

228-362

06/06/2003

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

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

JUN 6 2003

Russell F. Sawyer  
Nufarm Americas Inc.  
1333 Burr Ridge Parkway, Suite 125A  
Burr Ridge, IL 60521-0866

Dear Mr. Sawyer:

Subject: Label Revisions  
Riverdale XRM-5202 Lite Premium Selective Herbicide  
EPA Registration Number 228-362  
Your Submission Dated April 18, 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. Based on our meeting of May 28, 2003, make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

- When this product is formulated with a Clopyralid Technical marketed with the labeling approved by this office on September 27, 2002 (or later) you must modify the turf directions for use to include the following statements :

For use only on non-residential turf such as athletic and recreational sports fields, cemeteries, golf courses, industrial sites, non-cropland, parks, rights-of-way, and roadsides.

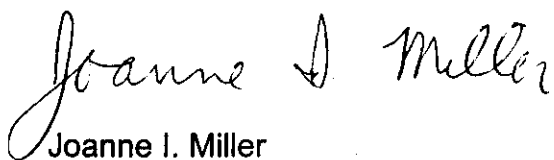
- Do not use on residential turf
- Do not send clippings to a compost facility
- Do not collect grass clippings for mulch or compost
- Applicator must give notice to landowners/property managers to not use grass clippings for composting.

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". The signature is written in black ink and is positioned above the typed name.

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

RIVERDALE®

XRM-5202 LITE PREMIUM SELECTIVE HERBICIDE

FOR THE CONTROL OF ANNUAL AND PERENNIAL  
BROADLEAF WEEDS IN ORNAMENTAL TURF

CONTAINS 2,4-D, TRICLOPYR, AND CLOPYRALID

ACTIVE INGREDIENTS:

Triisopropanolamine Salt of 2,4-Dichlorophenoxyacetic Acid* . . . . .	20.00%
Triethylamine Salt of 3,5,6-Trichloro-2-Pyridinyloxyacetic Acid** . . . . .	1.48%
3,6-Dichloro-2-Pyridinecarboxylic Acid*** . . . . .	0.51%
INERT INGREDIENTS . . . . .	78.01%
TOTAL . . . . .	100.00%

Isomer Specific Method, Equivalent to:

*2,4-Dichlorophenoxyacetic Acid . . . . .	10.73%	0.95 lbs./gal.
**3,5,6-Trichloro-2-Pyridinyloxyacetic Acid . . . . .	1.06%	0.09 lbs./gal.
***3,6-Dichloro-2-Pyridinecarboxylic Acid . . . . .	0.51%	0.05 lbs./gal.

Riverdale is a Registered Trademark of Riverdale - A Nufarm Company

FOR SALE TO AND USE BY COMMERCIAL APPLICATORS AND PROFESSIONAL LANDSCAPERS ONLY.  
NOT FOR SALE TO OR USE BY HOMEOWNERS.

KEEP OUT OF REACH OF CHILDREN

DANGER - PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que  
se la explique a usted en detalle.

SEE INSIDE BOOKLET FOR FIRST AID  
AND ADDITIONAL PRECAUTIONARY STATEMENTS

EPA REG. NO. 228-362

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GALS.

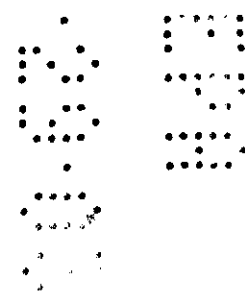
EPA EST. NO. 228-IL-1

MANUFACTURED BY NUFARM AMERICAS, INC., BURR RIDGE, ILLINOIS 60527-0800

ACCEPTED  
with COMMENTS  
EPA 10/2003  
JUN 6 2003

NOTE: Spanish language is optional

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
228-362



(Inside Booklet)

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
DANGER - PELIGRO**

Corrosive. Causes irreversible eye damage. Harmful if swallowed, inhaled or absorbed through skin. Do not get in eyes, on skin or on clothing. When using this product, wear long-sleeved shirt, long pants, socks, shoes, rubber gloves, and eye protection. It is recommended that safety glasses include front, brow, and temple protection. After using this product, rinse gloves before removing, remove clothing and launder separately before reuse, and promptly and thoroughly wash hands and exposed skin with soap and water. Remove saturated clothing as soon as possible and shower. Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment area until spray has dried. The maximum number of broadcast applications per treatment site is 2 per year. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

If this container is over one gallon and less than five gallons, then persons engaged in open pouring of this product must also wear coveralls or a chemical resistant apron. If this container is five gallons or more in capacity, do not open pour product from this container. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal.

**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 INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

**ENVIRONMENTAL HAZARDS**

Drift or runoff may adversely affect nontarget 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. Do not apply this product through any type of irrigation system.

Do not apply in or on ditches used to transport irrigation water, nor where runoff or irrigation water may flow into susceptible crops as injury to crops may occur.

Clopyralid, an active ingredient in this product, may leach through soil into groundwater under certain conditions of use. Use of this product where soils are permeable, particularly where the water table is shallow, may result in leaching to groundwater.

Caution should be exercised when handling this product at mixing, loading, and disposal sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this product will reduce the probability of spills. Placement of mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

XRM-5202™ LITE PREMIUM SELECTIVE HERBICIDE is a broad-spectrum herbicide for control of actively growing annual and perennial broadleaf weeds. It is for use on established Ornamental Turf such as Lawns, Parks, Cemeteries, Roadsides, Golf Courses (Fairways, Aprons, and Roughs), and similar non-crop areas. Do not use on Golf Greens or Tees. Not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production or for research purposes.

XRM-5202 Lite may be applied to the following established turfgrass species:

**Established Cool Season Turfgrasses**

Common Name	Scientific Name
bentgrass†	<i>Agrostis species</i>
bluegrass, Kentucky	<i>Poa pratensis</i>
fescue, chewing	<i>Festuca rubra</i> var. <i>commutata</i>
fescue, creeping red	<i>Festuca rubra</i>
fescue, sheeps	<i>Festuca ovina</i>
fescue, tall	<i>Festuca arundinaceae</i>
ryegrass, perennial	<i>Lolium perenne</i>

**Established Warm Season Turfgrasses††**

Common Name	Scientific Name
bahiagrass†	<i>Paspalum notatum</i>
bermudagrass†	<i>Cynodon dactylon</i>
buffalograss	<i>Buchloe dactyloides</i>
centipedegrass†	<i>Eremochloa ophiuroides</i>
zoysiagrass†	<i>Zoysia japonica</i>
zoysiagrass†	<i>Zoysia tenuifolia</i>
fescue, tall (growing in warm season areas)	<i>Festuca arundinacea</i>

†Do not apply to these turfgrass species unless potential turfgrass injury can be tolerated. Also, when treating these turfgrass species, do not apply more than 7.6 pints per acre. To minimize grass injury, additional applications should be made at least four weeks apart. Avoid swath overlaps.

††Do not treat warm season turfgrass with XRM-5202 Lite when mowing height is less than 1/2 inch.

**Note:** XRM-5202 Lite may discolor and/or stunt turf that is not well-established or is stressed or weakened due to unfavorable climatic conditions, temperature extremes, drought, nematodes, or other factors which damage or weaken turf. Apply this product only to healthy, well-established turf that has a well-anchored root system. Do not apply this product to grass species not listed on this label unless potential turf injury can be tolerated.

**USE PRECAUTIONS**

Do not apply this product directly to, or otherwise permit drift or spray mist to come into contact with cotton, citrus, grapes, tobacco, vegetables, flowers, ornamental plants, shrubs, trees, and other desirable plants. Do not pour spray solutions near desirable plants. Avoid fine mists. Use lawn type sprayer with coarse spray as wind drift is less

likely. Spray drift can be reduced by spraying when wind velocity is low, keeping spray boom as low as possible, using nozzles that deliver larger spray droplets and minimize the production of fine spray particles, and by using higher spray volumes and lower pressures. Applications should be made only when hazards from spray drift are at a minimum. Very small quantities of spray, which may not be visible, may seriously injure susceptible plants. Do not spray when wind is blowing toward susceptible crops or ornamental plants near enough to be injured. Do not apply to exposed roots of shallow rooted trees and shrubs. Do not use grass clippings from turf treated with this product for mulch or compost. Maximum kill of weeds will be obtained from Spring or early Fall applications when weeds are actively growing. Do not apply more than 10.1 pints per acre per application. Mow newly seeded turf at least twice before treatment with XRM-5202.

For optimum results: (1) avoid applying during excessively dry or hot periods unless irrigation is used; (2) turf should not be mowed 1 to 2 days before and following application; (3) reseed no sooner than 3 to 4 weeks after application of this product.

#### WEEDS CONTROLLED BY XRM-5202 PREMIUM SELECTIVE HERBICIDE

This product is designed to promote lush green growth in lawns and control many broadleaf weeds such as: Acacia, Alder, Artichoke, Aster, Austrian fieldcress, Bachelor button, Beggartick, Bidden, Bindweed, Bitterweed, Bitter wintercress, Black medic, Blessed thistle, Blue lettuce, Box elder, Broomweed, Buckhorn, Buckwheat, Buffalobur, Bull thistle, Burdock, Bur ragweed, Buttercup, Canada thistle, Carpetweed, Catnip, Chamomile, Chickweed, Chicory, Clover, Cockle, Cocklebur, Coffeebean, Coffeeweed, Common sowthistle, Cornflower, Creeping jenny, Croton, Curly indigo, Dandelion, Dock, Dogbane, Dog fennel, Elderberry, Fanweed, Flea bane (daisy), Flixweed, Florida pusley, Frenchweed, Galinsoga, Goatsbeard, Goldenrod, Ground ivy, Groundsel, Gumweed, Hawksbeard, Hawkweed, Healall, Hemp, Henbit, Hoary cress, Honeysuckle, Horsetail, Horseweed, Indiana mallow, Ironweed, Jewelweed, Jimsonweed, Kochia, Knapweed, Knotweed, Kudzu, Ladysthumb, Lambsquarter, Lespedeza, Locoweed, Lupine, Mallow, Marshelder, Meadow salsify, Mexicanweed, Morningglory, Musk thistle, Mustard, Nettle, Nightshade, Orange hawkweed, Oxalis, Parsnip, Pennycress, Pennywort, Peppergrass, Pepperweed, Pigweed, Plantain, Poison hemlock, Poison ivy, Poison oak, Pokeweed, Poorjoe, Povertyweed, Prickly lettuce, Primrose, Puncture vine, Purslane, Ragweed, Red clover, Red sorrel, Rush, Russian thistle, St. Johnswort, Shepherdspurse, Sicklepod Smartweed, Sneezeweed, Southern wild rose, Sowthistle, Spanishneedle, Spatterdock, Speedwell, Spurge, Starthistle, Stinkweed, Sumac, Sunflower, Sweet clover, Tansy Ragwort, Tarweed, Teasel, Thistle, Toadflax, Tumbleweed, Velvet leaf, Veronica, Vervain, Vetch, Virginia creeper, Wild aster, Wild carrot, Wild geranium, Wild lettuce, Wild radish, Wild rape, Wild strawberry, Wild sweet potato, Willow, Witchweed, Wormseed, Yarrow, Yellow rocket, and other broadleaf weeds.

After applying this product, many broadleaf weeds will begin to show visible signs of leaf curl within a few days. Some hard-to-control broadleaf weeds may require a second broadcast treatment in 3 to 4 weeks. In the event more than two broadcast applications per year are necessary, use as a spot treatment. To spot treat, make up solution as listed below.

#### TURF APPLICATION DIRECTIONS

Apply 7.6 to 10.1 pints of XRM-5202 Lite per acre (2.8 to 3.8 ozs./1,000 sq.ft.) to control above listed broadleaf weeds.

The maximum use rate for most warm season grasses is 7.6 pints per acre. For exceptions, see listing of warm season grasses listed above.

Make application using equipment that will ensure uniform coverage (see specific application directions below). Foliar sprays should be applied during warm weather when weeds are actively growing. Application under drought conditions may provide less than desirable results. When hard-to-control species are prevalent, when applications are made in late Summer, when weeds are mature, or during drought conditions, use the higher rates.

On closely mowed golf course fairway bentgrass, apply this product at a maximum rate of 5.1 pints in 20 to 240 gallons of water per acre (1.8 fluid ounces in 0.5 to 5.5 gallons of water per 1000 square feet). During conditions which promote turf stress use lower rates, 2.5 to 3.8 pints in 20 to 240 gallons of water, per acre (0.9 to 1.4 fluid ounces in 0.3 to 5.5 gallons per 1000 square feet). Slight turf yellowing will disappear after

one week. To minimize grass injury, a second application should not be made for at least 4 weeks. Avoid swath overlaps. Do not use on golf course greens or tees.

**Note:** Broadleaf weeds germinate at different times of the year. Only emerged weeds present at the time of application will be controlled by XRM-5202 Lite.

**Standard Volume Broadcast Applications:** Apply 7.6 to 10.1 pints of XRM-5202 Lite in enough water to deliver 20 to 200 gallons of total spray mix per acre (1.3 to 5 gallons spray per 1,000 square feet). Higher application volumes may be used when this product is tank mixed with liquid fertilizers.

**Low Volume Broadcast Applications:** Apply 7.6 to 10.1 pints of XRM-5202 Lite in enough water to deliver from 5 to 40 gallons of total spray mixture per acre. Use low pressures and application equipment capable of delivering a uniform droplet size that can wet the weed leaf surface.

**Targeted Zone Applications or Spot Treatment Using Portable Sprayers:** Mix 1.3 to 2.5 ounces of XRM-5202 Lite in enough water to make one gallon of spray and apply at any time broadleaf weeds are actively growing. Target plants should be sprayed to wet but not beyond point of runoff.

**Herbi™ Controlled Droplet Applicator:** Add 3.4 to 4.4 pints of XRM-5202 Lite to the 5 pint Herbi bottle, then fill with water to make 5 pints of mixture or substitute 1/2 pint of a surfactant for water while agitating the solution. While walking at approximately 1 pace (3 feet) per second, spray entire contents over 19,000 square feet (.44 acre). Do not overlap (double coverage) at edge of spray patterns. Reduced rates (use 1/2 of rate shown above) of XRM-5202 Lite must be applied when grass is stressed from heat, drought, etc. Herbi™ is a trademark of North American Micron.

**Controlled Droplet Applicators - (CDA), Atomizers, and Spinning Disk Applicators:** Use XRM-5202 at the rate of 7.6 to 10.1 pints per acre (2.8 to 3.8 fluid ounces per 1,000 square feet) in sufficient water to assure coverage (1 to 4 gallons of water per acre is normal for this type of equipment).

Note: Follow CDA equipment spray instructions.

#### STORAGE AND DISPOSAL

**STORAGE:** Always store pesticides in a secured warehouse or storage building. Do not store near open containers of fertilizer, seed or other pesticide. Store at temperatures above 28°F or agitate before using. Containers should be opened in well ventilated areas. Keep container tightly sealed when not in use. Do not stack cardboard cases more than two pallets high. Do not store near open containers of fertilizer, seed or other pesticide. Do not contaminate water, food or feed by storage or disposal.

**PRODUCT DISPOSAL:** Pesticide wastes are acutely hazardous. If container is damaged or if pesticide has leaked, contain all spillage. Absorb and clean up all spilled material with granules or sand. Place in a closed, labeled container for proper disposal. Improper disposal of excess pesticide, spray mixtures, or rinsate is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL FOR NON-REFILLABLE CONTAINERS:** Triple rinse (or equivalent). 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, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**CONTAINER DISPOSAL FOR REFILLABLE CONTAINERS:** Close all openings which have been opened during use and replace all caps. Contact Riverdale Chemical's Customer Service Department at 1-708/754-3330, to arrange for return of the empty refillable container.

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**WARRANTY**

Nufarm Americas, Inc. warrants that this herbicide conforms to the chemical description on its label. When used in accordance with label directions under normal conditions, this herbicide is reasonably fit for its intended purposes. Since timing, method of application, weather, plant and soil conditions, mixtures with other chemicals, and factors affecting the use of this product are beyond our control, no warranty is given concerning the use of this product contrary to label directions or under conditions which are abnormal or not reasonably foreseeable. The user assumes all risks of any such use, including the use of this product on turf species not recommended on this label.

(RV 041803)