

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Washington, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

December 31, 2013

Matthew Granahan Nufarm Americas, Inc. 4020 Aerial Center Parkway, Suite 101 Morrisville, NC 27560

Subject:

Label Amendment (add nursery use)

ProDeuce

EPA Reg. No. 228-509

Application Dated October 2, 2013

Dear Mr. Granahan:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

A stamped copy of the label is enclosed for your records. This label supersedes all previously accepted labels. You must submit one (1) copy of the final printed label before you release the product for shipment. Products released for shipment after eighteen (18) months from the date of this letter must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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

Sincerely,

Kable Bo Davis
Product Manager 25
Herbicide Branch

Registration Division (7505P)
Office of Pesticide Programs

[MASTER LABEL]

GROUPS 3 & 9 HERBICIDE

# **ProDeuce**

ACCEPTED

DEC 3 1 2013

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 228-509

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

**ACTIVE INGREDIENTS:** 

# 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

Nufarm

NET CONTENTS	GAL.	(Liters)	
Designation as "NONRE	FILLABLE	" or "REFILLABLE"	for containers > 5 GAL

<sup>\*</sup>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.

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

[SUBPART A – Formulator Market Label]

[GROUPS 3 & 9 HERBICIDE]

# **ProDeuce**<sup>®</sup>

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

ACTIVE INGREDIENTS:	
Glyphosate, N-(phosphonomethyl) glycine, in the form of its isopropylamine salt*	40.15%
Prodiamine**	
OTHER INGREDIENTS:	52.34%
TOTAL:	00.00%

# KEEP OUT OF REACH OF CHILDREN CAUTION / PRECAUCION

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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> <li>Hold eye open and rinse slowly and gently with water for 15 to 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>
	HOT LINE NUMBER
	t container or label with you when calling a poison control center or doctor, or going for treatment. ntact 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:

Barnvardorass Bluegrass, annual (Poa annual)1

Carpetweed Chickweed, common<sup>2</sup>

Chickweed, mouse-ear (from seed) Crabgrass (large, smooth) Crowfootgrass

Cupgrass, woolly Foxtails, annual

Goosegrass

Henbit1 Itchgrass

Johnsongrass (from seed)

Junglerice Knotweed1 Kochia

Lambsquarters, common Lovegrass Panicum, (Texas, fall, browntop)

Pigweed

Purslane, common Pusley, Florida Rescuegrass<sup>2</sup> Shepherdspurse<sup>1</sup> Signalgrass, broadleaf Speedwell, Persian Sprangletop

Spurge, prostrate Witchgrass

Rice red

Rye

Rocket, London

Ryegrass, Italian

Shepherdspurse

Spanishneedles

Spurge, annual

Spurry, umbrella

Sprangletop

Stinkgrass

Witchgrass

Teaweed

Wheat

Signalgrass, broadleaf

Shattercane

Sicklepod

Woodsorrel, yellow (from seed)

#### Post-Emergent:

#### **ANNUAL WEEDS**

Barley Barnyardgrass Bluegrass, annual Bluegrass, bulbous Brome, downy Buttercup Cheat

Chickweed, common Chickweed, mouse-ear (from seed) Cocklebur

Corn Craborass Dwarf dandelion False flax, smallweed

Filaree Foxtail Foxtail, Carolina

Geranium, Carolina

Goatgrass, jointed Goosegrass Groundsel, common

Henbit Horseweed / Mare's Tail Lambsquarters, common Mustard, blue

Mustard, tansy Mustard, tumble Mustard, wild Oats, wild Panicum, fall Panicum, Texas Pennycress, field Pigweed, redroot

Pigweed, smooth Primrose, cutleaf evening

Pusley, Florida

PERENNIAL WEEDS

Alfalfa Alligatorweed\* Anise (fennel) Artichoke, Jerusalem

Bahiagrass Bentgrass Bermudagrass

Bermudagrass, water (knotgrass) Bindweed, field

Bluegrass, Kentucky Bluegrass, Texas Brackenfern Bromegrass, smooth Bursage, woollyleaf

Canarygrass, reed Cattail Clover, red Clover, white Cogongrass **Dallisgrass** Dandelion

\* Partial Control

Dock, curly Dogbane, hemp Fescue, tall **Fescues** Guinea grass Horsenettle Horseradish ice plant Johnsongrass

Johnsongrass, seedling Kikuyugrass Knapweed Lantana Lespedeza Milkweed Morningglory Muhly, wirestem Mullein, common Napiergrass

Nightshade, silverleaf Nutsedge; purple, yellow

Orchardgrass Pampasgrass\* Paragrass Phragmites\* Poison hemlock Quackgrass Redvine\* Reed, giant

Ryegrass, perennial Smartweed, swamp Spurge, leafy\* Starthistle, yellow Sweet potato, wild\* Thistle, artichoke Thistle, Canada Timothy Torpedograss\* Trumpetcreeper\* Vaseygrass Velvetarass

Wheatgrass, Western

<sup>&</sup>lt;sup>1</sup>To control this weed in non-turf areas, apply this product in late summer, fall, or winter before weeds germinate.

<sup>&</sup>lt;sup>2</sup> Suppression only.

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 RISING 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.

· (RV123013)

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]

3 & 9

# **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 TREEJ[:] [ON GRAVEL AREAS][;] [IN AND AROUND NURSERIES]

ACTIVE INGREDIENTS:	
Glyphosate, N-(phosphonomethyl) glycine, in the form of its isopropylamine salt*	40.15%
Prodiamine**	
OTHER INGREDIENTS:	52.34%
TOTAL:	100.00%

#### 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.)

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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.

#### 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	<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 the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for 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.

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

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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 ≥ 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:

- 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:

Henbit1 Barnvardgrass Purslane, common Bluegrass, annual (Poa annual)1 Itchgrass Pusley, Florida Carpetweed Johnsongrass (from seed) Rescuegrass<sup>2</sup> Junglerice Shepherdspurse<sup>1</sup> Chickweed, common<sup>2</sup> Chickweed, mouse-ear (from seed) Knotweed<sup>1</sup> Signalgrass, broadleaf Crabgrass (large, smooth) Speedwell, Persian Kochia Crowfootgrass Lambsquarters, common Sprangletop Cupgrass, woolly Lovegrass Spurge, prostrate Foxtails, annual Panicum, (Texas, fall, browntop) Witchgrass

Goosegrass Pigweed Woodsorrel, yellow (from seed)

Geranium, Carolina

#### Post-Emergent:

#### **ANNUAL WEEDS**

Goatgrass, jointed Barley Rice, red Goosegrass Barnvardgrass Rocket, London Bluegrass, annual Groundsel, common Rye Bluegrass, bulbous Henbit Ryegrass, Italian Horseweed / Mare's Tail Brome, downy Shattercane Lambsquarters, common Shepherdspurse Buttercup Cheat Mustard, blue Sicklepod Chickweed, common Mustard, tansy Signalgrass, broadleaf Mustard, tumble Chickweed, mouse-ear (from seed) Spanishneedles Cocklebur Mustard, wild Sprangletop Oats, wild Spurge, annual Corn Crabgrass Panicum, fall Spurry, umbrella Dwarf dandelion Panicum, Texas Stinkgrass False flax, smallweed Pennycress, field Teaweed Pigweed, redroot Filaree Wheat Foxtail Pigweed, smooth Witchgrass Primrose, cutleaf evening Foxtail, 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 Horseradish Bermudagrass Redvine\* Bermudagrass, water (knotgrass) Ice plant Reed, giant Johnsongrass Bindweed, field Ryegrass, perennial Bluegrass, Kentucky Johnsongrass, seedling Smartweed, swamp Bluegrass, Texas Kikuyugrass Spurge, leafy\* Knapweed Brackenfern Starthistle, yellow Bromegrass, smooth Lantana Sweet potato, wild\* Bursage, woollyleaf Lespedeza Thistle, artichoke Milkweed Canarygrass, reed 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

<sup>&</sup>lt;sup>1</sup>To control this weed in non-turf areas, apply this product in late summer, fall, or winter before weeds germinate.

<sup>&</sup>lt;sup>2</sup> Suppression only.

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.

#### 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 RISING 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 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.

(RV123013)

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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

### LABEL HISTORY

FILE NAME	REVISION MARK	COMMENTS
000228-00509.20100719.PRN98-10;2007-4	. RV071910	Added Optional Statement. Updated verbiage for Storage and Disposal Language.
000228-00509.20100923.MASTER	RV092310	EPA Accepted Labeling.
000228-00509.20110408.EPA Not	RV040811	EPA Not PRN 07-04
000228-00509.20110426.EPA Not	RV042611	EPA Accepted Notification
000228-00509.20131002.EPA Amendment	RV100213	EPA Amendment – adding Subpart B (Nursery Use)
000228-00509.20131223.EPA Amendment	RV122313	EPA Review
000228-00509.20131230.EPA Amendment	RV123013	EPA Review