(not for putting greens). Use for Preemergence Weed Control Around Landscape Ornamentals Including Established Perennials and Wildflower Plantings

ACTIVE INGREDIENT: . 0.40% Prodiamine\* .....OTHER INGREDENTS: 99.60%

\*CAS (2909-21-2) EPA Reg. No. 7001-385 Barricade\* is a Reg. Trademark of Syngenta.

EPA Est. No. 45063-CA-8

## KEEP OUT OF REACH OF CHILDREN CAUTION

Fotal Nitrogon (NI)	GUARANTEED FERTILIZER ANALYSIS:16-8-8 16.00%
16.00% Ammoniacal Nitrogen	
	8.00%
Soluble Potash (K,O)	8.00%
16.0% Combined Sulfur (S)	150%

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS and DOMESTIC ANIMALS

CAUTION: Causes moderate eye injury (irritation). Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling. Prolonged or frequent repeated skin contact while handling the material may cause allergic reaction in some individuals.

FIRST AID			
IF SWALLOWED:	<ul> <li>Call a Poison Control Center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>		
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after 5 minutes, then continue rinsing.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
IF ON SKIN OR CLOTHING:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
IF INHALED:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>		

Have this product container or label with you when calling a poison control center, or doctor, or when going for treatment. You may also call the National Pesticide Information Center at 1-800-858-7378 for emergency medical treatment advice.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicator and other handlers must wear long-sleeved shirt and long pants; chemical resistant gloves; shoes plus socks; a dust mask and protective eyewear. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water.

### **USER SAFETY RECOMMENDATIONS**

<u>Users should:</u> Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### **ENVIRONMENTAL HAZARDS**

This product has low solubility in water. At the limits of solubility, this product is not toxic to fish. However at concentrations above the level of water solubility, it 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 washwaters.

**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.

READ ENTIRE LABEL BEFORE USING

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on the farms, forests, and nurseries 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 (sod farms, commercial nurseries).

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,

Chemical resistant gloves, such as butyl rubber > 14 mils or natural rubber >14 mils or Nitrile rubber >14 mils

NON—AGRICULTURAL USE REQUIREMENTS

The requirements of 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. Applicators and handlers should wear long-sleeved shirt, long pants, chemical resistant gloves, shoes with socks, and protective eyewear. Thoroughly wash face and hands with soap and water after exposure and before eating or smoking. Launder exposed clothing before reuse. Do not allow reentry to treated areas until dusts have settled and the turf grass or soil is dry.

CRABGRASS SEED GERMINATION DATES				
Approximate Dates				
Mid-north & northwestern	After May 30			
Upper mid-states & northeast	After May 10			
3. Lower mid-states	After April 20			
Upper southern states	After Mar 20			
5. Warm season states	lan 1 to Mar 20			

This product is a turf fertilizer and a preemergence herbicide that provides residual control of many grass and broadleaf weeds in established turf grasses, golf courses (excluding putting greens), for sod farms, and lawns, and around landscape ornamentals, established perennials and wildflower plantings. It 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 by ½ inch of rainfall, irrigation, or shallow (1 to 2 inches) incorporation, prior to weed seed germination and within 14 days following application. Do not graze or feed livestock forage cut from areas treated with this product. Do not apply aerially. Do not apply to golf course putting greens. Failure to follow the directions for use and precautions on this label may result in poor weed control.

## **APPLICATION DIRECTIONS**

Apply uniformly with suitable calibrated application equipment. Do not apply otherwise.

ESTABLISHED TURF

This product is a preemergence herbicide that, when properly applied, will control certain grass and broadleaf weeds listed below in established turf grass and lawns. The maximum amount of material that may be applied per year is given for each turf grass species in the **Maximum Annual Rates Chart** of this label. Most effective weed control in turf grasses will be obtained when this product is activated by at least ½ inch of rainfall or irrigation prior to weed seed germination and within 14 days following application. See the map for approximate crabgrass seed germination dates. USE PRECAUTIONS

The following precautions apply to the use of this product in turf grasses and lawns: (1) Application of this product may thin emerged annual bluegrass and newly overseeded grasses. (2) Do not apply to overseeded turf within 60 days after seeding or until after the second mowing whichever is longer. Injury to desirable seedlings is likely if this product is applied before seedling secondary roots are in the second inch of soil, not thatch plus soil. (3) Do not cut (harvest) treated sod before 120 days after application. Do not apply to newly set sod until the following year. (4) Application to turf stressed by drought, low fertility, or pest damage may result in turf injury. (5) Disturbing the herbicide barrier with cultural practices such as disking may result in reduced weed control. (6) Do not apply this product to putting greens, or areas where dichondra, colonial bentgrass, velvet bentgrass or annual bluegrass (*Poa annua*) are desirable species.

RATES OF APPLICATION

This product may be applied as a single application or in sequential applications to control weeds germinating throughout the year. All applications must be made prior to germination of the weeds listed below. This product will not control established weeds. Maximum use rate selection should be based on turf species. The length of time of "residual preemergence weed control" provided by this product is related to the rate applied.

### Maximum Annual Rates Chart This product is recommended for use on the turf grass species listed in the following char

Do not exceed the maximum yearly rate as given in this chart.

(1) Maximum application rate of this product per calendar year by turf grass species.

Turf Species	Lbs. Product / Acre	/ 1,000 Sq. ft.	Lbs. A.I./Acre
Creeping Bentgrass	162 lbs.	3.72	0.65 lb.
Creeping Red Fescue	187 lbs.	4.29	0.75 lb.
Buffalograss	250 lbs.	5.74	1.00 lb.
Kentucky Bluegrass	ш	и	u u
Perennial Ryegrass	и	и	и
Bermudagrass (2)	375 lbs.	8.6	1.50 lbs.
Bahiagrass	и	и	ш
Centipedegrass	ш	и	ш
Seashore Paspalum	и	и	ш
St. Augustinegrass	ш	и	и
Tall Fescue (including turf type)	и	и	и
Zoysia	и	и	и



After May 30

After May 10

After April 20

After Mar 20

Jan 1 to Mar 20

Mid-north & northwestern

Lower mid-states

Upper southern states

Warm season states

Upper/mid-states & northeast

(1) These are the maximum rates per calendar year by species limitations

(2) May be used on newly-sprigged or plugged Bermudagrass at rates not to exceed 130 lbs./A. Newly-sprigged or plugged Bermudagrass stolon rooting may be temporarily retarded. Suppression only of Foxtail, Goosegrass and Rescuegrass due to reduced product rates used in sprigging

Do not apply more than 375 lbs. of this product to the same area per calendar year.
 Use higher rates of this product to achieve higher levels of fertility and longer periods of weed control for each turf type, but do not exceed the maximum application rates specified in the Maximum Annual Rates Chart.

WEEDS CONTROLLED WHED SCONTROLLED

When used in accordance with this label, this product will provide control of the following weeds: Barnyardgrass, Bluegrass, Annual (Poa Annua)
Carpetweed, Chickweed, Common Chickweed, Mouseear (from seed), Crabgrass (Large, Smooth), Crowfootgrass, Cupgrass Woolly, Foxtails,
Annual, Goosegrass (1), Henbit, Itchgrass, Johnsongrass (from seed), Junglerice, Knotweed, Kochia, Lambsquarter, Common, Lovegrass, Panicum
(Texas, Fall, Browntop); Pigweed; Purslane, Common; Pusley, Florida, Rescuegrass, (3), Shepherd's purse (2); Signalgrass, Broadleaf; Speedwell,
Persian Sprangletop, Spurge, Prostrate; Witchgrass; Woodsorrel, Yellow (from seed).

(1) In many areas a single application of 162 to 375 lbs. per acre will control goosegrass. However under heavy goosegrass pressure and/or an extended growing season, most effective weed control may be obtained by making an initial application of 162 to 250 lbs. per acre followed after 60 to 90 days by a second application at doses that would not exceed those given in the Maximum Annual Rates Chart. Do not exceed the maximum rate for furf grass species listed in the Maximum Annual Rates Chart on this label.
(2) Application for Shepherd's purse should be made in late summer, fall, or winter prior to germination.
(3) Suppression only of rescuegrass. Sequential application may be made so long as the total amount of product applied does not exceed the maximum annual application rates recommended for each turf species. All applications must be made prior to germination of the weed seeds.
WHEN TO: APPLY AFTER OVERSEEDING TURF
Do not apply to overseeded turf within 60 days after seeding or until after the second mowing, whichever is longer. Injury to desirable seedlings is likely if this product is applied before seedling secondary roots are in the second inch of soil, not thatch plus soil.
WHEN TO: OVERSEED AFTER APPLICATION
This product will inhibit the germination of turf species if overseeded too soon after application. Follow rates and intervals in the table below for best

This product will inhibit the germination of turf species if overseeded too soon after application. Follow rates and intervals in the table below for best overseeding and/or reseeding results.

Product Rate Lbs./Acre	Lbs. Product/ 1,000 Sq. ft.	Months Before Overseeding			
	·	A. I./Acre	North	Transition	South
125	2.87	0.50	4	4	4
162	3.72	0.65	5	4	4
187	4.29	0.75	6	5	5
200	4.59	0.80	-	6	6
250	5.74	1.00	-	7	7
287	6.59	1.15	-	-	9
325	7.46	1.30	-	-	10
375	8.60	1.50	_	_	12

Application Equipment and Spreader Settings
The size and bulk density of granules in this product may vary; therefore, calibrate your granular applicator prior to application of this product. Follow directions in the owner's manual for calibrating your spreader. The settings indicated in the following table should only be used as a guide

SDDEADED SETTINGS

SPREADER SETTINGS				
Lbs of Al per acre	1/2 lb	3/4 lb	1 lb	
Lbs of Product / 1000 sq. ft.	2.87	4.29	5.74	
Spreader				
Best Pro	3 1/2 A	4 1/4 B	4 1/2 A	
Spyker 34, 44, 64	3.5	3.9	4.2	
Earthway	14	16	18	
Lesco	11	13 1/4	15 1/4	
Scotts R-8A (cone 8)	I	K 1/4	M	
Lely @ 425 rpm 5 mph	4 1/2	5 1/4	6	
Vicon @ 5 mph max	32	39	44	

# LANDSCAPE ORNAMENTALS INCLUDING ESTABLISHED WILD FLOWER PLANTINGS This product may be applied for residual preemergence weed control in Ornamentals as listed.

Use Rates

Apply at 162 to 375 lbs. per acre (3.72 lbs. to 8.61 lbs. per 1,000 sq. ft.) of landscape plants, in fall and/or spring. Use the higher rates of application for longer control periods. Sequential application may be made so long as the total amount of product applied does not exceed the maximum annual application rate of 375 lbs. per acre.

Application Timing and Information

Apply uniformly to the surface of the soil in ornamental planting beds with a granular applicator. Calibrate your applicator to assure appropriate dosage as described above under "Use Rates", prior to application. Calibrate your applicator as described in the owner's manual. The bulk density of this product may vary; therefore, to assure that the product is applied at the rates described, you must use a calibrated applicator. This product is a preemergence herbicide and will not control emerged weeds. Most effective weed control in ornamentals will be obtained when this product is activated by at least ½ inch of rainfall or irrigation, or with shallow (1 to 2 inches) mechanical incorporation, prior to weed seed germination and within 14 days following application. Best weed control is obtained when this product is applied to soil free of clods, weeds, and debris such as leaves. Prior to application of this product, control existing vegetation by hand weeding, cultivation, or the use of an appropriate postemergence

herbicide.

Established Landscape Ornamentals

This product may be applied to established ornamentals as a broadcast, over-the-top, or directed application. Irrigation or rainfall soon after application will wash residues off plant foliage and activate this product in the soil.

Newly Transplanted Landscape Ornamentals

This product may be applied to newly transplanted ornamentals as a broadcast, over-the-top, or directed application. Delay application to allow soil to settle around new transplants and water thoroughly before applying this product. Apply after cuttings form roots and become established. Apply before budding/grafting or after buds/grafts have taken to avoid any inhibition of the tissue union. Irrigate after application as directed above.

Tolerant Ornamental Species

This product will not harm most trees, shrubs, vines and flowers. The species listed here are tolerant to this product. Best results will be obtained when this product is uniformly applied to the soil surface. Avoid applying to ornamental shoots which may defeat the effort to get uniform distribution on the soil surface. This product may be applied over-the-top of these species. When plants are under stress (such as heat, drought, or frost damage) some cultivars of listed plants may be sensitive to this product.

when this product is uniformly applied to the soil surface. Avoid applying to ornamental shoots which may deteat the effort to get uniform distribution on the soil surface. This product may be applied over-the-top of these species. When plants are under stress (such as heat, drought, or frost damage) some cultivars of listed plants may be sensitive to this product.

For Use Around Landscape Ornamentals, Including Established Perennials And Wildflowers, As Listed.

Abelia: Sherwood Abelia grandiflora: Adam's Needle, Yucca V. filamentosa, Agapanthus orientalis; Aleppo Pine P. halepensis: Almond, Apricot, Nectarine, Peach, Plum and Prune' Prunus sp.; American Arborvitae Thuja occidentalis: American Dogwood C. stolonifera: American Holly J.opaca: Amur Privet L. amurense; Aquilegia: Red and Gold Aquilegia sp.; Arrowwood Viburnum V. suspensum; Aster: Bonny Blue, Purple Dome Aster sp., Aster X Frikarti: Australian Brushcherry Syzyglum paniculatum; Austrian Pine Pings: Avocado' Persea Americana: Baby's Breath Gypsophila repens: Barberry B. julianae: Bearberry Cotoneaster C. dammeri, Bergenia cordifolia: Bigleaf Hydrangea Hydrangea macrophylla: Black-Eyed Susan; Goldstrum Rudbeckia sp.; Border Forsythia Intermedia: Bougainvillea Spo.; Bradford Pear sp. Pyrus sp.; Burgundy Loropetalum chinense: Butterly-Bush (Dwarf Blue); Royal Red Buddleia davidii: Calabrian Pine Pinus brulia: Canada Hemlock Tsuga canadensis; Canary Island Pine P. canariensis; Canary Island Viburnum V. rigidum: Cape Weed Arctotheea calendula; Cardinal Flower, Indian Pink Lobelia Cardinalis, Ceratostigma plumbagonoides; Cheddar Pink D. gratianopolitanus: Chinese Hibiscus Hibiscus rosa-sinensis; Chinese Holly [lex cornuta: Chinese Juniper: Nick's Compact, Parsonnil Juniperus chinensis; Chinese Privet; Variegata Ligustrum sinense; Citrus species' Citrus sp.; Cleyera Cleyera Japonica: Common Perivinkle, Vinca Vinca minor; Coneflower, Purple; Magnus Echinacea purpurea: Cooper Pink Delosperma sp.; Coral Bells, Delaware Valley White, Flame Creeper, Formosa, Gi Privet (Waxleaf) L. lucidum: Grape\* Villis sp.\*: Greater Periwinkle, Vinca Vinca Major: Greenstem Forsythia F. viridissima: Hawthorn Cretaegus spp.; Heavenly Bamboo Nandina domestica; Holly I. pernyi; Hop Bush Dodonea viscose; Hosta, "Searsucker" H. Sieboldiana, Houtuynia cordata var. variegata; Hosta, Plantain Lily (Fragrant) Hosta plantaginea: Hottentot Fig (ce Plant) Carpobrolus edulis; Ice Plant Maleophora luteola; Indian Hawthorn Raphiolepsis indica; Iris species\* Iris spp.\*\*; Italian Cypress Cupressus sempervirens; Japanese Anemone Anemone hybrida: Japanese Aralia Fatsia japonica: Japanese Aucuba Aucuba japonica; Japanese Barberry B. Ithunbergii: Japanese Bothe Pine P. Inhunbergiia: Japanese Bothey Helleri I. crenata: Japanese Honeysuckle Lonicera japonica; Japanese Maple Acer palmatum; Japanese Privet L. japonicum; Japanese Sonowball V. plicatum; Japanese Spindle Tree (Evergreen Euorymus) E. Japanica: Japanese Vew Tavus cuspidate; Kiwi? Actinida chinensis\*; Lady Banks's Rose Rosa banksiae; Lady Fern: Fern Lady Athrium Filiz-femina; Lady's Leek, Nodding Onion Allium cernuum; Larkspur: Blue Eli Delphinium sp.; Laurustinus V. linus; Lavender; Munstead Lavender sp.: Leatherleaf Viburnum V. wrightii: Lily; Jazz Big Blue Lily; Turf Lillum sp.; Lily-of-the-Nille (African Lily) Agapanthus africanus: Lily-of-the-Valley Bush Pieris Japonica: Liriope, Creeping Liriope spicata; Liriope, Variegated Liriope Muscari var. variegata; Loblolly Pine P. laeda: Longleaf Pine P. palustrus; Loosestrife: Modern Pink Lythrum sp.; Lucifer Crocosmia sp.; Magnolia species\* Magnolia spp\*\* Mallow: Disco Belle White Hibiscus sp.; Meadow Rue Thalictrum diplerocarpum; Mentor Barberry B. mentorensis; Mondo Grass Ophiopogon japonicus; Monterey Pine P. radiata; Narcissus species\* Magrolia spp\*\*, Norway Maple A. platanoides: Oak species Ouercus spp.; Oak Mamard's Red Guercus Shumardii; Old Fashioned Weigela Weiglaa florida; Oleander Nerium oleander; Olive\* Olea europea\*; Osmanthus (False Holly): Guernsland Pittosporum Japanese Pittosporum r Bottlebrush Callistemon vinitalistics and septimental states of the control of th

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. <a href="STORAGE">STORAGE</a>: Store in original container away from other fertilizer, feed, or foodstuffs and separated from other pesticides. <a href="PESTICIDE DISPOSAL">PESTICIDE DISPOSAL</a>: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. <a href="CONTAINER DISPOSAL">CONTAINER DISPOSAL</a>: Do not reuse empty bag. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or at an incineration facility, or if allowed by State and local authorities, by burning locally. If burned, stay out of smoke. If product is spilled sweep up and use as per label instructions or dispose of as indicated above.

Read the entire Directions for Use, Conditions, Disclaimer of Warranties, and Limitation of Liability before using this product. If the terms are not acceptable, return the unopened container at once. By using this product, user and buyer accept the following Conditions, Disclaimer of Warranties,

CONDITIONS: The directions for use of this product are believed to be adequate and should be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of J.R. Simplot Company. All such risks shall be assumed by the user or buyer.

<u>Disclaimer of Warranties:</u> There are no warranties express or implied, of merchantability or of fitness for a particular purpose or otherwise, which extend beyond the statements made on this label. No agent of J.R. Simplot Company is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein.

J.R. Simplot Company disclaims any liability whatsoever for special, incidental, or consequential damages resulting from the use or handling of this IMITATION OF WARRANTIES: The exclusive remedy of the user or buyer for any and all 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, or at J.R. Simplot Company's option, the replacement of the product.

Warning: This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986, requires notification of potential exposure to substances identified by the State of California as causing cancer, birth defects or other reproductive harm. Information regarding the contents and levels of metals in this product is available on the Internet at http://www.regulatory-info-jr.com

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P.O. Box 198 • Lathrop, CA 95330