

228-174

8/25/2003

Page 1  
Jacket 87



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Russell F. Sawyer  
Nufarm Americas Inc.  
1333 Burr Ridge Parkway, Suite 125A  
Burr Ridge, IL 60527-0866

AUG 25 2003

Dear Mr. Sawyer:

Subject: Revised Labeling  
Riverdale 2.5G Pre-Emergent Herbicide  
EPA Registration Number 228-174 ✓  
Your Submission Dated July 10, 2003

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you:

1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

- Modify the turf directions for use to indicate the application rate in pounds of product per acre and 1,100 square feet. Pounds per 29,050 square feet does not normally appear on turf labels.

Please note based on our May 28, 2003 meeting the sites on the proposed labeling do not imply that this product can be applied to sod farms so the exclusionary statement is not required

2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

A stamped copy of the labeling is enclosed for your records. If you have any questions concerning this letter, please contact Mr. James Stone at 703-305-7391.

Sincerely yours,

A handwritten signature in cursive script that reads "Joanne I. Miller".

Joanne I. Miller  
Product Manager (23)  
Herbicide Branch  
Registration Division (7505C)

Enclosure

287

(COMMERCIAL LABEL)

RIVERDALE®

2.5G PRE-EMERGENT HERBICIDE

A selective Pre-emergent herbicide for the control of crabgrass and most other annual weed grasses on lawns, golf courses and other listed sites in established:

Bluegrass (Perennial)	Bermudagrass
Ryegrass (Perennial)	Centipedegrass
Fescue	St. Augustinegrass
Bahiagrass	Zoysiagrass

ACTIVE INGREDIENT:

N-butyl--Ethyl-a, a, a-trifluoro-dinitro-p-toluidine . . . . .	2.5%
INERT INGREDIENTS: . . . . .	97.5%
TOTAL . . . . .	100.0%

Contains 1 Pound Active Ingredient Per 40 Pound Bag.

Riverdale is a Registered Trademark of Riverdale - A Nufarm Company

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE SIDE PANEL FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

EPA Reg. No. 228-174

Net Contents 40 Pounds

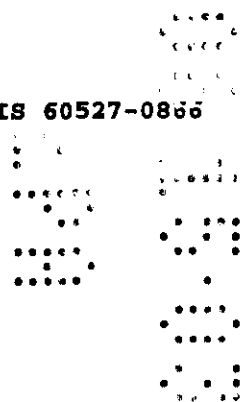
EPA EST. NO. 228-IL-1

MANUFACTURED BY NUFARM AMERICAS INC., BURR RIDGE, ILLINOIS 60527-0866

ACCEPTED  
with COMMENTS  
In EPA Letter Dated  
**AUG 25 2003**

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

228-174



Revised 4/25/03 Changed First Aid Statement per PR 2001-1. Additional changes are updates since last accepted label via Amendment.  
7/10/03 Changed per EPA's letter dated 7/9/03.

(Back Panel)

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION**

Causes eye irritation. Avoid contact with eyes, skin, or clothing. Harmful if absorbed through skin. Wash thoroughly with soap and water after handling.

**FIRST AID STATEMENT**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**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.

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

**ENVIRONMENTAL HAZARDS**

Drift or runoff may adversely affect non-target plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Do not contaminate water used for irrigation or domestic purposes.

**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.

This product is a pre-emergent herbicide which is applied to established Ornamental Turf Lawns (Residential, Industrial and Institutional), Parks, Cemeteries, Athletic Fields and Golf Courses (Fairways, Aprons, Tees and Roughs) and similar turf areas. It is used for the control of annual bluegrass (Poa Annua), smooth and hairy crabgrass, goosegrass (silver crabgrass or crowfoot); barnyardgrass (watergrass) and green and yellow foxtail. This product controls these annual weeds by killing their seeds as they germinate. Apply before these annual weeds begin to germinate since it does not control established weeds.

**USE PRECAUTIONS**

Apply this product to the turf prior to the germination of weed grasses since this product will not control established weeds. This product may thin established annual bluegrass (Poa annual) turfs and fine-leaved fescues at rates above .40 pounds per 29,050 square feet (1.0 pounds active ingredients). This product should not be applied in the Spring to turfgrass planted in the previous Fall. In Bermudagrass areas that have been over seeded with winter grasses a Spring application of this product may thin the over-seeded grasses. Because of varying cultural practices, this product should not be used on dichondra. This product should not be applied to newly sprigged areas of bermudagrass, St. Augustinegrass or centipedegrass until the turfs are well established.

**APPLICATION DIRECTIONS**

**RATES, FREQUENCY AND TIMING OF APPLICATION**

Successful pre-emergence control of the annual grass weeds listed on this label requires proper timing of application.

Apply Riverdale 2.5G Pre-emergent Herbicide approximately one to two weeks prior to the germination of annual grass weeds. All summer annual grasses do not germinate at the same time. If application timing does not coincide with normal germination period of any of the annual grass weeds listed on this label, weed control results may be erratic or poor. Optimum weed control performance will be obtained if treated areas are irrigated soon after application.

Any cultural practices that disturb the soil, such as areification or verticutting should be done prior to application of this product.

1. Spring germinating Summer annual grasses - crabgrass, foxtails, and barnyardgrass.

A. Northern (cool season) turfgrasses.

For pre-emergence control, apply 40 to 53.4 pounds per 29,050 square feet (1.0 to 1.33 pounds active ingredient) of this product per acre in Spring one to two weeks prior to the onset of conditions favorable for annual weed grass seed germination.

B. Southern (warm season) turfgrasses.

For pre-emergence control, apply 53.4 to 80 pounds (1.33 to 2 pounds active ingredient) of this product per 29,050 square feet in the late Winter or early Spring one to two weeks prior to the onset of conditions favorable for annual weed grass seed germination.

In areas of the United States where germination of these annual weed grass species continues for extended periods of time a second application of this product at the recommended rate may be made 8 to 10 weeks after initial treatment for continued control.

2. Late Spring, early Summer germinating annual grasses - goosegrass.

Although classified as a Summer annual grass, goosegrass normally germinates 4 to 6 weeks later than crabgrass, foxtails, and other summer annual grass species. Applications of this product should, therefore, be timed accordingly.

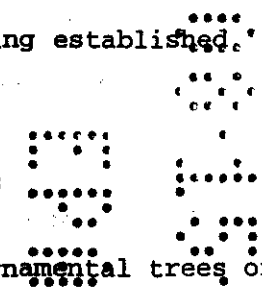
A. Northern (cool season) turfgrasses.

For pre-emergence control, apply 53.4 pounds (1.33 pounds active ingredient) of this product per 29,050 square feet in the late Spring or early Summer, one to two weeks prior to expected germination of goosegrass.

When this product is applied as directed, the following established turfgrasses are tolerant:

Kentucky bluegrass  
Perennial ryegrass  
Centipedegrass St.  
Fescue

Zoysiagrass  
Bermudagrass  
Augustinegrass  
Bahiaagrass



This product will not harm most nearby established ornamental trees or shrubs.

B. Southern (warm season) turfgrasses.

For pre-emergence control, apply 53.4 to 80 pounds (1.33 to 2 pounds active ingredient) of this product per 29,050 square feet in late Spring or early Summer one to two weeks prior to the expected germination of goosegrasses.

3. Northern and Southern turfgrasses.

In areas of the United States where pre-emergence control of both early germinating annual grasses (crabgrass, foxtails and barnyardgrass) and the later germinating goosegrass is desired, two applications of this product at the recommended rate spaced 8 to 10 weeks apart may be made to provide full season control of the annual grass species.

4. Poa annua (annual bluegrass).

In areas of heavy infestation of annual bluegrass, its elimination will temporarily result in thin turfgrass areas; Proper fertilization, irrigation and soil incorporated reseeding will encourage existing desirable turfgrasses and newly planted seedling turfgrasses to fill in these thin areas previously occupied by annual bluegrass.

A. Northern (cool season) turfgrasses.

For pre-emergence control, apply 53.4 pounds (1.33 pounds active ingredient) of this product per 29,050 square feet in late Summer or early Fall and again in late Winter or early Spring one to two weeks prior to expected germination of annual bluegrass.

B. Southern (warm season) turfgrasses.

For pre-emergence control, apply 80 pounds (2 pounds active ingredient) of this product per 29,050 square feet in the late Summer or early Fall one to two weeks prior to the expected germination of the annual bluegrass. In southern areas of the United States where germination of annual bluegrass continues for extended periods of time, a second application of this product at 80 pounds per 29,050 square feet can be made 10 to 12 weeks after the initial treatment. For application in smaller areas, apply the following amounts of this product.

<u>Per 43,560 Sq.Ft.</u>	<u>Per 1,100 Sq.Ft.</u>
60 Pounds	1 to 1/2 pounds
80 Pounds	2 pounds
120 Pounds	3 pounds

**RESEEDING**

Chemicals that effectively control annual weed seeds may also affect new desirable turfgrass seedlings. Reseeding should be delayed for -at least 6 weeks after applying this product. When reseeding, it is essential that proper cultural practices such as soil cultivation, irrigation and fertilization be followed. For satisfactory reseeding results after using this product, the amount of seed used should be increased and equipment designed to place seed in contact with the soil (such as the Rogers Aero Seeder) should be employed. When using this product at the highest recommended rate, reseeding should be delayed 12 to 16 weeks after application.

**APPLICATION EQUIPMENT**

Apply this product evenly over the turfgrass area without skips or misses. A more uniform application can be made by spreading half the required amount over the area and then applying the remaining half at right angles. Both drop type and rotary type spreaders may be used. Avoid the use of spreaders which would apply the material in a narrow, concentrated band. For best results use equipment designed to apply granular herbicides and insecticides. Calibrate applicators prior to use according to the manufacturer's directions. Check frequently to be sure equipment is working properly and distributing granules uniformly.

**APPROXIMATE SPREADER SETTINGS AS A GUIDE FOR CALIBRATION  
(FOR APPLYING PRODUCT IN ONE PASS OVER THE TURF)**

**TO APPLY POUNDS PER 29,050 Square Feet**

<u>SPREADER TYPE</u>	<u>40 lbs.</u>	<u>53.4 lbs.</u>	<u>80 lbs.</u>
<b>GANDY:</b>			
Model 10A Series 6, 8, 10, 11, 12, 20 and 30 ft. (based on tractor speed of 5 M.P.H.)	7	8	9
Model 10T Series 6, 8, 10, 11, 12, 20 and 30 ft. (based on tractor speed of 5 M.P.H.)	16	18	21
Turf Tender, 24, 30, 42 in. (based on tractor speed of 3 M.P.H.)	14	16	18
600 Series 3, 4 and 5 ft. (based on tractor speed of 3 M.P.H.)	7	8	9
<b>SCOTTS:</b>			
Rotary Models R-7, PR-1, PT-10, PT-11 (width of coverage 11 ft.)	A	B	C
Drop Spreaders	2.25	2.5	3
<b>CYCLONE:</b>			
Models B1, 33, 96, 100 and BSSB	2.25	2.5	2.75
Models BPI, 93A, and 99	2.25	2.25	2.75
Models S3 and MSB 400R (based on tractor speed of 5 M.P.H.)	4	4.5	5.5
<b>EZEE FLOW:</b>			
Models 105 and 88F	B	B+.75	1+.5
Models 106 and 116 (based on tractor speed of 5 M.P.H.)	A <sub>1</sub> +.5	B <sub>1</sub> (7.5 MPH)	B <sub>1</sub>
Model 109 (based on tractor speed of 5 M.P.H.)	B <sub>2</sub>	A <sub>3</sub>	B <sub>3</sub>
<b>LELY:</b>			
Model W and H (based on tractor speed of 4.5 M.P.H.) (Do not use agitator unit)	2.5	3	4

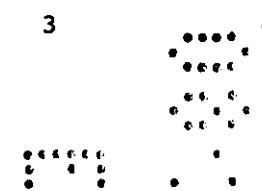
**Environmental Benefits**

(Grasscycling Logo)

Besides increasing property values, did you know a well-maintained lawn provides the following benefits to your home and environment:

Grass clippings and yard waste are approximately 20% of the volume in our nation's landfills. To do your part to reduce this amount, leave grass clippings on your lawn. Increased mowing height and frequency will produce smaller grass clippings that will decompose more readily so nutrients go back into your lawn.

- ✓ A 50' x 50' lawn produces enough oxygen for a family of 4 every day
- ✓ Reduces Glare & Reduces Noise
- ✓ Traps Dust, Smoke Particles & Other Pollutants
- ✓ Purifies Water & Modifies Temperature
- ✓ Improves Soil Condition & Controls Erosion



**STORAGE AND DISPOSAL**

**STORAGE:** Always store product in original container and in locked storage area. Do not contaminate other pesticides, fertilizer, seed, water, food or feed by storage or disposal.

**PRODUCT 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 landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**NOTICE:** Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, expressed or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.  
(RV 071003)