

228-196

1/5/2004

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

JAN - 5 2004

**OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES**

Russell F. Sawyer
Regulatory Affairs Manager
Nufarm Americas Inc.
Riverdale, a Nufarm Company
1333 Burr Ridge Parkway, Suite 125A
Burr Ridge, IL 60527-0866

Subject: Riverdale® Patron® DP-4 Ester
EPA Reg. No. 228-196
Amendment dated October 17, 2003

Dear Mr. Sawyer:

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

One copy of the label stamped "Accepted" is enclosed for your records. This label supercedes all labels previously accepted for this product. Please submit one copy of the final printed label before the product is released for shipment.

If you have any questions, please contact Robert Westin by phone at (703) 305-5721 or via email at westin.robert@epa.gov.

Sincerely,

/s/

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

Enclosure

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RIVERDALE®

PATRON™ DP-4 ESTER

A WOODY PLANT HERBICIDE

FOR CONTROL OF BRUSH AND SOLID STANDS OF POST, BLACKJACK,
SAND SHINNERY OAK, AND SANDSAGE ON HIGHWAYS, FIREBREAKS,
RAILROADS, DRAINAGE DITCHBANKS, AND RIGHTS-OF-WAY

ACTIVE INGREDIENT:

Isooctyl (2-ethylhexyl) Ester of 2-(2,4-Dichlorophenoxy)propionic Acid*	69.8%
INERT INGREDIENTS:**	30.2%
TOTAL	100.0%

**Contains Petroleum Distillate

Isomer Specific AOAC Method, Equivalent to:

*2-(2,4-Dichlorophenoxy)propionic Acid 47.4%, 4 lbs./gal.

Patrol is a Trademark of Riverdale - A Nufarm Company

Riverdale is a Registered Trademark of Riverdale - A Nufarm Company

KEEP OUT OF REACH OF CHILDREN

CAUTION - CAUCION

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 SIDE PANELS FOR FIRST AID
AND ADDITIONAL PRECAUTIONARY STATEMENTS**

EPA REG. NO. 228-196

NET CONTENTS

GALS.

EPA EST. NO. 228-IL-1

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

ACCEPTED

In EPA Letter Dated

JAN - 5 2004

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

228-196

Note: Spanish language is optional

Revised 5/15/03 Changed First Aid per PR 2001-1 via Amendment.
A/O 8/26/03 Changed per EPA's letter dated 8/26/03.

(Side Panels)

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION - CAUTION**

Harmful if swallowed or absorbed through the skin.

FIRST AID STATEMENT

Have the product container or 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 do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: Contains petroleum distillate - vomiting may cause aspiration pneumonia.

NON-WPS USES: Applicators and other handlers who handle this pesticide for any use NOT covered by the Worker Protection Standard (40 CFR Part 170) -- in general, only agricultural plant uses are covered by the WPS -- must wear: chemical resistant gloves.

WPS USES: Personal Protective Equipment: Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category E on an EPA chemical resistance category selection chart. Applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR Part 170) -- in general, agricultural plant uses are covered -- must wear: long-sleeved shirt and long pants; chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber ≥ 14 mils, Neoprene Rubber ≥ 14 mils, and Viton ≥ 14 mils; and shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining Personal Protective Equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls Statements: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the 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: 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

Drift or runoff may adversely affect nontarget plants. For terrestrial uses, 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 nor pour the washwater on the ground; spray or drain over a large area away from wells and other water sources. Do not apply this product through any type of irrigation system. Do not apply when or where runoff is likely to occur. If spills occur, collect the material and dispose of by following disposal instructions on this label.

Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-DP have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-DP pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or 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. **READ ENTIRE LABEL BEFORE USING. 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 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 such as Barrier Laminate, Nitrile Rubber > 14 mils, Neoprene Rubber > 14 mils and Viton > 14 mils; and shoes plus socks.

Patron™ DP-4 Ester will control mixed brush such as post oak, blackjack oak, white oak, sand shinnery oak, red oak, pine, fir, spruce, black cherry, alder, willow, sandsage, elm, and similar species as well as solid stands of post oak, blackjack oak, sand shinnery oak and sandsage along utility rights-of-way, highway, railroads, drainage ditchbanks and firebreaks.

PRECAUTION: Do not apply Patron DP-4 Ester near, directly to, or permit spray mist to drift onto cotton, okra, grapes, tomatoes, fruit trees, vegetables, flowers or other desirable crop or ornamental plants which are susceptible to 2,4-DP herbicide. Very small quantities of Patron DP-4 Ester will cause severe injury during the growing or dormant periods. Crops contacted by DP-4 Ester sprays or spray drift may be killed or suffer significant stand loss with extensive quality and yield reduction. Do not apply when weather conditions favor drift from target area.

Do not use the same spray equipment for other purposes unless thoroughly cleaned. Do not contaminate irrigation ditches or water used for domestic or irrigation purposes especially in areas where grapes, cotton, tomatoes or other susceptible plants are grown. Do not use in a greenhouse.

Do not apply when a temperature air inversion exists. Such a condition is characterized by little or no air movement and an increase in air temperature with an increase in height. In humid regions, a fog or mist may form. An inversion may be detected by producing a smoke column and checking for a layering effect. If questions exist pertaining to the existence of an inversion, consult with local weather services before making an application.

Use coarse sprays to minimize drift. Do not apply with hollow cone-type insecticide or other nozzles that produce fine spray droplets. Do not apply when any wind is blowing toward susceptible crops or valuable plants.

Drift from aerial application may be reduced by: (1) applying as near to the target as possible in order to obtain coverage; (2) by using 20 pounds pressure or less at the nozzle tips; (3) by using nozzles which produce a coarse spray pattern; (4) by spraying

only when the wind velocity is less than 5 miles per hour; (5) by applying sprays at low pressure and high volume; (6) by applying 5 or more gallons of spray per acre.

Drift from ground application may be reduced by: (1) keeping the spray as near to the target as possible in order to obtain complete coverage; (2) by applying 25 gallons or more of spray per acre; (3) by using no more than 20 pounds of pressure at the nozzle tips; (4) by using nozzles which produce a coarse spray pattern; (5) by applying sprays at low pressure and high volume.

Under very high temperatures, vapors from this product may injure susceptible plants in the immediate vicinity.

FOLIAGE STEM METHOD: This is the standard method for high-volume sprays along fencerows, highways, and utility rights-of-way. Use it as a "first spray" on thick brush composed of mixed species. Apply spray to both foliage and stems of all plants from the time foliage is fully developed until plants begin to go dormant. For effective control, all leaves, stems and suckers must be thoroughly wet to ground line. Some regrowth may be expected on resistant species, such as ash, maple, oak and persimmon.

To control mixed brush, add 1 gallon of Patron DP-4 Ester to 99 gallons of water. Mix thoroughly before spraying. Apply 100 to 300 gallons of spray mixture per acre.

Up to 5 gallons of oil per 100 gallons may be added to these spray mixtures.

RAILROAD ON-TRACK APPLICATION: For use with the DIRECTA-SPRA® spray applicator mounted on Hi-Rail equipment, use 3 gallons of Riverdale Patron DP-4 Ester in 25 to 50 gallons of water per acre. For added drift control, add 2 to 2.5 ounces of LO-DRIFT™ Spray Additive in each 25 to 50 of gallons water. If higher total spray volumes are needed, do not apply more than 3 gallons of Patron DP-4 Ester per acre.

AERIAL APPLICATION UTILITY RIGHTS-OF-WAY: Aerial spraying is a specialized job. Secure qualified technical guidance for each job and employ a competent, reliable applicator. Become familiar with state laws governing the application of herbicides. Do not use aerial sprays in areas where possible drift may injure valuable crops or plants.

For aerial application to mixed brush along utility rights-of way, apply 2 to 3 gallons of Patron DP-4 Ester in 12 to 30 gallons of water per acre. One gallon of fuel oil may be added.

Apply spray only through equipment designed to provide effective drift control. A helicopter mounted MICROFOIL® applicator or other equipment that provides equivalent drift control is recommended.

SOLID STANDS OF OAK OR SANDSAGE: Apply chemicals with fixed wing or helicopter aircraft using 5 gallons of spray mixture per acre. Spray when plants have just developed full-sized leaves, when soil moisture is sufficient for good growing conditions, when relative humidity is high, and wind velocities are less than 5 miles per hour. Spray season normally runs from early May to mid-June in Texas, California and New Mexico and from mid-May to early July in Oklahoma and northward.

AMOUNTS PER ACRE

	Quarts DP-4 Ester	Oil Gals.	Water Gals.	Remarks
Post & Black Jack oak	2	1/2	4	Re-treat the 2nd year with 1 quart per acre.
Sand shinnery oak	1/2	1/2	4-3/8	Re-treat the 2nd year with 1/2 quart per acre.
Sandsage	1/2	1/2	4-3/8	

TO PREPARE SPRAY: Add this product to the proper amount of oil, if any, and mix thoroughly. Then pour this mixture into the required amount of water while agitating continuously. This material forms an emulsion in water - not a solution. Provide

agitation to prevent separation and ensure a uniform spray mixture.

PINE RELEASE GROUND SPRAY: To control hickory, sweetgum, oaks, wax myrtle, chinquapin, boxelder, cherry, sumac, sassafras and similar species in pine plantations, apply a mixture of 1 gallon Patron DP-4 ESTER + 24 gallons of water to the foliage of competing hardwood brush species. Apply with a backpack or similar sprayer with a hand-held wand and single nozzle. For best results, apply when hardwoods are in full leaf and actively growing and when soil moisture is high. Brush foliage should be thoroughly covered but short of run-off. Avoid spraying the planted pines, as some needle damage may result.

Application to a 1 to 3 year old pine plantation with 2' to 4' brush of average density should require 5 to 10 gallons of spray mixture per acre.

Brush species such as blackgum, water and willow oak and/or hophornbeam require thorough coverage for good results. Brush species such as red maple, ash or dogwood are not usually controlled by this treatment.

AERIAL OR GROUND APPLICATION TO CONTROL MIXED BRUSH INCLUDING CONIFERS AND ROOT SUCKERING SPECIES ON UTILITY, RAILROADS AND HIGHWAY RIGHTS-OF-WAY AND FENCEROWS. Where red maple, conifers and root-suckering species such as sassafras, sumac, black locust or persimmon are the major problem, use 1 to 2-1/2 gallons of Patron DP-4 Ester in combination with 1 to 2-1/2 gallons of Tordon* 101 or Tordon* 101 mixture or in combination with 3 to 6 pints of Tordon* K herbicide. Dilute with water and apply in a total spray volume of 15 to 50 gallons per acre. Use lower rates to control brush on sandy soils or coarse soils with susceptible species such as seedling aspen, cherry, willow and sumac. Use higher rates to control brush on clay soils or fine soils or rocky terrain with more resistant species such as maple, oak, pine and red cedar. When making the spray mixture, add Patron DP-4 Ester to the required amount of water while agitating the mixture in the spray tank. Then add the Tordon* 101 or Tordon* K while continuing agitation. (Do not mix concentrates of DP-4 Ester with concentrates of Tordon* 101 or Tordon* K.) Aerial application of the tank mixture should be made only with a helicopter mounted MICROFOIL® applicator or an equipment system providing equivalent drift control. Ground applications to control brush on railroad or utility rights-of-way should be made only with the DIRECTA-SPRA® spray applicator or an equipment system providing equivalent drift control. Do not use these tank mixtures on drainage ditchbanks or firebreaks. Observe all restrictions, precautions and limitations on the labeling of each product used in tank mixtures.

Local conditions may affect the uses of this chemical as shown on this label. Consult State Agricultural Extension or Experiment Station weed specialist for specific recommendations for local weed problems and for information of possible lower dosages.

STORAGE AND DISPOSAL

PESTICIDE STORAGE: Always store pesticides in a secure warehouse or storage building. Container should be opened in well ventilated areas. Keep container tightly sealed when not in use. Do not store near open containers of fertilizer, seed or other pesticides. Do not contaminate water, food or feed by storage or disposal.

PESTICIDE DISPOSAL: 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. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

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.

*Trademark of Dow Chemical Company

MICROFOIL®, DIRECTA-SPRA®, and LO-DRIFT™ - Trademarks of Rhone-Poulenc.

NOTICE: Seller warrants that this product conforms to the chemical description on this label. Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this material when such use and/or handling is contrary to label instructions. (RV 082603)