

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

JUL 28 1994

Mr. Russell F. Sawyer
Riverdale Chemical Company
425 West 194th Street
Glenwood, IL 60425-1584

Dear Mr. Sawyer:

SUBJECT: Riverdale DP-4 Ester
EPA Registration No. 228-196
Waiver Request - Removal of Reentry Statement
Your Submission Dated February 16, 1994

The Agency has reviewed your request to waive the reentry statement from the end-use product listed above. The labeling submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable.

A stamped copy is enclosed for your records. Please submit five (5) final printed copies for the referenced label incorporating the above changes, before releasing the product for shipment.

Sincerely yours,

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

CONCURRENCES							
SYMBOL	7505C						
SURNAME	Miller						
DATE	7/27/94						

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(Front Panel)

RIVERDALE

DP-4 ESTER

A WOODY PLANT HERBICIDE

FOR CONTROL OF BRUSH AND SOLID STANDS OF POST, BLACKJACK,
SAND SHINERY 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%

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

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE SIDE PANELS FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA REG. NO. 228-196

EPA EST. NO. 228-IL-1

NET CONTENTS GALS.

MANUFACTURED BY

RIVERDALE CHEMICAL COMPANY

GLENWOOD, ILLINOIS 60425-1584

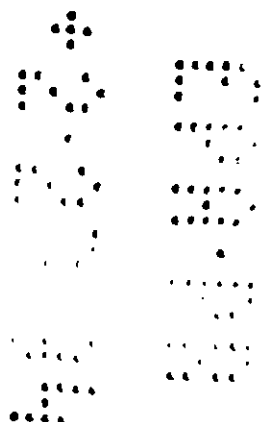
ACCEPTED
with COMMENTS
in EPA Letter Dated

JUL 28 1994

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

228-196

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(Side Panels)

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

Harmful if swallowed or absorbed through the skin.

IF SWALLOWED: Do not induce vomiting. If vomiting occurs spontaneously, keep airway clean. Never give anything by mouth to an unconscious person. Seek medical attention.

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.**

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 fire-breaks.

PRECAUTION: Do not apply 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 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.

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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 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^(A) spray applicator mounted on Hi-Rail equipment, use 3 gallons of Riverdale DP-4 Ester in 25-50 gallons of water per acre. For added drift control, add 2-2.5 ounces LO-DRIFTTM Spray Additive in each 25-50 gallons water. If higher total spray volumes are needed, do not apply more than 3 gallons 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 2-3 gallons of DP-4 Ester in 12 to 30 gallons of water per acre. One gallon of fuel oil may be added.

DIRECTIONS FOR USE (Continued)

Apply spray only through equipment designed to provide effective drift control. A helicopter mounted MICROFOIL^(B) 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 1/2 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	

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Riverdale
NOTICE:
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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 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 2-4' 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 DP-4 Ester in combination with 1 to 2-1/2 gallons Tordon* 101 or Tordon* 101 mixture or in combination with 3 to 6 pints 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 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^(R) 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 Experiment Station weed specialist for specific recommendations for local weed problems and for information of possible lower dosages.

STORAGE AND DISPOSAL

STORAGE: Always store pesticides in a secure warehouse or storage building. Do not store near seeds, fertilizers, insecticides or fungicides. Container should be opened in well ventilated areas. Keep container tightly sealed when not in use. 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[®]; NO-DRIFT[™] - Registered Trademarks of Rhone-Poulenc.

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NOTICE: Riverdale Chemical Company warrants that this product conforms to the chemical description on this label. Seller makes no warranty, expressed or implied, concerning 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.

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