

U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505C) 401 "M" St., S.W. Washington, D.C. 20460 EPA Reg. Number: 228-399

JUN 1 4 2002

Term of Issuance:
Conditional

Name of Pesticide Product:

Riverdale Predict Herbicide

<u>x</u> Registration
____ Reregistration

NOTICE OF PESTICIDE:

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Riverdale Chemical Company

1333 Burr Ridge Parkway, Suite 125A

Burr Ridge, IL 60521-0866

Mote: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

- 1. Submit and/or cite all data required for registration/ reregistration of your product when the Agency requires all registrants of similar products to submit data.
- 2. Make the following label changes listed below before you release the product for shipment:
 - a. Add the phrase, "EPA Reg. No. 228-399".
 - b. Wherever it appears on the labeling replace "Waterproof Gloves" with "Chemical Resistant Gloves Category A".
- 3. Submit one (1) copy of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

Signature	of	Approving	Official:
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If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

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

Enclosure

Riverdale®

with COMMENTS In EPA Letter Dated:

PREDICT® HERBICIDE

JUN 1 4 2002

Under the Federal Insecticide, Fungicide, and Redenticide Act.

FOR CONTROL OF GRASS AND BROADLEAF WHENeved under EPA Reg. No. FIELD-GROWN NURSERY STOCK AND NONCROP LAND IN FIELD-GROWN NURSERY STOCK AND NONCROP LAND

ACTIVE INGREDIENT:

Norflurazon: 4-chloro-5-(methylamino)-2-(α , α , α -trifluoro-m-tolyl)-3-

(2H) -pyridazinone*...... 78.6%

TOTAL:..... 100.0%

*Based on technical active ingredient analysis by isomer specific method AM-0864. Previously 80% by method T-4295.

Riverdale is a registered trademark of Riverdale Chemical Company.

NOT FOR SALE, USE, OR DISTRIBUTION IN NASSAU COUNTY AND SUFFOLK COUNTY, NEW YORK.

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE BACK OF BAG FOR ADDITIONAL PRECAUTIONARY AND FIRST AID STATEMENTS

EPA REG. NO.228-

NET WEIGHT

LBS.

EPA EST. NO. 228-IL-1

MANUFACTURED BY RIVERDALE CHEMICAL COMPANY BURR RIDGE, ILLINOIS 60527-0866

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, or clothing.

FIRST AID STATEMENT

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

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 by a poison control center or doctor. Do not give

anything by mouth to an unconscious person.

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

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.

PERSONAL PROTECTIVE EQUIPMENT (PPE): Applicators and other handlers must wear long-sleeved shirt, long pants, waterproof gloves and shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, 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.

ENVIRONMENTAL HAZARDS

Do not contaminate water when disposing of equipment washwater. 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 allow this material to drift onto neighboring crops or noncrop areas or use in a manner or at a time other than in accordance with label directions because animal, plant or crop injury, illegal residues, or other undesirable results may occur. Do not apply this product through any type of irrigation system, or contaminate irrigation ditches or water used for domestic purposes.

Norflurazon can contaminate surface water through spray drift. Under some conditions, norflurazon may also have a high potential for runoff into surface water (primarily via dissolution in runoff water) for several months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface wafers, frequently flooded areas, areas overlaying extremely shallow ground water, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

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.

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 requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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 protection 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, waterproof gloves and shoes plus socks.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.

GENERAL INFORMATION

Predict® is a soil active herbicide for control of certain grasses and broadleaf weeds in field-grown nursery stock and noncrop Lands.

Predict must be moved into the weed seed germination zone to be effective. If no rainfall occurs within 4 weeks after application, the product must be activated by flood irrigation or sprinkler irrigation. Predict alone has no postemergence activity and will not control established weeds. Existing weeds must be mechanically removed or controlled by using a suitable postemergence herbicide.

Cover crops planted in treated areas must not be harvested, grazed, or fed to livestock.

Precautions for Field-Grown Nursery Stock: (1) To avoid plant injury, do not apply until the fall following the first full season of field growth alter transplanting. (2) Use only on recommended plantings (see following list) grown on medium—and fine-textured soils. Do not use on coarse-textured soils. (3) Caution should be taken when application is made to field-grown plants when roofs are planted bound (i.e., in synthetic or burlap bags, etc.), so that herbicide does not channel directly into the root zone. (4) Wait at feast 12 months before planting cotton or crops listed on this label. Other crops should not be planted in previously treated soil until a bioassay or test planting with the desired crop exhibits growth without chlorosis for 4 months after emergence. (5) Do not apply to erodible soils which may wash into the root zone of sensitive plants.

DIRECTIONS FOR FIELD-GROWN NURSERY STOCK APPLICATIONS

Apply Predict before weeds emerge. If weeds have germinated prior to the application of Predict, a contact or burndown herbicide must be used (see tank mix instructions below).

The soil should be settled and firm at the time of application.

Apply as a directed spray. Avoid contact with foliage. Make only one application per year

Apply the recommended rate of Predict in 20 to 100 gals. of water per acre.

Equipment

Predict should be applied using an accurately calibrated fixed boom sprayer. Filters with screen sizes of 50-mesh or larger should be used.

Mixing Instructions

Clean and calibrate the sprayer. Add Predict to the spray tank already filled with the required volume of water. This will eliminate or minimize foaming. Maintain agitation while filling and spraying. If a bypass line is used, discharge at the bottom of the tank to further minimize foaming.

Do not allow Predict spray mixture to remain in the spray tank overnight, because settling will occur and resuspension will be difficult.

Tank Mix Recommendations for Field-Grown Nursery Stock

Tank mix combinations may be desired for broader spectrum preemergence control of postemergence control of emerged weeds. Predict may be tank mixed with other EPA-registere herbicides in accordance with all directions, precautions, limitations, and recommendation on the label of the tank mix partner, after a compatibility test has shown that no formulation compatibility problem(s) exist (see Compatibility Test section).

Note: Predict may not always be compatible with formulations of DNA herbicides.

Products should be added to the spray tank in the following order:

- 1. Wettable powders and water-dispersible granules: wettable powders should be premixed in a small amount of water: water-dispersible granules should be added during filling. Allow both to disperse before other products are added. The order of addition is not important.
- 2. Flowable liquids
- 3. Emulsifiable concentrates
- 4. Surfactants: Begin adding wettable powders, flowable liquids, emulsifiable concentrates, and surfactants after the spray tank is 3/4 full, Continue agitation during the addition of all the materials and while filling and spraying.

Compatibility Test.

Before mixing in the spray tank, if is advisable to test compatibility by mixing all components in a small container in proportionate quantities (see following table).

	Amount of Herbicide to Add to One Pt. Of Spray Carrier (Assuming Volume is 25 Gals. Per Acre)		
Herbicide Formulations	Rate Per Acre	Level Teaspoons	
Dry	1 lb.	1.5	
Liquid	1 pt.	0.5	

If herbicide(s) do not ball-up or form flakes, sludge, gels, oily films or layers, or other precipitates, then the tested spray mix is compatible. Usually, incompatibility in any of the above described forms will occur within 5 minutes after mixing.

If components are incompatible, the use of a compatibility agent approved for agricultural use is recommended. Rerun the above compatibility test with a suitable compatibility agent (1/4 teaspoon is equivalent to 2 pts./100 gals. of spray carrier).

Broadcast Rates

Apply 3 lbs. of product per acre in the fall or spring.

Strip or Band Treatment

Sycamore, American

When applying a strip treatment of Predict, the following formula may be used to calculate the amount per acre:

Width of strip in ft. Lbs. per acre for Lbs. per acre for Distance between rows in ft. X broadcast treatment = strip treatment

The solution should be mixed to the maximum label rate and at no point in the field should the solution be applied as a concentration any higher than this rate.

RECOMMENDATIONS FOR FIELD-GROWN NURSERY STOCK CROPS

Apply Predict to these species of trees and shrubs as recommended above: Apple Malus Blueberry Vaccinium Citrus Citrus Crabapple* Malus* Cranberry* Viburnum Filbert Corylus Pear Pyrus Carya Pecan Walnut Juglans Buxus harlandii Boxwood, Korean Cypress, Bald Taxodium distichum Dogwood Cornus Holly, Green Luster llex crenata 'Green Luster' East Palaka 1. opaca 'East Palaka' 1. X 'American Greenleaf American Greenleaf 1. X 'Fosteri' Footer 1. X 'Nellie Stevens' Nellie Stevens 1. X 'Savannah' Savannah Juniper, Andora Creeping Juniperus horizontalis 'Plumosa Burki I virginiana `Burki' Fastigata I fastigata Magnolia grandiflora Magnolia, Southern Acer rubrum Maple, Red Lagerstroemia indica*' Myrtle, Crepe Oak, Pin Ouercus palustris Willow Q. phellos Poplar, Tulip Liriodendron tulipifera

Platanus occidentalis

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*Fruit is not to be used for feed and/or human consumption.

WEEDS CONTROLLED AT FIELD-GROWN NURSERY STOCK RATES

Predict at recommended rates controls the following weeds:

Broadleaf Weeds (Dicotyledons)

Carolina Geranium (wild)
Carpetweed

Common Chickweed

Desert Rockpurslane (Redmaids)

Dogfennel

Falsedandelion (Smooth Cat's Ear)

Fiddleneck

Filaree* (Redstem and Whitestem)

Little Mallow (Cheeseweed)

London Rocket

Pigweeds

Pineappleweed

Prickly Sida

Prostrate Spurge

Puncturevine

Purslane

Purple Cudweed

Shepherdspurse

Spurred Anoda

Stinging Nettle

Tropic Croton

Tumble Mustard

Velvetleaf

Wild Buckwheat

Geranium carolinianum Mullugo verticillata Stellaria media Calandrinia ciliata Eupatorium capillifolium Pyrrhopappus carolinianus

Amsinckia intermedia

Erodium spp.*

Malva parviflora

Sisymbrium irio

Amaranthus spp.

Matricaria matricarioides

Sida spinosa

Euphorbia humistrata
Tribulus terrestris
Portulaca oleracea
Gnaphalium purpureum
Capsella bursa-pastoris

Anoda cristata Urtica dioica Croton glandulosus Sisymbrium altissimum Abutilon theophrasti

Polygonum convolvulus

*Treat prior to germination and incorporate with water on medium soils if necessary for

Grass and Sedge Weeds (Monocotyledons)

Annual Bluegrass Annual Sedge

Bahiagrass (seedling)

adequate control.

Barnvardgrass

Broadleaf Signalgrass

Brome Cheat Crabgrass Downy Brome Fall Panicum

Feather Fingergrass

Foxtails Goosegrass

Italian Ryegrass (Annual Ryegrass)

Johnsongrass (seedling)

Sandbur

Sixweeks Grama

Southwestern Cupgrass

Tall Fescue Texas Panicum Wild Barley Wild Onion Witchgrass Poe annua

Cyperus compressus Paspalum notatum

Echinochloa crus-galli Brachiaria platyphylla

Bromus spp.
Bromus secalinus
Digitaria spp.
Bromus tectorum

Panicum dichotomiflorum

Chloris virgata
Setaria spp.
Eleusine indica
Lolium multiflorum
Sorghum halepense
Cenchrus longispinus
Bouteloua barbata
Eriochloa gracilis
Festuca arundinacea
Panicum texanum
Hordeum leporinium
Allium canadense
Panicum capillare

Predict applied at recommended rates suppresses the following grass and broadleaf weeds:

Bermudayrass Camphorweed Cocklebur Common Lambsquarters

Common Ragweed

Cynodon dactylon Heterotheca subaxillaris Xanthium strumarium Chenopodium album Ambrosia artemisiifolia Florida pusley Goldenrod Groundsel Hairy Fleabane (Flax-leaved Fleabane) Henbit Lamium amplexicaule Horseweed (Marestail) Johnsongrass (rhizome) Kochia Kochia scoparia Lanceleaf Sage Morningglory Natalgrass (seedling) Nutsedge Orchardgrass Pangolagrass (seedling) Pennsylvania Smartseed Plantains (Bracted and Buckhorn Poorjoe Ouackgrass Russian thistle Silverleaf Nightshade (White Horsenettle) Sowthistle Spotted Spurge Vaseygrass Wirestem Muhly (Western Muhly)

Richardia scabra Solidago altissima Senecio Vulgaris Conyza bonariensis

Conyza canadensis Sorghum halepense

Salvia retroflexa Ipomoea spp. Rhynchelytrum repens Cyperus spp. Dactylis glomerata Digitaria decumbens Polygonum pensylvanicum Plantago supp. Diodia teres Agropyron repens Salsola iberica Solanum elaeagnifolium Sonchus oleracea Euphorbia maculate Paspalum urvillei Muhlenbergia frondosa

DIRECTIONS FOR NONCROP LANDS

Predict may be used for preemergence weed control in noncrop land areas including: industrial sights, rights-of-way (highway, pipeline, railroad, or utility), wasteland, and other noncrop land areas. Do not apply to erodible soils which may wash into the root zone of sensitive plants.

Use Predict at a rate of 2.5 to 5 lbs. of product per treated acre for noncrop land areas. Higher rates within the range should be used for fine-textured soils and where longer residual is desired,

Apply the recommended rate of Predict in 20 to 100 gals. of water per acre.

Since Predict is a preemergence herbicide, it must be applied to the soil surface before weeds germinate. Existing weeds should be mechanically removed or controlled with a suitable postemergence herbicide. Predict must be incorporated into the soil by rainfall or irrigation within 4 weeks of application for best weed control.

Tank mix recommendations for noncrop lands

Tank mix combinations may be desired for broader spectrum preemergence control or postemergence control of emerged weeds or brush. Predict may be tank mixed with other EPA-registered herbicides in accordance with all directions, precautions, limitations, and recommendations on the label of the tank mix partner, after a compatibility test has shown that no formulation compatibility problem(s) exist (see Compatibility Test section).

Note: Predict may not always be compatible with formulations of DNA herbicides.

WEEDS CONTROLLED AND SUPPRESSED IN NONCROP LANDS

Predict at recommended rates controls the following weeds:

Broadleaf Weeds (Dicotyledons)		, ,
Annual Sedge	Cyperus compressus	• ••
Camphorweed	Heterotheca subaxillaris	1 11
Carolina Geranium (wild)	Geranium carolinianum	****
Common Chickweed	Stelleria media	•
Common Ragweed	Ambrosia artemisiifolia	• • • • •
Desert Rockpurslane (Redmaids)	Calandrinia cíliata	
Dogfennel	Eupatorium capillifolium	• • • •
Falsedandelion (Smooth Cat's Ear)	Pyrrhopappus carolinianus	
Fiddleneck	Amsinckia intermedia	

Filaree* (Redstem and Whitestem)

Goldenrod

Little Mallow (Cheeseweed)

London Rocket Pineappleweed Prostrate Spurge Puncturevine Purple Cudweed Shepherdspurse

Spreading Dayflower Stinging Nettle

Tumble Mustard

Wild Buckwheat

Erodium spp. * Solidago altissima Malva parviflora Sisymbrium irio Matricaria matricarioides Euphorbia humistrata Tribulus terrestris Gnaphalium purpureum Capsella bursa-pastoris Commelina diffusa

Urtica dioica Sisymbrium altissimum Polygonum convolvulus

*Treat prior to germination and incorporate with water on medium soils if necessary for adequate control.

Grass and Sedge Weeds (Monocotyledons)

Annual Bluegrass Annual Sedge

Bahiagrass (seedling)

Rarnyardgrass

Bearded Sprangletop

Broadleaf Signalgrass Cheat

Crabgrass

Crowfootgrass (seedling)

Downy Brome Fall Panicum

Feather Fingergrass

Foxtails Goosegrass

Guineagrass (seedling)

Italian Ryegrass (Annual Ryegrass)

Johnsongrass (seedling) Natalgrass (seedling) Pangolagrass (seedling)

Sandbur

Sixweeks Grama

Southwestern Cupgrass

Tall Fescue Texas Panicum

Vaseygrass (seedling)

Wild Barley Wild Onion Witchgrass

Poa annua

Cyperus compressus

Paspalum notatum

Echinochloa crus-galli Leptochloa fascicularis Brachiaria platyphylla

Bromus secalinus Digitaria spp.

Dactyloctenium aegyptium

Bromus tectorum

Panicum dichotomiflorum

Chloris virgata Setaria spp. Eleusine indica Panicum maximum Lolium multiflorum Sorghum halepense Rhynchelytrum repens Digitaria decumbens Cenchrus Longispinus Bouteloua barbata Eriochloa gracilis Festuca arundinacea Panicum texanum Paspalum urvillei Hordeum leporinium

Allium canadense Panicum capillare

Predict applied at recommended rates suppresses the following weeds:

Bermudagrass

Common Lambsquarters Common Pulsiane

Florida Fusiev Groundsel

Hairy Fleabane (Flax-leaved Fleabane)

Henbit

Horseweed (Murestail) Johnsongrass (rhizer.c)

Nutsedge

Orchardgrass

Pigweeds (Redroot, Tumble, and

Green Amaranth)

Plantains (Bracted and Buckhorn)

Poorice

Russian Thisale Ouackgrass

Silverleaf Nightshade

Cynodon dactylon Chenopodium album Portulaca oleracea Richardia scabra Senecio vulgaris Conyza bonariensis Lamium amplexicaule Conyza canadensis Sorghum halepense Cyperus spp. Dactylis glomerata

Amaranthus spp.

Plantago spp. Diodia teres Salsola iberica Agropyron repens Solanum elaeagnifolium RIVERDALE® PREDICT® HERBICIDE

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Sowthistle Torpedograss Wirestem Muhly (Western Muhly) Sonchus óleracea Panicum repens Muhlenbergia frondosa

STORAGE AND DISPOSAL

Pesticide Storage: Store in original container in a well-ventilated area separately from open containers of fertilizer, feed, and foodstuffs. Avoid cross-contamination with other pesticides. Do not contaminate water, food, or feed by storage or disposal.

Pesticide Disposal: Pesticide wastes are toxic. Triple rinse pesticide from containers and use rinsates in the pesticide application. If container is damaged or if pesticide has spilled, contain all spillage and absorb with clay granules, sawdust, or equivalent material. Place in a closed, labeled container for proper disposal. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night. Wastes which cannot be used according to label instructions may be disposed of on site or at approved waste disposal facility.

Container Disposal: Triple rinse container (or equivalent) and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or if plastic, by incineration, or by open burning, if allowed by state and local authorities. If burned, keep 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 the 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.

Predict, is a trademark of Syngenta Group Company