



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

May 13, 2019

Gregory C. Mattern
Regulatory Manager
Nufarm Americas, Inc.
4020 Aerial Center Parkway, Suite 101
Morrisville, NC 27560

Subject: Notification per PRN 98-10 – Remove “or less than” application rate description
from minimum retreatment interval restriction

Product Name: ProDeuce
EPA Registration Number: 228-509
Application Date: September 26, 2018
Decision Number: 546185

Dear Mr. Mattern:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records.

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

If you have any questions, please contact Mindy Ondish by email at ondish.mindy@epa.gov or by phone at (703)605-0723.

Sincerely,

Mindy Ondish for

Reuben Baris
Product Manager 25
Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

[MASTER LABEL]

GROUPS 3 & 9 HERBICIDE

ProDeuce®

**PRE-EMERGENT AND POST-EMERGENT WEED CONTROL
FOR MANY BROADLEAF WEEDS AND GRASSES**

NOTIFICATION

228-509

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

05/13/2019

ACTIVE INGREDIENTS:

Glyphosate, N-(phosphonomethyl) glycine, in the form of its isopropylamine salt*	40.15%
Prodiamine**	7.51%

OTHER INGREDIENTS:	52.34%
TOTAL:	100.00%

*Contains 480 grams per liter or 4.0 pounds per U.S. gallon. Equivalent to 356 grams per liter or 2.97 pounds per U.S. gallon.

**Equivalent to 90 grams per liter or 0.75 pounds per U.S. gallon (CAS # 29091-21-1).

KEEP OUT OF REACH OF CHILDREN CAUTION / PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

**For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840**

EPA REG. NO. 228-509

EPA EST. NO.

MANUFACTURED FOR

NUFARM AMERICAS INC.

11901 S. AUSTIN AVE.

ALSIP, IL 60803



NET CONTENTS _____ GAL. (_____ Liters)

[Designation as "NONREFILLABLE" or "REFILLABLE" for containers > 5 GAL]

000228-00509.20180928.NOTIF (HL)

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**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION / PRECAUCION**

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear protective eyewear. Wash thoroughly with soap and water after handling.

FIRST AID	
IF IN EYES	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	

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 wash water or rinsate.

PHYSICAL OR CHEMICAL HAZARDS

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT, OR SPRAY SOLUTIONS OF THIS PRODUCT, IN GALVANIZED STEEL OR

UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. **READ ENTIRE LABEL BEFORE USING THIS PRODUCT. USE STRICTLY IN ACCORDANCE WITH LABEL PRECAUTIONARY STATEMENTS AND DIRECTIONS.**

Stay off treated areas until sprays have dried. Precautions should be taken to prevent tracking product after application onto desirable grasses.

SHAKE WELL BEFORE USING.

PRODUCT INFORMATION

WHERE TO USE

Apply this product to both established weeds and weed-prone areas where weeds have not yet emerged:

- on cracks and crevices in driveways, sidewalks, walkways, and patios
- along fences, foundations, curbs, retaining walls, and edges of lawns
- around the base or in mulched beds of well-established (at least 6 months old) plants, shrubs or tree
- on gravel areas

HOW THIS PRODUCT WORKS

Important: To prevent new weeds and grasses from growing you must spray the entire area you want to control, not just the emerged weeds.

This product works two ways:

1. One ingredient enters the plants through foliage and moves systemically to the roots, killing many weeds by stopping the production of a substance found in plants. Weeds begin to yellow and wilt in a matter of days with complete kill of many weeds in 1 to 2 weeks.
2. The other ingredient provides an herbicidal barrier in the soil preventing growth and development of newly germinated weeds.

USE RESTRICTIONS

- **DO NOT** spray desirable plants.
- **DO NOT** use in lawns or for lawn renovations as this product prevents desirable grass establishment.
- **DO NOT** use for vegetable garden preparations or in and around fruits and vegetables.
- **DO NOT** spray around ornamental plants or in an area that will be planted or seeded for 6 months after application when applying at the 3 fluid ounces per 1,000 square feet use rate.
- If applying at **or less than** the 3 fluid ounces per 1,000 square feet rate **DO NOT** retreat for a minimum of 30 days following application.

- **DO NOT** spray around ornamental plants or in an area that will be planted or seeded for 12 months after application when applying at the 5.75 fluid ounces per 1,000 square feet use rate.
- **DO NOT** apply more than 5.75 fluid ounces per 1,000 square feet per application.
- **DO NOT** apply more than 5.75 fluid ounces per 1,000 square feet. per year (12-month period).
- **DO NOT** apply through any type of irrigation system.
- **DO NOT** apply by air.

APPLICATION

When to Apply

Spray when air is calm to prevent drift to desirable plants. For best results, apply during warm, sunny weather (above 60°F).

WEEDS CONTROLLED

Pre-Emergent:

When used as directed, this product will prevent the following weeds from emerging:

Barnyardgrass	Henbit ¹	Purslane, common
Bluegrass, annual (<i>Poa annual</i>) ¹	Itchgrass	Pusley, Florida
Carpetweed	Johnsongrass (from seed)	Rescuegrass ²
Chickweed, common ²	Junglerice	Shepherdspurse ¹
Chickweed, mouse-ear (from seed)	Knotweed ¹	Signalgrass, broadleaf
Crabgrass (large, smooth)	Kochia	Speedwell, Persian
Crowfootgrass	Lambsquarters, common	Sprangletop
Cupgrass, woolly	Lovegrass	Spurge, prostrate
Foxtails, annual	Panicum, (Texas, fall, browntop)	Witchgrass
Goosegrass	Pigweed	Woodsorrel, yellow (from seed)

¹To control this weed in non-turf areas, apply this product in late summer, fall, or winter before weeds germinate.

²Suppression only.

Post-Emergent:

ANNUAL WEEDS

Barley	Goatgrass, jointed	Rice, red
Barnyardgrass	Goosegrass	Rocket, London
Bluegrass, annual	Groundsel, common	Rye
Bluegrass, bulbous	Henbit	Ryegrass, Italian
Brome, downy	Horseweed / Mare's Tail	Shattercane
Buttercup	Lambsquarters, common	Shepherdspurse
Cheat	Mustard, blue	Sicklepod
Chickweed, common	Mustard, tansy	Signalgrass, broadleaf
Chickweed, mouse-ear (from seed)	Mustard, tumble	Spanishneedles
Cocklebur	Mustard, wild	Sprangletop
Corn	Oats, wild	Spurge, annual
Crabgrass	Panicum, fall	Spurry, umbrellia
Dwarf dandelion	Panicum, Texas	Stinkgrass
False flax, smallweed	Pennycress, field	Teaweed
Filaree	Pigweed, redroot	Wheat
Foxtail	Pigweed, smooth	Witchgrass
Foxtail, Carolina	Primrose, cutleaf evening	
Geranium, Carolina	Pusley, Florida	

PERENNIAL WEEDS

Alfalfa	Dock, curly	Orchardgrass
Alligatorweed*	Dogbane, hemp	Pampasgrass*
Anise (fennel)	Fescue, tall	Paragrass
Artichoke, Jerusalem	Fescues	Phragmites*
Bahiagrass	Guinea grass	Poison hemlock
Bentgrass	Horsenettle	Quackgrass
Bermudagrass	Horseradish	Redvine*
Bermudagrass, water (knotgrass)	Ice plant	Reed, giant
Bindweed, field	Johnsongrass	Ryegrass, perennial
Bluegrass, Kentucky	Johnsongrass, seedling	Smartweed, swamp
Bluegrass, Texas	Kikuyugrass	Spurge, leafy*
Brackenfern	Knapweed	Starthistle, yellow
Bromegrass, smooth	Lantana	Sweet potato, wild*
Bursage, woollyleaf	Lespedeza	Thistle, artichoke
Canarygrass, reed	Milkweed	Thistle, Canada
Cattail	Morningglory	Timothy
Clover, red	Muhly, wirestem	Torpedograss*
Clover, white	Mullein, common	Trumpetcreeper*
Cogongrass	Napiergrass	Vaseygrass
Dallisgrass	Nightshade, silverleaf	Velvetgrass
Dandelion	Nutsedge; purple, yellow	Wheatgrass, Western

* Partial Control

TANK SPRAYER (plastic, aluminum, fiberglass, plastic-lined steel or stainless steel)

- Add 3 to 5.75 fluid ounces to 1 gallon of water and treat 1,000 square feet.
- For longer pre-emergent control and post-emergent control of larger weeds use the higher rate.

Do not apply with a galvanized or unlined steel (except stainless steel) sprayer, or through any irrigation system.

HOW TO APPLY

Spray existing weeds AND the entire surrounding weed-prone area you want to keep free of weeds. Spray the area with sufficient volume to assure complete coverage. When spraying around the base of well-established (at least 6 months old) ornamental plants, shrubs, or trees, shield desirable plants from drift with a sheet of cardboard or plastic. Use caution to prevent application to green stems and leaves, damage can occur.

WHEN TO REPLANT

All ornamental bedding plants, trees, shrubs, sod, and seed (flowers and grasses) may be planted 6 months after application when applying at the 3 fluid ounces per 1,000 square feet use rate or 12 months when applying at the 5.75 fluid ounces per 1,000 square feet use rate.

HOW TO CLEAN SPRAYER

To clean sprayer after use, rinse sprayer and all sprayer parts with soap and water 3 times. Spray rinse water on bare soil or gravel. After cleaning, sprayer may be used for other products.

STORAGE AND DISPOSAL [Commercial]

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

PESTICIDE STORAGE: STORE ABOVE 10°F (-12°C) TO KEEP PRODUCT FROM CRYSTALLIZING. Crystals will settle to the bottom. If allowed to crystallize, place in a warm room 68°F (20°C) for several days to redissolve and shake or roll to mix well before using.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. **DO NOT** contaminate water, food or feed by storage or disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. Dispose of excess or waste pesticide by use according to label directions, or contact your State pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

[**Note to Reviewer:** The following statement will be included on all Final Printed Labels bearing multiple Container Disposal (Container Handling) statements] **NOTE:** This product is available in multiple containers. Refer to the Net Contents section of this products labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container disposal [handling] instructions below that apply to your container type / size."

[**Note to Reviewer:** The bracketed section headers will be included when multiple container types / sizes are listed on the label.]

[Nonrefillable Containers 5 Gallons or Less:]

Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration. Do not burn unless allowed by state and local ordinance If burned stay out of smoke.

[Nonrefillable containers larger than 5 Gallons:]

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. If recycling or reconditioning is not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration. Do not burn unless allowed by state and local ordinance. If burned stay out of smoke. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

[Refillable containers]

CONTAINER HANDLING [DISPOSAL]: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

STORAGE AND DISPOSAL
[Residential]

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

PESTICIDE STORAGE: STORE ABOVE 10°F (-12°C) TO KEEP PRODUCT FROM CRYSTALLIZING. Crystals will settle to the bottom. If allowed to crystallize, place in a warm room 68°F (20°C) for several days to redissolve and shake or roll to mix well before using.

PESTICIDE DISPOSAL AND CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container. **If empty:** Place in trash or offer for recycling if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor (including toilet) or outdoor (including sewer) drain.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV)

ProDeuce is a registered trademark of Nufarm Americas Inc.
All other trademarks are the property of their respective owners.

OPTIONAL MARKETING HYPE:

Season Long Control*

* Season Long is 3 months

Dual Action

Dual Action Formula

Up to 4 months control

3 to 6 months control

OPTIONAL STATEMENT:

The preemergent herbicide prodiamine in this product is yellow in color, which allows the user to see the area that has been sprayed. If sprayed on cement curbs, sidewalks, and driveways, it may temporarily stain if not washed off immediately after application. Caution should be used not to wash the product off target weeds or weed control may be adversely affected. Treated areas should be dry before entering to avoid staining onto non-treated surfaces.

[SUBPART B - Label with Nursery Uses]

GROUPS 3 & 9 HERBICIDE

ProDeuce®

**PRE-EMERGENT AND POST-EMERGENT WEED CONTROL FOR MANY BROADLEAF WEEDS AND GRASSES
[FOR USE] [ON CRACKS AND CREVICES IN DRIVEWAYS, SIDEWALKS, WALKWAYS, AND PATIOS][:]
[ALONG FENCES, FOUNDATIONS, CURBS, RETAINING WALLS, AND EDGES OF LAWNS][:] [AROUND THE
BASE OR IN MULCHED BEDS OF WELL-ESTABLISHED PLANTS, SHRUBS OR TREE][:] [ON GRAVEL
AREAS][:] [IN AND AROUND NURSERIES]**

ACTIVE INGREDIENTS:

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Proflumicafone** 7.51%

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CAUTION / PRECAUCION**

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HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION / PRECAUCION**

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear protective eyewear. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear: Long-sleeved shirt and long pants and shoes plus socks. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENTS: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in 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 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.

FIRST AID

IF IN EYES

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

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

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 wash water or rinsate.

PHYSICAL OR CHEMICAL HAZARDS

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT, OR SPRAY SOLUTIONS OF THIS PRODUCT, IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. READ ENTIRE LABEL BEFORE USING THIS PRODUCT. USE STRICTLY IN ACCORDANCE WITH LABEL PRECAUTIONARY STATEMENTS AND DIRECTIONS.

Stay off treated areas until sprays have dried. Precautions should be taken to prevent tracking product after application onto desirable grasses.

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 requirement specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulations.

SHAKE WELL BEFORE USING.

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 Category A such as butyl rubber, neoprene rubber, natural rubber, or nitrile rubber \geq 14 mils and shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

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

Keep people and pets off treated areas until spray solution has dried.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversion section of this label).

Controlling Droplet Size

Volume-Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

Pressure-Use the lower spray pressures specified for the nozzle. Higher pressure reduces droplet size and does not improve canopy protection. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Nozzle Type-Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.

Wind

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

Temperature And Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications must not occur during a temperature inversion, because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun set and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas

The pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

PRODUCT INFORMATION

WHERE TO USE

Apply this product to both established weeds and weed-prone areas where weeds have not yet emerged:

- on cracks and crevices in driveways, sidewalks, walkways, and patios
- along fences, foundations, curbs, retaining walls, and edges of lawns
- around the base or in mulched beds of well-established (at least 6 months old) plants, shrubs or tree
- on gravel areas
- application to undesirable vegetation in nurseries

HOW THIS PRODUCT WORKS

Important: To prevent new weeds and grasses from growing you must spray the entire area you want to control, not just the emerged weeds.

This product works two ways:

1. One ingredient enters the plants through foliage and moves systemically to the roots, killing many weeds by stopping the production of a substance found in plants. Weeds begin to yellow and wilt in a matter of days with complete kill of many weeds in 1 to 2 weeks.
2. The other ingredient provides an herbicidal barrier in the soil preventing growth and development of newly germinated weeds.

USE RESTRICTIONS

- **DO NOT** spray desirable plants.
- **DO NOT** use in lawns or for lawn renovations as this product prevents desirable grass establishment.
- **DO NOT** use for vegetable garden preparations or in and around fruits and vegetables.
- **DO NOT** spray around ornamental plants or in an area that will be planted or seeded for 6 months after application when applying at the 3 fluid ounces per 1,000 square feet use rate.
- If applying at **or less than** the 3 fluid ounces per 1,000 square feet rate **DO NOT** retreat for a minimum of 30 days following application.
- **DO NOT** spray around ornamental plants or in an area that will be planted or seeded for 12 months after application when applying at the 5.75 fluid ounces per 1,000 square feet use rate.
- **DO NOT** apply more than 5.75 fluid ounces per 1,000 square feet per application.
- **DO NOT** apply more than 5.75 fluid ounces per 1,000 square feet. per year (12-month period).
- **DO NOT** apply through any type of irrigation system.
- **DO NOT** apply by air.

ORNAMENTALS, NURSERIES (PLANTS AND TREES)

DO NOT USE THIS PRODUCT AS AN OVER-THE-TOP BROADCAST SPRAY IN ORNAMENTALS.

Note: Desirable plants may be protected from the spray solution by using shields or coverings made of cardboard or other impermeable material.

When applied as instructed for the conditions described for this product controls undesirable vegetation listed on this label as a postdirected spray around established ornamentals. This product may also be used to trim and edge around trees, buildings, sidewalks, roads, potted plants and other objects in a nursery setting.

Postdirected Spray - Use as a postdirected spray around established woody ornamental species or nursery species. Care must be exercised to avoid contact of spray, drift or mist with foliage or green bark of established ornamental species.

APPLICATION

When to Apply

Spray when air is calm to prevent drift to desirable plants. For best results, apply during warm, sunny weather (above 60°F).

WEEDS CONTROLLED

Pre-Emergent:

When used as directed, this product will prevent the following weeds from emerging:

Barnyardgrass	Henbit ¹	Purslane, common
Bluegrass, annual (<i>Poa annual</i>) ¹	Itchgrass	Pusley, Florida
Carpetweed	Johnsongrass (from seed)	Rescuegrass ²
Chickweed, common ²	Junglerice	Shepherdspurse ¹
Chickweed, mouse-ear (from seed)	Knotweed ¹	Signalgrass, broadleaf
Crabgrass (large, smooth)	Kochia	Speedwell, Persian
Crowfootgrass	Lambsquarters, common	Sprangletop
Cupgrass, woolly	Lovegrass	Spurge, prostrate
Foxtails, annual	Panicum, (Texas, fall, browntop)	Witchgrass
Goosegrass	Pigweed	Woodsorrel, yellow (from seed)

¹To control this weed in non-turf areas, apply this product in late summer, fall, or winter before weeds germinate.

²Suppression only.

Post-Emergent:

ANNUAL WEEDS

Barley	Goatgrass, jointed	Rice, red
Barnyardgrass	Goosegrass	Rocket, London
Bluegrass, annual	Groundsel, common	Rye
Bluegrass, bulbous	Henbit	Ryegrass, Italian
Brome, downy	Horseweed / Mare's Tail	Shattercane
Buttercup	Lambsquarters, common	Shepherdspurse
Cheat	Mustard, blue	Sicklepod
Chickweed, common	Mustard, tansy	Signalgrass, broadleaf
Chickweed, mouse-ear (from seed)	Mustard, tumble	Spanishneedles
Cocklebur	Mustard, wild	Sprangletop
Corn	Oats, wild	Spurge, annual
Crabgrass	Panicum, fall	Spurry, umbrella
Dwarf dandelion	Panicum, Texas	Stinkgrass
False flax, smallweed	Pennycress, field	Teaweed
Filaree	Pigweed, redroot	Wheat
Foxtail	Pigweed, smooth	Witchgrass
Foxtail, Carolina	Primrose, cutleaf evening	
Geranium, Carolina	Pusley, Florida	

PERENNIAL WEEDS

Alfalfa	Dock, curly	Orchardgrass
Alligatorweed*	Dogbane, hemp	Pampasgrass*
Anise (fennel)	Fescue, tall	Paragrass
Artichoke, Jerusalem	Fescues	Phragmites*
Bahiagrass	Guinea grass	Poison hemlock
Bentgrass	Horsenettle	Quackgrass
Bermudagrass	Horseradish	Redvine*
Bermudagrass, water (knotgrass)	Ice plant	Reed, giant
Bindweed, field	Johnsongrass	Ryegrass, perennial
Bluegrass, Kentucky	Johnsongrass, seedling	Smartweed, swamp
Bluegrass, Texas	Kikuyugrass	Spurge, leafy*
Brackenfern	Knapweed	Starthistle, yellow
Bromegrass, smooth	Lantana	Sweet potato, wild*
Bursage, woollyleaf	Lespedeza	Thistle, artichoke
Canarygrass, reed	Milkweed	Thistle, Canada
Cattail	Morningglory	Timothy
Clover, red	Muhly, wirestem	Torpedograss*
Clover, white	Mullein, common	Trumpetcreeper*
Cogongrass	Napiergrass	Vaseygrass
Dallisgrass	Nightshade, silverleaf	Velvetgrass
Dandelion	Nutsedge, purple, yellow	Wheatgrass, Western

* Partial Control

TANK SPRAYER (plastic, aluminum, fiberglass, plastic-lined steel or stainless steel)

- Add 3 to 5.75 fluid ounces to 1 gallon of water and treat 1,000 square feet.
- For longer pre-emergent control and post-emergent control of larger weeds use the higher rate.

Do not apply with a galvanized or unlined steel (except stainless steel) sprayer, or through any irrigation system.

HOW TO APPLY

Spray existing weeds AND the entire surrounding weed-prone area you want to keep free of weeds. Spray the area with sufficient volume to assure complete coverage. When spraying around the base of well-established (at least 6 months old) ornamental plants, shrubs, or trees, shield desirable plants from drift with a sheet of cardboard or plastic. Use caution to prevent application to green stems and leaves, damage can occur.

WHEN TO REPLANT

All ornamental bedding plants, trees, shrubs, sod, and seed (flowers and grasses) may be planted 6 months after application when applying at the 3 fluid ounces per 1,000 square feet. use rate or 12 months when applying at the 5.75 fluid ounces per 1,000 square feet use rate.

HOW TO CLEAN SPRAYER

To clean sprayer after use, rinse sprayer and all sprayer parts with soap and water 3 times. Spray rinse water on bare soil or gravel. After cleaning, sprayer may be used for other products.

STORAGE AND DISPOSAL **[Commercial]**

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

PESTICIDE STORAGE: STORE ABOVE 10°F (-12°C) TO KEEP PRODUCT FROM CRYSTALLIZING. Crystals will settle to the bottom. If allowed to crystallize, place in a warm room 68°F (20°C) for several days to redissolve and shake or roll to mix well before using.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. **DO NOT** contaminate water, food or feed by storage or disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. Dispose of excess or waste pesticide by use according to label directions, or contact your State pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

[**Note to Reviewer:** The following statement will be included on all Final Printed Labels bearing multiple Container Disposal (Container Handling) statements] **NOTE:** This product is available in multiple containers. Refer to the Net Contents section of this products labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container disposal [handling] instructions below that apply to your container type / size."

[**Note to Reviewer:** The bracketed section headers will be included when multiple container types / sizes are listed on the label.]

[Nonrefillable Containers 5 Gallons or Less:]

Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration. Do not burn unless allowed by state and local ordinance If burned stay out of smoke.

[Nonrefillable containers larger than 5 Gallons:]

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. If recycling or reconditioning is not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration. Do not burn unless allowed by state and local ordinance. If burned stay out of smoke. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

[Refillable containers]

CONTAINER HANDLING [DISPOSAL]: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

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If you do not agree with or do not accept any of the directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV _____)

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OPTIONAL MARKETING HYPE:

Season Long Control*

* Season Long is 3 months

Dual Action

Dual Action Formula

Up to 4 months control

3 to 6 months control