daylily <sup>†</sup>	100
Hemerocallis 'Aztec' <sup>†</sup>	Daylily 'Aztec Gold' <sup>†</sup>	100
Hemerocallis 'Stella de Oro' <sup>†</sup>	Daylily 'Stella de Oro' <sup>†</sup>	100
Hemerocallis 'Tender Love' †	Daylily 'Tender Love' <sup>†</sup>	100
Hesperaloe parvifolia	Red Yucca	200

Scientific Name	Common Name	Max Rate/ Application (lbs./acre)	
Hibiscus**	Rose-of-Sharon**	100	
<i>Hibiscus moschetus</i> 'Disco Belle White'	Mallow 'Disco Belle White'	100	
Hibiscus rosa-sinensis**	Chinese Hibiscus**	100	
<i>Hibiscus rosa-sinensis</i> 'Ross Estey'**	Hisbiscus 'Ross Estey'**	100	
Hibiscus syriacus 'Red Bird'**	Rose-of-Sharon 'Red Bird'**	100	
<i>Hibiscus syriacus</i> 'Red Heart'**	Rose-of-Sharon 'Red Heart'**	100	
Hibiscus syriacus 'Woodbridge'**	Rose-of-Sharon 'Woodbridge'**	100	
Hosta x 'Fortunei'	Hosta 'Fortunei'	200	
Hosta x 'Francee'	Hosta 'Francee'	200	
Hostα x 'Patriot'	Hosta 'Patriot'	200	
Hosta lancifolia f. albomarginata	Hosta 'Albomarginata'	200	
Hosta lancifolia	Narrow Leafed Hosta	200	
Hosta plantaginea <sup>†</sup>	Fragrant Hosta <sup>†</sup>	200	
Houttuynia cordata 'Chameleon'	Variegated Chameleon Plant	200	
<i>llex x</i> 'Nellie R. Stevens'	Holly 'Nellie R Stevens'	200	
llex aquafolium	English Holly	200	
<i>Ilex aquafolium</i> 'Gold Coast'	English Holly 'Gold Coast'	200	
llex x aquipernyi 'San Jose'	Holly 'San Jose'	200	
llex x attenuate 'Savanna'	Holly 'Savannah'	200	
llex cassine	Dahoon Holly	200	
llex cornuta 'Burfordii'	Chinese Holly 'Burford'	200	
<i>llex cornuta</i> 'Needlepoint'	Chinese Holly 'Needlepoint'	200	
llex cornuta 'Dwarf Burford'	Chinese Holly 'Dwarf Burford'	200	
llex cornuta**	Chinese Holly**	200	
llex crenata	Japanese Holly	200	
llex crenata 'Convexa'	Japanese Holly 'Convexa'	200	
llex crenata 'Green Luster'	Japanese Holly 'Green Luster'	200	
llex crenata 'Hetzii'	Japanese Holly 'Hetzii'	200	
Ilex crenata 'Steeds'	Japanese Holly 'Steeds'	200	
<i>Ilex crenata</i> 'Stokes'	Japanese Holly 'Stokes'	200	
Ilex glabra	Inkberry	200	
Ilex glabra 'Compacta'	Inkberry 'Compacta'	200	
<i>Ilex x meserveae</i> 'Ebony Magic'	Meserve Holly 'Ebony Magic'	200	
llex pernyi	Perny Holly	200	
llex vomitoria	Yaupon Holly	200	
llex vomitoria 'Nana'	Yaupon Holly 'Nana', Dwarf Yaupon Holly	200	
<i>llex vomitoria</i> 'Pendula'	Yaupon Holly 'Pendula', Weeping Yaupon Holly	200	

Scientific Name	Common Name	Max Rate/ Application (lbs./acre)	
Illicium anisatum	Japanese Star Anise	200	
Inula ensifolia	Swordleaf Inula	200	
<i>Ipomea acuminata</i> 'Blue Dawn'	Blue Dawn Morning Glory	200	
Iris ensata 'Jodlesong'	Japanese Iris ' Jodlesong'	200	
Iris pumila	Dwarf Iris	200	
Iris sibirica 'Cabernet'	Siberian Iris 'Cabernet'	200	
Iris virginica	Virginia Iris	200	
<i>Itea virginica '</i> Henry's Garnet'	Virginia Sweetspire 'Henry's Garnet'	200	
Jasminum nudiflorum	Winter Jasmine	200	
Jasminum polyanthum	Pink Jasmine	200	
Juniperus chinensis	Chinese Juniper	200	
Juniperus chinensis (x pfitzeriana) 'Old Gold'	Juniper 'Old Gold'	200	
Juniperus chinensis (x pfitzeriana) 'Glauca'	Juniper 'Pfitzeriana Glauca'	200	
Juniperus chinensis (x pfitzeriana) 'Sea Green'	Juniper 'Sea Green'	200	
Juniperus chinensis (x pfitzeriana) 'Torulosa'	Juniper 'Torulosa', Hollywood Juniper	200	
Juniperus chinesis (davurica) 'Parsonii' <sup>†</sup>	Juniper 'Parsonii', Parson's Juniper <sup>†</sup>	200	
Juniperus horizontalis	Creeping Juniper (except 'Prince of Wales')	200	
Juniperus horizontalis	Andorra Juniper	200	
<i>Juniperus horizontalis '</i> Bar Harbor'	Creeping Juniper 'Bar Harbor'	200	
<i>Juniperus horizontalis '</i> Blue Chip'	Creeping Juniper 'Blue Chip'	200	
Juniperus horizontalis 'Wiltonii'	Creeping Juniper 'Blue Rug'	200	
Juniperus horizontalis 'Huntington Blue'	Creeping Juniper 'Huntington Blue'	200	
Juniperus procumbens	Japanese Garden Juniper	200	
Juniperus sabina	Savin Juniper	200	
Juniperus sabina 'Broadmoor'	Savin Juniper 'Broadmoor'	200	
Juniperus sabina 'Hicksii'	Savin Juniper 'Hicksii'	200	
Juniperus scopulorum 'Emerald Green'	Rocky Mountain Juniper 'Emerald Green'	200	
Juniperus scopulorum 'Wichita Blue'	Rocky Mountain Juniper 'Wichita Blue'	200	
Juniperus squamata	Singleseed Juniper	100	
Juniperus squamata 'Blue Star'	Juniper 'Blue Star'	100	
Juniperus virginiana	Eastern Red Cedar	200	
Justicia brandegeana	Shrimp Plant	200	
Kalmia latifolia	Mountain Laurel	200	
Kniphofia uvaria 'Flamenco'	Red Hot Poker 'Flamenco'	200	
Lagerstromia indica and hybrids <sup>†</sup>	Crape Myrtle <sup>†</sup>	200	

Scientific Name	Common Name	Max Rate/ Application (lbs./acre)	
<i>Lavandula angustifolia</i> 'Munstead' <sup>†</sup>	Lavender 'Munstead' <sup>†</sup>	100	
Leucophyllum frutescens	Texas Sage	200	
Leucophyllum laevigatum	Chihuahan Sage	200	
Leucothoe axillaris	Coast Doghobble	200	
Leucothoe fontanesiana	Drooping Leucothoe	200	
Ligustrum amurense	Amur Privet	200	
Ligustrum japonicum	Japanese Privet	200	
Ligustrum lucidum	Glossy Privet	200	
Ligustrum ovalifolium	California Privet	200	
Ligustrum sinense	Chinese Privet	200	
Ligustrum sinense 'Variegatum' <sup>†</sup>	Chinese Privet 'Variegatum'	200	
Ligustrum x vicaryi	Golden Privet	100	
Ligustrum vulgare 'Cheyenne'	Common Privet 'Cheyenne'	200	
Ligustrum vulgare 'Lodense'	Common Privet 'Lodense'	200	
Liquidambar styraciflua	American Sweetgum	200	
Liriope gigantea	Giant Lily Turf	200	
Liriope muscari 'Big Blue'	Liriope 'Big Blue'	200	
Liriope muscari 'Lilac Beauty'	Liriope 'Lilac Beauty'	200	
Liriope muscari 'Majestic'	Liriope 'Majestic'	200	
Liriope muscari 'Monroe's White'	Liriope 'Monroe's White'	200	
<i>Liriope muscari</i> 'Silvery Sunproof'	Liriope 'Silvery Sunproof'	200	
Liriope muscari 'Variegata'	Liriope 'Variegata'	200	
Liriope spicata <sup>†</sup>	Creeping Liriope <sup>†</sup>	200	
<i>Liriope spicata</i> 'Silver Dragon'	Liriope 'Silver Dragon'	200	
Lobelia cardinalis <sup>†</sup>	Cardinal Flower, Indian Pink <sup>†</sup>	200	
Lonicera fragrantissima	Winter Honeysuckle	200	
Lonicera periclymenum	Woodbine	200	
Lonicera periclymenum 'Serotina'	Woodbine 'Serotina'	200	
Lonicera sempervirens	Trumpet Honeysuckle	200	
Lonicera tatarica	Tatarian Honeysuckle	200	
Loropetalum chinense 'Burgundy' <sup>†</sup>	Loropetalum 'Burgundy' <sup>†</sup>	200	
Loropetalum chinense 'Monraz'	Loropetalum 'Razzleberri'	200	
Loropetalum chinense 'Ruby' <sup>†</sup>	Loropetalum 'Ruby' <sup>†</sup>	200	
Loropetalum chinense 'Sizzlin' Pink'	Loropetalum 'Sizzlin' Pink'	200	
Lycianthes (Solanum) rantonnetii	Paraguay Nightshade	200	
Lysimacia nummularia	Moneywort	200	
Lysimacia punctata	Dotted Loosestrife	200	

Scientific Name	Common Name	Max Rate/ Application (lbs./acre)	
Magnolia grandiflora	Southern Magnolia	200	
Magnolia x soulangeana	Saucer Magnolia	200	
Magnolia stellata 'Royal Star'	Magnolia 'Royal Star'	200	
<i>Mahonia aquifolium</i> 'Compacta'	Compact Oregon Grapeholly	200	
Mahonia bealei	Leather Leaf Mahonia	200	
Mahonia repens	Creeping Mahonia	200	
Malephora luteola	Rocky Point Ice Plant	200	
<i>Mandevilla splendens</i> 'Red Riding Hood'	Mandevilla 'Red Riding Hood'	200	
Matteuccia struthiopteris	Ostrich Fern	200	
Michelia figo	Banana Shrub	200	
Miscanthus sinensis 'Silberfeder'	Maidengrass 'Silberfeder'	200	
<i>Miscanthus sinensis '</i> Yaku Jima'** <sup>†</sup>	Maidengrass 'Yaku Jima'** <sup>†</sup>	200	
Morella (Myrica) cerifera	Southern Waxmyrtle	200	
Morella (Myrica) pensylvanica	Northern Bayberry	200	
Morus alba*	White Mulberry*	200	
Musa acuminata*	Banana*	200	
<i>Myoporum parvifolium</i> 'Putah Creek'	Myoporum 'Putah Creek'	200	
Nandina domestica	Nandina	200	
Oenothera macrocarpa <sup>†</sup>	Ozark Sundrops, Missouri Evening Primrose <sup>T</sup>	200	
Oenothera speciosa 'Siskiyou'	Evening Primrose 'Siskiyou'	200	
Olea europaea*	Olive*	200	
Onoclea sensibilis	Sensitive Fern	200	
<i>Ophiopogon japonicus</i> 'Nana'**	Dwarf Mondo Grass**	200	
Ophiopogon japonicus**	Mondo Grass**	200	
Origanum libanoticum	Hopflower Oregano	200	
Osmanthus fragrans	Sweet Olive Osmanthus	200	
Osmanthus heterophyllus	Holly Osmanthus	200	
Osmanthys heterophyllus 'Gulftide' <sup>T</sup>	Holly Osmanthus 'Gulftide' <sup>†</sup>	200	
Osteospermum fruticosum <sup>†</sup>	Trailing African Daisy <sup>†</sup>	200	
Oxydendrum arboreum	Sourwood	200	
Pachysandra terminalis 'Green Sheen'	Japanese Spurge 'Green Sheen'	200	
Paeonia suffruticosa <sup>†</sup>	Tree Peony <sup>†</sup>	200	
Penstemon x gloxinioides 'Apple Blossom'	Penstemon 'Apple Blossom'	200	
Phlox subulata	Moss Pink	200	
Phoenix roebelenii	Pygmy Date Palm	200	
Phormium tenax 'Jack Spratt'	New Zealand Flax 'Jack Spratt'	200	
<i>Physocarpus opulifolius</i> 'Nanus'	Dwarf Ninebark	200	

Scientific Name	Common Name	Max Rate/ Application (lbs./acre)	
Physostegia virginiana 'Vivid' <sup>†</sup>	False Dragonhead 'Vivid' <sup>†</sup>	200	
Picea abies	Norway Spruce	200	
Picea abies 'Pendula'	Weeping Norway Spruce	200	
Picea abies 'Regens'	Spreading Norway Spruce	200	
Picea glauca	White Spruce	200	
Picea glauca 'Conica'	Dwarf Alberta Spruce	200	
Picea pungens f. glauca	Colorado Blue Spruce	200	
Picea pungens 'Hoopsii'	Hoop's Blue Spruce	200	
Picea pungens 'Koster'	Koster's Blue Spruce	200	
Pieris japonica	Pieris, Japanese Andromeda	200	
<i>Pieris japonica '</i> Mountain Fire'	Pieris 'Mountain Fire'	200	
Pieris japonica 'Snowdirft'	Pieris 'Snowdrift'	200	
Pieris japonica 'Temple Bells'	Pieris 'Temple Bells'	200	
Pieris japonica 'Valley Rose'	Pieris 'Valley Rose'	200	
<i>Pieris japonica '</i> Valley Valentine'	Pieris 'Valley Valentine'	200	
Pinus aristata	Bristlecone Pine	200	
Pinus brutia	Calabrian Pine	200	
Pinus canariensis	Canary Island Pine	200	
Pinus contorta	Shore Pine, Lodgepole Pine	200	
Pinus eldarica	Eldarica Pine	200	
Pinus elliottii	Slash Pine	200	
Pinus halepensis	Aleppo Pine	200	
Pinus heldreichii (leucodermis)	Bosnian Pine	200	
Pinus mugo	Mugo Pine	200	
Pinus nigra	Austrian Black Pine	200	
Pinus palustris	Longleaf Pine	200	
Pinus radiata	Monterey Pine	200	
Pinus strobus	Eastern White Pine	200	
Pinus sylvestris	Scotch Pine	200	
Pinus sylvestris f. fastigiata	Columnar Scotch Pine	200	
Pinus taeda	Loblolly Pine	200	
Pinus thunbergii	Japanese Black Pine	200	
Pinus virginiana	Virginia Pine	200	
Pittosporum rhombifolium	Queensland Pittosporum	200	
Pittosporum tenuifolium 'Golf Ball'	Pittosporum Kohuhu 'Golf Ball'	200	
Pittosporum tobira	Japanese Pittosporum	200	
Pittosporum tobira 'Wheeleri'	Pittosporum 'Wheeler's Dwarf'	200	
Platanus occidentalis	American Sycamore	200	
Platanus racemosa	California Sycamore	200	
Plumbago auriculata	Cape Plumbago	200	

Scientific Name	Common Name	Max Rate/ Application (lbs./acre)	
Podocarpus macrophyllus	Buddist Pine, Yew Podocarpus	200	
Polygala fruticosa	Sweet Pea Shrub	200	
Polystichum acrostichoides	Christmas Fern	200	
Polystichum polyblepharum	Tassel Fern	200	
Populus deltoides	Eastern Cottonwood	200	
Potentilla fragiformis	Strawberry Cinquefoil	200	
Potentilla fruticosa	Shrubby Cinquefoil	200	
Potentilla fruticosa 'Floppy Disc'	Cinquefoil 'Floppy Disc'	200	
Potentilla fruticosa 'Gold Drop'	Cinquefoil 'Gold Drop'	200	
Potentilla fruticosa 'Goldfinger'	Cinquefoil 'Goldfinger'	200	
Potentilla fruticosa 'Red Ace'	Cinquefoil 'Red Ace'	200	
Potentilla fruticosa 'Sunset'	Cinquefoil 'Sunset'	200	
Potentilla fruticosa 'Tangerine'	Cinquefoil 'Tangerine'	200	
Potentilla neumanniana	Spring Cinquefoil	200	
Prosopis chilensis	Chilean Mesquite	200	
Prunus laurocerasus	English Laurel	200	
<i>Prunus laurocerasus</i> 'Otto Luyken'	English Laurel 'Otto Luyken'	200	
Prunus caroliniana	Carolina Cherry Laurel	200	
Prunus caroliniana 'Bright 'N Tight'	Carolina Cherry Laurel Bright 'N Tight'	200	
Prunus glandulosa	Dwarf Flowering Almond	200	
Prunus x yedoensis	Yoshino Cherry	200	
Pseudotsuga menziesii**	Douglas Fir**	200	
Psidium cattleianum	Strawberry Guava	200	
Pyracantha 'Monon'	Pyracantha 'Yukon Belle'	200	
Pyracantha 'Monelf'	Pyracantha 'Red Elf'	200	
Pyracantha 'Rutgers'	Pyracantha 'Rutgers Hybrid'	200	
Pyracantha coccinea	Scarlet Firethorn	200	
Pyracantha coccinea 'Lalandei'	Scarlet Firethorn 'Lalandei'	200	
Pyracantha fortuneana	Pyracantha, Chinese Firethorn	200	
Pyracantha koidzumii	Pyracantha, Formosa Firethorn	200	
Pyracantha koidzumii 'Santa Cruz'	Pyracantha 'Santa Cruz'	200	
Pyracantha koidzumii 'Victory'	Pyracantha 'Victory'	200	
Quercus ilicifolia	Bear Oak	200	
Quercus palustris	Pin Oak	200	
Quercus phellos	Willow Oak	200	
Quercus rubra	Red Oak	200	
Quercus shumardii <sup>†</sup>	Shumard Oak <sup>†</sup>	200	
Ratibida columnifera	Mexican Hat	200	

Scientific Name	Common Name	Max Rate/ Application (lbs./acre)	
Ravenea rivularis	Majesty Palm	200	
Rhaphiolepis indica	Indian Hawthorn	200	
<i>Rhaphiolepis indica</i> 'Ballerina'	Indian Hawthorn 'Ballerina'	200	
Rhaphiolepis indica 'Charisma'	Indian Hawthorn 'Charisma'	200	
Rhaphiolepis indica 'Enchantress'	Indian Hawthorn 'Enchantress'	200	
Rhaphiolepis indica 'Springtime'	Indian Hawthorn 'Springtime'	200	
Rhaphiolepis umbellata <sup>†</sup>	Yedda Hawthorn <sup>†</sup>	200	
Rhododendron x 'Fashion'	Azalea 'Fashion'	200	
Rhododendron x 'Wakeiebisu'	Azalea 'Wakeiebisu'	200	
Rhododendron x 'George Taber'	Azalea 'George Taber'	200	
Rhododendron x 'Delaware Valley White'	Azalea 'Delaware Valley White '	200	
Rhododendron x 'Girard's Roberta'	Azalea 'Girard's Roberta'	200	
Rhododendron x 'Girard's Crimson'	Azalea 'Girard's Crimson'	200	
Rhododendron x 'Golden Flare'	Golden Flare Azalea	200	
Rhododendron x 'Hellmut Vogel'	Azalea 'Hellmut Vogel'	200	
Rhododendron x 'Hershey's Red'	Azalea 'Hershey's Red'	200	
Rhododendron x 'Girard's Hot Shot'	Azalea 'Girard's Hot Shot'	200	
Rhododendron x 'Inga'	Azalea 'Inga'	200	
Rhododendron x 'Irene Koster'	Azalea 'Irene Koster'	200	
Rhododendron indicum 'President Claey'	Azalea 'President Claey'	200	
Rhododendron x 'Tradition'	Azalea 'Tradition'	200	
Rhododendron forrestii x griersonian 'Elizabeth'	Rhododendron 'Elizabeth'	200	
Rhododendron calendulaceum	Flame Azalea	200	
Rhododendron x 'Klondyke'	Azalea 'Klondyke'	200	
Rhododendron 'Ramapo'	Rhododendron Ramapo	200	
Rhododendron x kaempferi 'Blue Danube'	Azalea 'Blue Danube'	200	
Rhododendron mucronulatum	Korean Rhododendron	200	
Rhododendron obtusum	Hino Crimson Azalea	200	
Rhododendron x ponticum 'Chionoides'	Rhododendron 'Chionoides'	200	
Rhododendron x racemosum 'Scarlet Wonder'	Rhododendron 'Scarlet Wonder'	200	
Rhododendron racemosum 'Trilby'	Rhododendron 'Tribly'	200	

Scientific Name	Common Name	Max Rate/ Application (lbs./acre)	
Rosa banksiae 'Lutea'	Lady Banks' Rose	200	
Rumohra adiantiformis	Leatherleaf Fern	200	
Salix babylonica	Babylon Weeping Willow	200	
Santolina rosmarinifolia (virens)	Green Lavender Cotton	200	
Sasa pygmaea	Dwarf Bamboo	200	
Scutellaria resinosa	Sticky Skullcap	200	
Sequoia sempervirens	Coast Redwood	200	
Sequoiadendron giganteum	Giant Sequoia	200	
Skimmia japonica	Japanese Skimmia	200	
Skimmia reevesiana	Reeves Skimmia	200	
Spiraea x bumalda 'Anthony Waterer' <sup>†</sup>	Spirea 'Anthony Waterer' <sup>†</sup>	200	
Spiraea japonica 'Magic Carpet'	Spiraea 'Magic Carpet'	200	
<i>Spiraea japonica</i> 'Neon Flash'	Spiraea 'Neon Flash'	200	
Spiraea japonica 'Shirobana'	Spiraea 'Shirobana'	200	
Spiraea x vanhouttei	Vanhoutte Spirea	200	
Streptosolen jamesonii	Marmalade Bush	200	
Swietenia mahogani	Mahogany	200	
Symphyotrichum (Aster) 'Persian Rose' <sup>†</sup>	Dwarf Aster 'Persian Rose'	100	
Symphyotrichum (Aster) novae-angliae <sup>T</sup>	New England Aster <sup>†</sup>	100	
Symphyotrichum (Aster) novae-angliae 'Purple Dome' <sup>T</sup>	Aster 'Purple Dome' <sup>†</sup>	100	
Symphyotrichum (Aster) novi- belgii <sup>†</sup>	New York Aster <sup>†</sup>	100	
Symphyotrichum (Aster) novi-belgii 'Bonny Blue' <sup>†</sup>	Aster 'Bonny Blue' <sup>†</sup>	100	
Syringa vulgaris	Common Lilac	200	
Taxus cuspidata	Japanese Yew	200	
Taxus x media <sup>†</sup>	Yew <sup>†</sup>	200	
Tecomaria capensis	Cape Honeysuckle	200	
Ternstroemia gymnanthera	Japanese Ternstroemia	200	
Tetraneuris (Hymenoxys) acaulis	Butte Marigold, Angelita Daisy	200	
Teucrium fruticans	Bush Germander	200	
Thalictrum delavayi (dipterocarpum) <sup>†</sup>	Chinese Meadow Rue <sup>†</sup>	200	
Thevetia neriifolia	Yellow Oleander	200	
Thuja occidentalis	American Arborvitae	200	
Thuja occidentalis 'Smaragd'	Arborvitae 'Emerald'	200	
Thuja occidentalis 'Globosa'	Arborvitae 'Globe'	200	
<i>Thuja occidentalis</i> 'Little Giant'	Arborvitae 'Little Giant'	200	

Scientific Name	Common Name	Max Rate/ Application (lbs./acre)	
<i>Thuja occidentalis</i> 'Pyramidalis'	Arborvitae 'Pyramidal'	200	
Thuja occidentalis 'Rheingold'	Arborvitae 'Rheingold'	200	
Thuja occidentalis 'Techny'	Arborvitae 'Techny'	200	
<i>Thuja occidentalis</i> 'Woodwardii'	Woodward's Arborvitae	200	
Tibouchina urvilleana	Princess Flower	200	
Trachelospermum asiaticum	Asian Star Jasmine	200	
Trachycarpus fortunei	Windmill Palm	200	
Tsuga canadensis	Canadian Hemlock, Eastern Hemlock	200	
Tulbaghia violacea	Society Garlic	200	
Ulmus parvifolia	Chinese Elm	200	
Viburnum carlesii	Koreanspice Viburnum	200	
Viburnum davidii	David Viburnum	200	
Viburnum japonicum	Japanese Viburnum	200	
Viburnum lantana	Wayfaring Tree Viburnum	200	
Viburnum odoratissimum	Sweet Viburnum	200	
Viburnum opulus	European Cranberrybush Viburnum	100	
Viburnum plicatum	Snowball Viburnum	200	
Viburnum plicatum f. tomentosum	Doublefile Viburnum	200	
Viburnum x pragense	Prague Viburnum	200	
Viburnum setigerum	Tea Viburnum	200	
Viburnum tinus	Laurustinus	200	
Viburnum tinus 'Spring Bouquet'	Laurustinus 'Spring Bouquet'	200	
Viburnum tinus sp. rigidum	Canary Island Viburnum	200	
Viburnum trilobum	American Cranberrybush Viburnum	200	
Viburnum wrightii	Wright's Viburnum	200	
Vinca major	Bigleaf Periwinkle	200	
Vinca minor	Dwarf Periwinkle	200	
Washingtonia robusta	Mexican Fan Palm	200	
Weigelia florida 'Minuet'	Weigelia 'Minuet'	100	
Xylosma congestum	Shiny Xylosma	200	
Yucca aloifolia	Spanish Bayonet	200	
Yucca filamentosa	Adam's Needle Yucca	200	
Zamia furfuracea	Cardboard Palm (Cycad)	200	

<sup>&</sup>lt;sup>†</sup>Not for use in California

### Table 6. Do Not Use This Product For Weed Control In The Following Ornamental Plant Species

Scientific Name	Common Name
Ajuga spp.	Bugleweed or Ajuga
Brassica spp.	Mustard
Digitalis purpurea 'Dalmation Purple'	Common Foxglove 'Dalmation Purple'
Euonymus alatus 'Compacta'	Dwarf Burning Bush
Euphorbia spp.	Spurge
Iberis spp.	Candytuft
Juniperus horizontalis 'Prince of Wales'	Prince Of Wales Juniper
Melaleuca quinquenervia	Cajeput Tree
Rhododendron caroliniaum	Carolina Rhododendron
Rhododendron catawbiense 'Roseum Elegans'	Roseum Elegans Rhododendron
Sedum spp.	Stonecrop
Yucca recurvifolia	Green Yucca

#### **VEGETATION MANAGEMENT**

### **Product Information**

Apply Gemini® Granular to soil surfaces for preemergence control of listed grass and broadleaf weeds in non-crop areas including ornamentals (does not include container or field grown ornamentals) or surrounding non-crop areas such as managed rights-of-way for transportation systems and utilities (including roadways, roadsides, railways, and equipment yards) and facilities including substations, tank farms, pumping stations, parking and storage areas, and non-grazed fence rows. The best weed control occurs when the product is activated in the soil by 0.5 inch of irrigation or rainfall before listed weed seeds germinate and within 14 days after application.

### Timing and Method of Application

Gemini® Granular is a preemergence herbicide only and will not control listed grassy or broadleaf weeds that have already emerged. It works best when applied to soil that is free of clods, weeds and debris and is activated by at least 0.5 inches of irrigation or rainfall or shallow incorporation to a depth of 1 to 2 inches. Weed control is improved if Gemini® Granular is activated in the soil before listed weed seeds germinate and within 14 days after application. Apply Gemini® Granular to newly-transplanted and established ornamentals as a broadcast or over-the-top application.

<sup>\*</sup>Do not use on food producing trees, vines, or plants.

<sup>\*\*</sup>Not for use on container grown plants.

### **Plant Sensitivity**

Direct application of Gemini® Granular to rapidly growing tissue or buds can injure desirable plants. In the spring when buds are rapidly growing and expanding, over-the-top application of Gemini® Granular can injure new growth of desirable plants, however, these effects are temporary. To reduce the possibility of injury at this time, wait to apply Gemini® Granular over the top of newly emerged vegetation until it has hardened off, unless your experience indicates that the ornamental plant will not be injured by the over-the-top application. After application, immediately apply overhead irrigation to the foliage to wash Gemini® Granular from plant surfaces onto soil. Do not apply to wet foliage to minimize the risk of crop injury.

### Sensitivity of Ornamental Species - Vegetation Management

Gemini® Granular will not likely harm the trees, shrubs, vines and flowers in **Table 5** at the listed application rates. Gemini® Granular can be applied over the top of the listed species. When plants are under stress (such as heat, drought, or frost damage), some cultivars of listed plants may be sensitive to Gemini® Granular.

Gemini® Granular is not recommended for weed control in the plants listed in **Table 6**.

### **VEGETATION MANAGEMENT - NON-CROP AREAS**

### **Product Information**

Apply Gemini® Granular to soil surfaces for preemergence control of many grass and broadleaf weeds in non-crop areas, including ornamentals (does not include container or field grown ornamentals) and established perennials, on or surrounding non-crop areas as directed in **Table 7.** The best weed control occurs when the product is activated in the soil by 0.5 inches of irrigation or rainfall before listed weed seeds germinate and within 14 days after application.

Table 7. Amount of Gemini Granular to Apply to Non-Crop Area for Control of Weeds Listed in Table 2

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Site	Application Rate	Timing	Comments/ Instructions	
Non-crop areas, including ornamentals, on or surrounding managed rights-of-way for transportation systems and utilities (including roadways, roadsides, railways, and equipment yards); facilities including substations, tank farms, pumping stations, parking and storage areas, and non-grazed fence rows.	100-200 lbs./ acre	Before weed seeds germinate	Use higher labeled rate range for longer control. More than one application per year is permitted, but do not exceed 375 lbs. per acre per year.	

### 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. Completely empty bag into application equipment. Then offer for recycling if available, or 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.

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To the extent consistent with applicable law, user or buyer accepts the conditions, disclaimer of warranties and limitations of liability. Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once for full refund.

**CONDITIONS:** The directions for use of this product are believed to be adequate and the user or buyer must always follow the label directions carefully and exercise judgment and caution when using this product under their growing conditions. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness, unsatisfactory or substandard results or other unintended consequences may result because of such factors as weather conditions, presence or absence of other materials, or the manner of use or application, all of which are beyond the control of Everris. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

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losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid by the user or Buyer for the quantity of this product involved or, at Everris' election, the replacement of the product. To the extent consistent with applicable law, Everris must have prompt notice of any claim so that a timely investigation of buyer's or user's claim can be made. Buyer and all users shall promptly notify Everris of any claims, whether based on contract, negligence, strict liability, other tort or otherwise or be barred from any remedy.

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Customer Service: 1-800-492-8255 or 314-983-7500

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NOTES:			