# Howard Johnson's

### **CRABGRASS CONTROL PLUS WITH 0.37% PRODIAMINE**

FOR SELECTIVE PREEMERGENCE CONTROL OF GRASS & BROADLEAF WEEDS IN LAWNS AND ORNAMENTAL TURF

GRASSES (excluding golf course putting greens), LANDSCAPE ORNAMENTALS, ESTABLISHED PEREN-NIALS & WILDFLOWER PLANTINGS. STOPS MANY UGLY WEED GRASSES BEFORE THEY GROW. PREVENTS CRABGRASS, ANNUAL BLUEGRASS, FOXTAIL, & MORE.

**ACTIVE INGREDIENT:** 

Prodiamine: [N³,N³-Di-n-propyl-2,4-dinitro-6-(trifluoromethyl)-m-phenylenediamine] . .0.37% INERT INGREDIENTS: ..... 99.63% TOTAL: ..... 100.00%

EPA Reg. No. 32802-66

EPA Est. No. 32802-WI-1 (A), 32802-MO-1 (B) First letter of bag code shows establishment where manufactured.

Manufactured by:

#### Howard Johnson's Enterprises, Inc.

700 W. Virginia St., Milwaukee, WI 53204

Read the entire "Directions for Use" and "Warranty Statements" before using this product. If terms are not acceptable, return the unopened product container at once to the seller.

#### **GUARANTEED ANALYSIS**

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

## 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 repeated skin contact with product may cause allergic reactions in some individuals. 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.

First Aid				
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</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 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
If swallowed	<ul> <li>Call a poison control center or physician 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 do so by the poison control center or physician.</li> <li>Do not give anything by mouth to an unconscious person.</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>			

Hot line number:

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Telecommunications Network at 1-800**DIRECTIONS FOR USE:** It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Not for use on plants being grown for sale or other commercial use, for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown in ornamental gardens or parks, or on golf courses or lawns and grounds. This product is a selective preemergence herbicide that provides residual control of many grass and proadleaf weeds in established lawns and ornamental turf (excluding golf course putting greens), landscape ornamentals and established perennials and wildflower plantings. It controls susceptible weeds by inhibiting weed seeds germination and root development. When used according to directions, it will control: barnyardgrass; bluegrass, annual (Poa annua); carpetweed; chickweed, common; chickweed, mouseear (from seed); crabgrass (large, smooth); crowfootgrass; cupgrass, woolly; foxtails, annual; goosegrass1; henbit; itchgrass; johnsongrass (from seed); unglerice; knotweed; kochia; lambsquarter, common; lovegrass; panicum Texas, fall, browntop); pigweed; purslane, common; pusley, Florida; escuegrass<sup>3</sup>; shepherd's purse<sup>2</sup>; signalgrass, broadleaf; speedwell, Persian; sprangletop; spurge, prostrate; witchgrass; woodsorrel, yellow

In many areas a single application of 4 to 9.3 pounds / 1000 square feet will control goosegrass. However, under heavy goosegrass pressure and/or an extended growing season, most effective weed control may be obtained with an initial application of 4 to 6.2 pounds / 1000 square feet, followed after 60 to 90 days by a second application at doses that would not exceed the maximum annual rate (see Minimum and Maximum

For this weed, apply in late summer, fall or winter prior to germination.

Spreader setting to apply at the listed rate (lbs per 1000 sq ft)						
	Cone setting	3.0 lbs	4.0 lbs	4.6 lbs	6.2 lbs	9.3lbs
Accu-Pro 2000	6	L 1/2	M 1/2	N 1/2	O 1/2	Q 1/2
SR2000	6	L 1/2	N	O 1/2	Р	R
Lesco 021820	0.25 Closed	D 1/2	E 1/2	F 1/2	G 1/2	I 1/2
Spyker 76-22		4.3	4.5	4.7	4.9	5.5
PSB Bigfoot	A.5	J 1/2	K 1/2	L 1/2	M	N 1/2
Lely HR	II-B	5.25	6	6.5	7	8.5
Vicon 203		15	17	19	21	27

WHEN TO APPLY TO ESTABLISHED TURE: This product must be applied prior to germination of weed seeds, as it will not control established weeds

APPLICATION DIRECTIONS: Apply this product uniformly, using a suitable spreader that has been properly calibrated Most effective weed control will be obtained when this product is activated by at least 0.5 inch of rainfall or irrigation, or with shallow (1 to 2 inches) incorporation, prior to weed seed germination and within 14 days after application.

<u>USE PRECAUTIONS</u>: The following precautions apply to the use of this product in turf grasses and lawns. Application of this product may thin emerged annual bluegrass and newly overseeded grasses. 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). Do not apply to newly set sod until the following year. Application to turf stressed by drought, low fertility, or pest damage may result in turf injury. Disturbing the herbicide barrier with cultural practices (such as core aeration) may result in reduced weed control. Do not apply to putting greens, or areas where dichondra, colonial bentgrass, velvet bentgrass or annual bluegrass (Poa annua) are desirable species. Do not apply through any type of irrigation system. Do not apply aerially. Do not graze or feed livestock forage cut from treated areas.

Minimum and Maximum Application Rates (by Turf Grass Species)¹ Turf Species Minimum Rate Maximum Annual Rate					
Bahiagrass, Centipedegrass Bermudagrass², Zoysiagrass Seashore Paspalum St. Augustinegrass Tall Fescue (including turf-type)	4 pounds per 1000 sq. ft	9.3 pounds per 1000 sq. ft. per year			
Buffalograss Kentucky Bluegrass Perennial Ryegrass	4 pounds per 1000 sq. ft.	6.2 pounds per 1000 sq. ft. per year			
Creeping Red Fescue	4 pounds per 1000 sq. ft.	4.6 pounds per 1000 sq. ft. per year			
Creeping Bentgrass	4 pounds per 1000 sq. ft.	4.0 pounds per 1000 sq. ft. per year			

RATES OF APPLICATION: This product is recommended for use on the turf grass species listed in the following table. The maximum amount of this product that may be applied per year is given for each turf grass species. Do not exceed the maximum yearly rate listed:

These are the maximum rates per calendar year.

May be used on newly sprigged or plugged Bermudagrass at rates not to exceed 3.3 lbs / 1000 square feet. Newly sprigged or plugged Bermudagrass stolon rooting may be temporarily retarded. Suppression only of foxtail, goosegrass and rescuegrass due to reduced rates used in sprigging situations.

This product may be applied as a single application or in sequential applications to control weeds germinating throughout the year. Sequential applications 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. The length of time of residual weed control provided by this product is related to the rate applied. Use the higher rates listed for longer periods of weed control.

Use Rate	Months Before Overseeding			
Ibs / 1000 sq ft	North	Transition	South	
3 lbs	4	4	4	
4 lbs	5	4	4	
4.6 lbs	6	5	5	
4.9 lbs		6	6	
6.2 lbs		7	7	
7 lbs			9	
8 lbs			10	
9.3 lbs			12	

WHEN TO OVERSEED AFTER APPLICATION: This product will inhibit germination of turf seed if overseeded too soon after application. Follow rates and intervals in table for best overseeding/ reseeding results

LANDSCAPE ORNAMENTALS (including established perennials and wildflower plantings): This product may be applied for residual preemergence weed control in ornamentals. Apply at the rate of 4 to 9.3 lbs / 1000 square feet in fall and/or spring. Use higher rates of application for longer control periods. Sequential or single applications are allowed so long as the total amount of product applied does not exceed the maximum annual application rate of 9.3 lbs / 1000 square feet per year.

APPLICATION TIMING AND INFORMATION: This product may be applied to newly transplanted and established ornamentals a broadcast, over the top or directed application. Around new transplants, delay

application to allow soil to settle and water thoroughly before applying. 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. 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 0.5 inch of rainfall or irrigation, or with shallow (1 to 2 inch) mechanical incorporation, prior to weed seed germination and within 14 days following application. Best weed control is obtained when applied to soil free of clods, weeds, and debris such as leaves. Prior to application, control existing vegetation by hand weeding, cultivation or the use of an appropriate postemergence herbicide.

TOLERANT ORNAMENTAL SPECIES: This product will not harm most trees, shrubs, vines and flowers. The species listed below are tolerant to this product. Best results will be obtained when 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.

SCIENTIFIC NAME Abies spp Acer palmatum	COMMON NAME Fir species** (Balsam, etc.) Japanese Maple	SCIENTIFIC NAME Hedera helix Hibiscus rosa-sinensis	COMMON NAME English Ivy Chinese Hibiscus	SCIENTIFIC NAME P. tobira Podocarpus macrophyllu	COMMON NAME  Japanese Pittosporum
A. platanoides Actinidia chinensis	Norway Maple Kiwi*	llex cornuta I. crenata	Chinese Holly Japanese Holly	Prunus laurocerasus Prunus sp.	English Laurel Almond, Apricot, Nectarine
Agapanthus africanus Arctostaphylos densiflora	Lily-of-the-Nile (African Lily)	I. opaca	American Holly Iris species**	Pyracantha coccinea	Peach, Plum and Prune* Firethorn (Scarlet)
Arctotheca calendula	Cape Weed	Iris spp. Jasminium nudiflorum	Winter Jasmine	P. fortuneana	Firethorn Firethorn
Aucuba japonica Berberis gladwynensis	Japanese Aucuba Barberry	Juniperus chinensis J. conferta	Chinese Juniper Shore Juniper	P. koidzumii Pyrus sp.	Bradford Pear sp.
B. julianae B. mentorensis	Wintergreen Barberry Mentor Barberry	J. horizontalis Juglans sp.	Creeping Juniper Walnut*	Quercus spp. Raphiolepsis indica	Oak species Indian Hawthorne
B. thunbergii Buxus microphylla	Japanese Barberry Japanese Boxwood	Justicia brandegeana Lagerstromia indica	Shrimp Plant Crepe Myrtle	Rhododendron (including Azalea)	'Coral Bells' 'Formosa,' 'Hino-crimson,'
Callistemon viminalis Calluna vulgaris	Weeping Bottlebrush Scotch Heather	Ligustrum amurense L. japonicum	Amur Privet Japanese Privet	Rosa banksiae	'PJM', 'Roseum Elegans' Lady Bank's Rose
Carpobrotus edulis Cassia artemisoides	Hottentot Fig (Ice Plant) Feathery Cassia	L. lucidum Liriope muscari	Glossy Privet (Waxleaf) Big Blue Lily, Silver Mound	Rosmarinus officinalis Santolina virens	Rosemary Santolina
Ceanothus rigidus	Wild Lilác	Lonicera japonica	Japanese Honeysuckle	Sedum album	Stonecrop
Chamaecyparis pisifera Cleyera japonica	False Cypress Cleyera	L. tatarica Maleophora luteola	Tatarian Honeysuckle Ice Plant	Syzygium paniculatum Taxus cuspidata	Japanese Brushcherry Japanese Yew
Citrus spp. Cornus florida	Citrus species* Flowering Dogwood	Malus sp. Nandina domestica	Crabapple* Heavenly Bamboo	T. media Thuja occidentalis	Yew American Arborvitae
C. stolonifera Cortaderia selloana	American Dogwood Pampas Grass	Olea europaea Ophiopogon japonicus	Olive* Mondo Grass	Trachelospermum asiatu Tsuga canadensis	ım Star Jasmine Canada Hemlock
Cotoneaster apiculatus C. buxifolius	Cranberry Cotoneaster Cotoneaster	Osteospermum fruticosum Oxydendrum arboreum		Viburnum japonicum V. odoratissimum	Japanese Viburnum Sweet Viburnum
C. dammeri	Bearberry Cotoneaster	Persea americana	Avocado*	V. plicatum	Japanese Snowball
C. microphyllus Cretaegus spp.	Rockspray Cotoneaster Hawthorne	Photinia fraseri Picea spp.	Frasier's Photinia (Redtip) Spruce species**	V. rigidum V. tinus	Canary Island Viburnum Laurustinus
Cupressus sempervirens Delasperma alba	s Italian Cypress White Trailing Ice Plant	Pieris japonica Pinus brutia	Lily-of-the-Valley Bush Calabrian Pine	V. trilobium V. wrightii	Cranberry Bush Leatherleaf Viburnum
Delphinium spp. Dodonea viscosa	Larkspur, Blue Elf Hop Bush	P. canariensis P. halepensis	Canary Island Pine Aleppo Pine	Vinca major Vinca minor	Greater Periwinkle, Vinca Common Periwinkle, Vinca
Elaeagnus pungens	Silverberry Wintercreeper	P. nigrá	Austrian Pine Monterey Pine	Vitis sp. Weigela florida	Grape* Old Fashioned Weigela
Euonymus fortunei E. japonica	Evergreen Euonymus	P. radiata P. thunbergiana	Japanese Black Pine	Yucca aloifolia	Spanish Bayonet, Yucca
E. kiautschovica Fatsia japonica	Spreading Euonymus Japanese Aralia	P. strobus P. sylvestris	Eastern White Pine Scotch Pine		Adam's Needle, Yucca ducing trees, vines or plants.
Forsythia intermedia F. viridissima	Border Forsythia Greenstem Forsythia	Pistachio sp. Pittosporum rhombifolium	Pistachio* Queensland Pittosporum	**Not for use on containe	er grown plants.
Gardenia jasminoides	Gardenia, Cape-Jasmine		acconciana i ittooporum		

**STORAGE AND DISPOSAL:** Do not contaminate water, food, or feed by storage or disposal. Storage: Store in original container in a locked storage area out of reach of children and domestic animals. Pesticide disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Container disposal: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary andfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

NOTICE: Buyer and user assumes all risks and liability of use, storage and/or handling of this product not in accordance with the terms of this label