



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

SEP 12 1995

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Mr. Russel Sawyer
Riverdale Chemical Company.
435 West 19th Street
Glenwood, IL 60425-1584

Subject: Label Amendment Resubmission of 4/28/95 in Response to
PR Notice 93-7
EPA Reg. No. 228-141
Riverdale Butoxy 2,4-D Low Volatile Ester

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling

AND

- WITHIN one year from date of this acceptance.

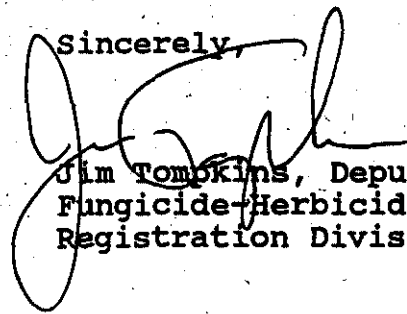
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief
Fungicide-Herbicide Branch
Registration Division (7505C)

Attachment

RIVERDALE

3/8

BUTOXY

2,4-D LOW VOLATILE ESTER

ACTIVE INGREDIENT:

Butoxyethanol Ester of 2,4-Dichlorophenoxyacetic Acid*	62.2%
INERT INGREDIENTS:	37.8%
TOTAL	100.0%

Isomer Specific AOAC Method, Equivalent to:

*2,4-Dichlorophenoxyacetic Acid 42.8%, 3.84 lbs./gal

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 AND BACK PANELS FOR ADDITIONAL PRECAUTIONARY STATEMENTS
AND STATEMENT OF PRACTICAL TREATMENT

NET CONTENTS GALS.

EPA REG. NO. 228-141

EPA EST. NO. 228-IL-1

MANUFACTURED BY
RIVERDALE CHEMICAL COMPANY
GLENWOOD, ILLINOIS 60425-1584

**ACCEPTED
with COMMENTS
In EPA Letter Dated**

SEP 12 1995

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

228-141

NOTE: Spanish Language is optional.

Revised A/O 9/29/93 Corr 4/28/95

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION - CAUCION

Harmful if swallowed, inhaled or absorbed through skin. Avoid inhalation of vapors or spray mist and contact with skin, eyes and clothing. Remove saturated clothing as soon as possible and shower. 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, then a mechanical system (probe and pump) 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.

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 face shield, goggles or safety glasses and chemical resistant gloves, long-sleeved shirt, long pants, socks and shoes when mixing, loading or applying this product or repairing or cleaning equipment used with this product. It is recommended that safety glasses include front, brow and temple protection. For aerial applicators in an enclosed cockpit and applicators applying this product from a tractor that has a completely enclosed cab, eye protection is not required. Wash hands, face and arms with soap and water as soon as possible after mixing, loading or applying this product. After work, remove all clothing and shower using soap and water. Do not reuse clothing worn during the previous day's mixing and loading or application of this product without cleaning first. Clothing must be kept and washed separately from other household laundry.

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 \geq 14 mils, Neoprene Rubber \geq 14 mils and Viton \geq 14 mils; shoes plus socks; and protective eyewear. 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. After each day of use, clothing or PPE must not be reused until it has been cleaned. If this container is over one gallon and less than five gallons, mixers and loaders who do not use a mechanical system (probe and pump) to transfer contents of this container must wear coveralls or a chemical resistant apron in addition to the other required PPE.

Engineering Controls Statements: If this container is five gallons or more in capacity, a mechanical system (probe and pump) 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. If the mechanical system is used 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.

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

USER 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.

STATEMENT OF PRACTICAL TREATMENT

- IF SWALLOWED:** Get medical attention immediately. This product contains petroleum distillates. DO NOT induce vomiting or give anything by mouth to an unconscious person.
- IF ON SKIN:** Wash thoroughly with plenty of soap and water. Get medical attention if irritation persists.
- IF IN EYES:** Flush eyes with water for 15 minutes and get medical attention.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Drift or runoff may adversely affect fish and non-target plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water maker. Vapors from this product may injure susceptible plants in the immediate vicinity. Use care to avoid spray contact or drift to 2,4-D susceptible plants such as cotton, tomatoes, flowers, grapes, fruit trees and ornamentals. Do not permit spray mist containing this product to drift onto them. Do not spray when the wind is blowing towards susceptible crops or ornamental plants. Use coarse sprays and/or low spray pressure to minimize drift. On cropland and along roadsides, do not exceed 20 psi pressure. Spray drift can be lessened by keeping the spray boom as low as possible, by spraying when wind velocity is low, and by stopping all spraying when wind exceeds 6 to 7 miles per hour. Do not use the same spray equipment for applying other materials to 2,4-D susceptible crops as injury may result. It is best to see a separate sprayer for application of insecticides and fungicides. Clean and rinse spray equipment using soap or detergent and water or suitable chemical cleaner, and rinse thoroughly before reuse for other spraying. Do not contaminate water when disposing of equipment washwaters. Do not apply this product through any type of irrigation system. Do not contaminate domestic or irrigation waters. Excessive amounts of this product in the soil may temporarily inhibit seed germination and plant growth.

Most groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D 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. When using on Pastures and Rangeland Grasses there is a (1) 7 day pregrazing interval for dairy cattle; (2) 30 day preharvest interval for grass cut for hay; and (3) 3 day pre-slaughter interval for meat animals.

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, 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 is 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 \geq 14 mils, Neoprene Rubber \geq 14 mils and Viton \geq 14 mils; shoes plus socks, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. For Turf use, do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment areas until spray has dried.

GENERAL INFORMATION

This product is a low volatile ester especially prepared for use on crops and weeds where a susceptible crop in the near vicinity may be injured by a more volatile product. It is recommended for control of numerous broadleaf weeds and certain 2,4-D susceptible woody plants without injury to most established grasses. For best results, apply this product as a water or oil spray during warm weather when young, succulent weeds or brush are actively growing. Application under drought conditions often will give poor results. The lower recommended rates will be satisfactory on susceptible annual weeds. For perennial weeds and conditions such as the very dry areas of the Western states where control is difficult, the higher recommended rates should be used. Deep-rooted perennial weeds such as Canada thistle and Field bindweed and many woody plants usually require repeated applications for maximum control.

Unless otherwise directed, application rates should be 1 to 10 gallons of total spray by air or 5 to 25 gallons by ground application equipment. Higher gallonage may be used if desired to improve spray coverage. If band treatment is used, base the dosage rate on actual area to be sprayed. In either case, use the same amount of 2,4-D recommended per acre. Although water quantities may vary due to different types of application equipment, sufficient water must be used to provide for complete and uniform coverage. When product is used for weed control in crops, the growth stage of the crop must be considered. For crop uses, do not mix with oil, surfactants, or other adjuvants unless specifically recommended on label. To do so may reduce herbicide's selectivity and could result in crop damage.

Aerial applications should be used only when there is no danger of drift to susceptible crops. Many states have regulations concerning aerial application of 2,4-D formulations. Consult local regulatory authorities before making applications. Although this product is a low volatile formulation, temperatures above 90°F vapors may damage susceptible crops growing nearby.

Riverdale Butoxy 2,4-D Low Volatile Ester is especially prepared for use on crops and weeds where a susceptible crop in the near vicinity may be injured by a more volatile product.

SOME WEEDS READILY KILLED DURING EARLY STAGES OF GROWTH

ANNUALS		PERENNIALS	
Beggarticks	Kochia	Hedge bindweed	Healall
Black medic	Marshelder	Buckhorn	Nettle, stinging
Butter print	Mustards	Bull thistle	Lawn pennywort
or Velvetleaf	Pigweeds	Burdock	Plantains
Cocklebur	Puncture vine	Chickweed	Sunflower
Fanweed	Ragweed	mouseear	(perennial)
Hemp (marijuana)	Sunflower (annual)	Dandelion	Vervains
			Vetch

TREATMENT IN CORN AND SORGHUM - Use from 1/2 to 1 pint Riverdale Butoxy 2,4-D Low Volatile Ester with recommended amounts of water to make per acre applications. Time of application should be determined by weed growth with the ideal time after emergence of majority of weeds but before they have damaged the crop. The crop is most sensitive when growing fast and temperatures and moisture favorable for plant growth. As a general rule, the crop is less susceptible from 3 inches up to 10 inches. Use drop nozzle when corn or sorghum is over 10 inches tall. Do not apply from tasseling to dough stage.

TREATMENT IN SMALL GRAINS - WHEAT, OATS, BARLEY AND RYE - Use from 1/2 to 1 pint Riverdale Butoxy 2,4-D Low Volatile Ester with recommended amounts of water to make per acre applications for ground equipment and airplane application. Good results have also been obtained with airplane application using diesel oil as the diluent instead of water. Make application after the crop is fully tillered until jointing is under way. Stop treatment before boot stage is reached. Spraying in small grain is frequently desirable after the crop has reached the milk stage. At such time annual and perennial weeds often interfere with harvesting and produce seeds which lower quality of threshed grain. Under such conditions use from 1 to 1-1/2 pints Riverdale Butoxy 2,4-D Low Volatile Ester with recommended amounts of water to make per acre applications. Ground equipment will cause some mechanical damage to the crop. When applying with plane, use dosage in 2 to 3 gallons diesel oil.

GENERAL BROADLEAF CONTROL ON PASTURES AND ON NON-CROPPED LAND - Do not apply to clover or newly seeded pastures. The rates of applications for pastures and rangelands are per acre per application per site.

ANNUAL WEEDS - Most annual broadleaf weeds can be controlled with 1 to 1-1/2 pints in 50 to 100 gallons of water per acre. Make application when weeds are young and actively growing.

New seedings of grass should not be treated until they are well established. For controlling annual weeds in farm yards, fence rows along highways and similar locations, use 1 quart in 5 to 10 gallons water per acre. Possible injury may occur to bentgrass St. Augustinegrass and clover.

PERENNIAL WEEDS - Many of the perennial weeds in pastures, including ironweed, vervain and asters are moderately tolerant to 2,4-D. For control of these type weeds, use 1 quart Riverdale Butoxy 2,4-D Low Volatile Ester in 5 to 10 gallons water per acre. Make application not later than the bud stage and repeat treatment the following season.

STORAGE AND DISPOSAL

STORAGE: Always use original container to store pesticides in a secured warehouse or storage building. Do not store near seeds, fertilizers, insecticides or fungicides. Containers should be opened in well ventilated areas. Do not contaminate water, food or feed by storage or disposal. Keep container tightly sealed when not in use. Do not stack cardboard cases more than two pallets high.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixtures, or rinsate is a violation of Federal law and may contaminate groundwater. 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. 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.

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

WARRANTY: Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures and other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of the seller. Buyer assumes all risk of use, storage or handling of this material not in strict accordance with directions given herewith. (ERP 102393) (PR937&8 042194/RV 042895)