

Please read instructions on reverse before completing form. Form Approved. OMB No. 2070-0060. Approval expires 05-31-98

 EPA United States Environmental Protection Agency Washington, DC 20460	Registration Amendment	OPP Identifier Number 247949
	<input checked="" type="checkbox"/> Other	EPA H0100L

Application for Pesticide - Section I

1. Company/Product Number 228-313	2. EPA Product Manager Joanne I. Miller	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Riverdale Horsepower™ Selective Herbicide	PM# 23	
5. Name and Address of Applicant (Include ZIP Code) Riverdale Chemical Company 425 West 194th Street Glenwood, IL 60425-1584 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

NOTIFICATION

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Changed: "Kills" to "Control"

Deleted: (1) Rainfall and Irrigation suggestions
 (2) Common for Bermuda

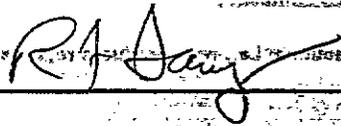
Added: (1) Controlled Droplet Application (3) More weeds
 (2) *Excluding Bentgrass Tees Rearranged: list of grasses

NOV 28 1997

Section - III

1. Material This Product Will Be Packaged In:			2. Type of Container		
Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____		
* Certification must be submitted		If "Yes" Unit Packaging wgt. _____ No. per container _____	If "Yes" Package wgt. _____ No. per container _____		
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container _____		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled <input type="checkbox"/> Other _____					

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Russell F. Sawyer	Title Regulatory Affairs Manager	Telephone No. (Include Area Code) 708/754-3330
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Regulatory Affairs Manager	EPA Form 8570-1 (Rev. 8-94)
4. Typed Name Russell F. Sawyer	5. Date October 29, 1997	

RIVERDALE

HORSEPOWER™ SELECTIVE HERBICIDE

FOR SELECTIVE BROADLEAF WEED CONTROL
IN ORNAMENTAL LAWNS AND TURF GRASSES

CONTAINS MCPA, TRICLOPYR AND DICAMBA

CONTROLS: Dandelion, Chickweed, Black medic, Knotweed, Plantain, Oxalis,
Clover, Cocklebur, Thistle and many other species of
broadleaf weeds; some of which are listed on this label.

ACTIVE INGREDIENTS:

Dimethylamine Salt of 2-Methyl-4-Chlorophenoxyacetic Acid*	48.99%
Triethylamine Salt of 3,5,6-Trichloro-2-Pyridinyloxyacetic Acid**	5.59%
Dimethylamine Salt of Dicamba (3,6-Dichloro-o-Anisic Acid)***	4.82%
INERT INGREDIENTS:	40.60%
TOTAL	100.00%

By Isomer Specific AOAC Method, Equivalent to:

*2-Methyl-4-Chlorophenoxyacetic Acid	40.0%	3.80 lbs./gal.
**3,5,6-Trichloro-2-Pyridinyloxyacetic Acid	4.0%	0.38 lbs./gal.
***3,6-Dichloro-o-Anisic Acid	4.0%	0.38 lbs./gal.

Horsepower™ - Is A Trademark of Riverdale Chemical Company

For Use By Professional Turf Maintenance Personnel,
Landscaping or Commercial Applicators Only

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 ADDITIONAL PRECAUTIONARY STATEMENTS AND
STATEMENT OF PRACTICAL TREATMENT

EPA REG. NO. 228-313

NET CONTENTS

GALS.

EPA EST. NO. 228-IL-1

MANUFACTURED BY

RIVERDALE CHEMICAL COMPANY

GLENWOOD, ILLINOIS 60425-1584

NOTE: Spanish language is optional

NOTIFICATION

NOV 28 1997

Revised 10/29/97

Added Controlled Droplet Applicator, a note for Bentgrass Tees, and
more weeds. Deleted rainfall and irrigation suggestions, and common
for Bermuda. Changed "Kills" to "Controls", rearranged list of
grasses, via Notification.

(Inside Booklet)

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

Corrosive. This concentrate causes irreversible eye damage. Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin or on clothing. Wear face shield or goggles when mixing and loading this product. After product has been diluted in accordance with Directions for Use, eye protection is not required. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF SWALLOWED: Call a doctor or get medical attention. Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.

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. When cleaning equipment, do not pour washwater on the ground; spray or drain over a large area away from wells and other water sources. Do not contaminate water when disposing of equipment washwaters. Do not apply this product through any type of irrigation system. Do not contaminate water used for irrigation or domestic purposes.

Most cases of ground water contamination involving phenoxy herbicides such as MCPA have been associated with mixing/loading and disposal sites. Caution should be exercised when handling these phenoxy pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing and transferring this pesticide will reduce the probability of spills. Placement of the 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.

HORSEPOWER™ SELECTIVE HERBICIDE is for use on Lawns, Turf, Golf Courses (Fairways, Aprons, Tees* and Roughs), Parks, Cemeteries and similar non-crop areas. Not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production or for research purposes. *Excluding Bentgrass Tees.

USE PRECAUTIONS

Avoid drift of spray mist to vegetables, flowers, ornamental plants, shrubs, trees and other desirable plants. Do not pour spray solutions near desirable plants. Do not use on carpetgrass, Dichondra, nor on lawns or turf where desirable clovers are present. Avoid fine mists. Use lawn type sprayer with coarse spray as wind drift is less likely. Avoid contact with exposed feeder roots of ornamentals and trees. Maximum control of weeds will be obtained from Spring or early Fall applications when weeds are actively growing. Use the higher rate for hard-to-control weeds. Do not exceed specified dosages for any area; be particularly careful within the dripline of tree and other ornamental species. Do not apply to newly seeded grasses until well established. Do not spray when air temperature exceeds 90°F.

Avoid application to Centipede or St. Augustine grasses unless turf injury can be tolerated. The suitable use of Horsepower on non-recommended turf species may be

determined by treating a small area at any rate/acre which does not exceed 3 pints/acre. Prior to treatment of larger areas, the treated area should be observed for any sign of turf injury for a period of 30 days of normal growing conditions to determine the phytotoxicity and efficacy to the treated area. The user assumes the responsibility for any plant damage or other liability resulting from the use of this product on species not recommended on this label.

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. Adding oil, wetting agent, or other surfactant to the spray may be used to increase effectiveness on weeds but doing so may reduce selectivity to turf resulting in turf damage. Clean and rinse spray equipment using soap or detergent and water, and rinse thoroughly before reuse for other sprays.

WEEDS CONTROLLED BY HORSEPOWER™

Alfalfa, Amaranth, Aster, Beadstraw, Bedstraw, Beggartick, Beggarweed, Bindweed, Bitter sneezeweed, Black medic, Bladder campion, Bracken fern, Broomweed, Buckhorn, Buckwheat, Buffalobur, Burclove, Burcucumber, Burdock, Bursage, Buttercup, Canada thistle, Carpetweed, Catnip, Catsear, Chamise, Chamomile, Chickweed, Chicory, Cinquefoil, Clover, Cocklebur, Coffeeweed, Cornflower, Cornspeedwell, Croton, Daisy, Dandelion, Dock, Dog annel, Dragonhead mint, Evening primrose, Field pennycress, Fleabane, Florida pusley, Frenchweed, Galinsoga, Geranium, Goatsbeard, Goldenrod, Goosefoot, Gromwell, Ground ivy, Halfshrub sundrop, Hawkweed, Healall, Heartleaf drymary, Hemp sesbania, Hempnettle, Henbit, Horsenettle, Horsetweed, Ironweed, Jerusalem artichoke, Jimsonweed, Knapweed, Knapwood, Knawel, Knotweed, Kochia, Ladysthumb, Lambsquarter, Lespedeza, Little starwort, Mallow, Marc's Tail, Marshelder, Matchweed, Mayweed, Milkweed, Morningglory, Mustard, Nightflowering catchfly, Nightshade, Oxalis (Stricta and corniculata), Parsley-piert, Pennywort, Peppergrass, Pepperweed, Pigweed, Plantain, Poison hemlock, Poison ivy, Poison oak, Pokeweed, Poorjoe, Prickly sida, Prickly lettuce, Puncturevine, Purslane, Ragweed, Red sorrel, Red clover, Redvine, Redstem, Rubberweed, Sheep sorrel, Shepherdspurse, Sicklepod, Smartweed, Snakeweed, Sowthistle, Speedwell, Spiderwort, Spikeweed, Spiny, Spurge, Spurry, Spurweed, Starbur, Stinging nettle, Stitchwort, Stunkweed, Sumpweed, Sunflower, Tansy ragwort, Teasel, Teaweed, Texas blueweed, Thistle, Thistle, Toadflax, Trumpetcreeper, Velvetleaf, Veronica, Vetch, Waterhemlock, Waterhemp, Whitebrush, Wild violet, Wild radish, Wild onion, Wild aster, Wild carrot, Wild lettuce, Wild garlic, Wild geranium, Wood sorrel, Wormwood, Yankeeweed, Yarrow, Yellow starthistle, Yellow rocket, and many other broadleaf weeds.

ORNAMENTAL LAWNS AND TURF

Apply Horsepower Selective Herbicide at the rate of 2 to 3 pints in 20 to 240 gallons of water per acre (0.73 to 1.10 fluid ounces in 0.5 to 5.5 gallons of water per 1,000 square feet) to control weeds growing in turf planted to Bluegrass, Fescue, Rye, Bent (excluding golf course greens and tees), Bahia, Bermuda and Zoysia.

Herbi™ Controlled Droplet Applicator: Add 1-1/2 to 2-1/4 pints of Horsepower 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 33,000 square feet (3/4 of an acre). Do not overlap (double coverage) at edge of spray patterns. Reduced rates (use 1/2 of rate shown above) of Horsepower 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 Horsepower at the rate of 2 to 3 pints per acre (0.73 to 1.10 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: For all grasses (1) Do not overlap spray patterns; (2) Use reduced rates if grass is stressed from heat, drought, etc.; and (3) Follow CDA equipment spray instructions.

COMPATIBILITY

Horsepower can be mixed with some liquid fertilizers or liquid iron materials. Because liquid fertilizers and liquid iron differ in pH, free ammonia content, density, salt concentration and percentage of water, a compatibility test (given below) is recommended prior to mixing in the application equipment. All regulations, either State or Federal,

relating to the application of liquid fertilizers or liquid iron and this product must be strictly followed. The following compatibility test should always be performed prior to full-scale mixing.

1. Pour 18 ounces of water into a quart jar.
2. Add 1 ounce of either the liquid fertilizer or liquid iron to be used.
3. Add 1 ounce of Horsepower.
4. Close jar and shake well.
5. Watch the mixture for several seconds after shaking and check again after 30 minutes.
6. If the mixture does not show signs of separating, the combination may be used. If the mixture foams excessively, gels, separates or gets very thick, do not combine for field application.
7. Compatibility may be improved by the use of a compatibility agent. Some suggested compatibility agents to try are Kalo Laboratories Complex, Hopkins Chemical's Unite, Farm Chemicals Inc.'s Compat, Harscos Chemicals' T-Mulz 734-2, Rigo Company's Rigo Compatibility Agent, Witco Chemical's Sponto 168D, Amoco Oil's Amoco Spray Mate and Universal Co-op.'s Chem-Link. These agents are all used in the same manner. Follow the previously outlined test procedures and add 1/6 ounce of the compatibility agent between steps (the compatibility agent must be added to the fertilizer or iron before adding the Horsepower).
8. If the mixture does not separate, gel, foam or get very thick, it may be used for field application. Mix only the amount to be sprayed. Do not allow to stand overnight.

STORAGE AND DISPOSAL

STORAGE: Always store pesticides in a secured warehouse or storage building. Do not store near open containers of herbicides and other pesticides, fertilizer and seed. Store at temperatures above 32°F. If allowed to freeze, remix before using. This does not alter this product. 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 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. 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: 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.

WARRANTY

Riverdale 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. (PR938&11 042194/RV 102997)