UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

NOV 22 1999

Dear Mr. Sawyer:

SUBJECT: Riverdale 2.5% Bromacil Liquid Ready-to-Use Weed Killer, EPA Registration Number 228-241

The reregistration label you submitted in your November 12, 1999 letter is acceptable provided you make the following changes:

Delete the sentence: "Wash clothing before reuse" from the Precautionary Statements.

Delete the sentence: "Wash clothing before reuse" from the User Safety Recommendations section.

Replace the glove language in the Personal Protective Equipment (PPE) statement with: chemical resistant (category A) gloves. Note - category A includes all types listed in EPA's Chemical Resistant Glove Selection Chart. You may also add the word "waterproof" in brackets here.

In reviewing your November 12 letter, we agree that there are more statements than necessary calling for hand washing and equipment washing. We believe these changes address your concerns.

A stamped copy is enclosed for your records

If you have any questions, please call Lisa Jones of my staff at (703) 308-9424.

Sincerely,

James Tomptins
Product Manager 25
Herbicide Branch
Registration Division

CONCURRENCES								
SYMBOL +	7505C							
SURNAME +	Lisa Jones							
DATE •	Nov 22, 1999							

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

RIVERDALE

2.5% BROMACIL LIQUID

READY-TO-USE WEED KILLER

A non-selective water soluble liquid for use on industrial plant sites, highways, railroads, and pipeline rights-of-way, storage areas, parking lots and similar areas.

ACTIVE INGREDIENT: Lithium salt of bromacil (5-bromo-3-<u>sec</u>-butyl-6-methyluracil) TOTAL

This product contains .21 lbs. of bromacil per gallon. U.S. Pats 3,352,862 & 3,235,357

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND STATEMENT OF PRACTICAL TREATMENT

> NET CONTENTS GALS

EPA REG. NO. 228-241

EPA EST. NO. 228-IL-1

MANUFACTURED BY

RIVERDALE CHEMICAL COMPANY

GLENWOOD, ILLINOIS 60425-1584

ACCEPTED with COMMENTS In EPA Letter Dated:

NOV 2 2 1999

Under the Federal Insecticide. Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 228-241

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(Back Panel)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling.

USER SAFRTY RECOMMENDATIONS

USERS SHOULD:

Wash hands before eating, drinking chewing gum, using tobacco or using the toilet. Wash clothing before reuse. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove clothing immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, chemical resistant (category A) gloves, and shoes plus socks. Note - category A includes all types listed in the matrix; Follow manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED:

Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting.

IF IN EYES:

Flush eyes with plenty of water. Call a physician if irritation

persists.

IF ON SKIN:

Wash with plenty of soap and water. Get Medical Attention.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

ENVIRONMENTAL HAZARDS

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. Do not apply, drain, or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.

PHYSICAL AND CHEMICAL HAZARDS

Do not use with aluminum spray nozzles.

GENERAL INFORMATION: 2.5% Bromacil Liquid Weed Killer is a water soluble liquid to be sprayed undiluted on non-cropland areas. It is an effective general herbicide for control of brush and many annual and perennial grasses. Effects are slow to appear and may not become apparent until the chemical has been carried into the root zone of the weeds by moisture. The degree of control and duration of effect will vary with the amount of chemical applied, soil type, rainfall, and other conditions. 2.5% Bromacil Liquid Weed Killer is non-volacile, non-flammable, and non-corrosive to metals except aluminum. Thoroughly clean all traces of 2.5% Bromacil Liquid Weed Killer from application equipment immediate-ly after use. Flush tank, pump, hoses, and boom with several changes of water after re-moving nozzle tips and screens (clean these parts separately).

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.

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. Do not enter treated areas until sprays have dried.

Unless otherwise noted, apply 2.5% Bromacil Liquid Weed Killer just before or during the period of active growth of plants to be controlled when rainfall can be expected for soil activation. If dense growth is present, results will be improved if vegetation is removed before treatment. Do not apply when ground is frozen. Before spraying, calibrate equipment to uniformly apply this product. Use a fixed-boom power sprayer properly calibrated to a constant speed and rate of delivery. For application with a hand-gun sprayer, be careful to obtain even distribution of the herbicide to the soil. For treating small areas, a tank-type hand sprayer may be used. Not for use in any recreational areas or in or around homes.

Total Application of this product is limited to 57 gallons per acre in a twelve-month period. Injury of loss of desirable trees or other plants may result from failure to observe directions. Do not use on residential lawns, walks, driveways, tennis courts, or similar areas. Prevent drift of spray to desirable plants.

WEED CONTROL: To control most weeds for an extended period of time on non-cropland areas such as Railroad, Highway and Pipeline Rights-of-Way, Petroleum Tank Farms, Lumberyards, Storage Areas, and Industrial Plant Sites, apply 12 to 24 gals. of 2.5% Bromacil Liquid Weed Killer per acre to control Annual Weeds and Grasses such as bromegrass cheatgrass, crabgrass, foxtail, lambsquarter, orchardgrass, puncturevine, ragweed, ryegrass, turkey mullein, and wild oats. When applied just prior to or after emergence of annuals, rates as low as 8 gals. per acre control many annual weeds and grasses in low rainfall areas and give short term control in higher rainfall areas.

Apply 24 to 48 gals. of 2.5% Bromacil Liquid Weed Killer per acre to control perennial weeds and grasses such as aster, bahiagrass, bluegrass, broomsedge, dandelion, dogfennel, goldenred, plantain, purpletop, quackgrass, redtop, smooth brome, and wild carrot. In areas with low or seasonal rainfall, rates as low as 20 gals, per acre control many perennial weeds and grasses.

Apply 48 to 57 gals. of 2.5% Bromacil Liquid Weed Killer per acre to control johnsongrass. Use at the same rate for other hard-to-kill perennial weeds and grasses such as bermudagrass, bouncingbet, bracken fern, dalligrass, dogbane, horsetail, nutsedge, saltgrass, and vaseygrass. Where limited rainfall (usually less than 4 inches) occurs during the active growth period such as some areas of the West, 2.5% Bromacil Liquid Weed Killer will not provide satisfactory control of hard-to-kill, deep-rooted perennial weeds such as johnsongrass. Use higher levels of the dosage ranges on adsorptive soils (usually those high in organic matter or carbon).

RETREATMENT: Apply 12 to 24 gals. of 2.5% Bromacil Liquid Weed Killer per acre when annual weeds and grasses reappear on sites where weed growth has been controlled. FOR SMALL AREAS: 1 gal. per 1,000 square feet is approximately 44 gals. per acre. BRUSH CONTROL: To control undesirable woody plants on non-cropland areas such as Railroad Rights-of-Way, Storage Areas and Industrial Plant Sites. Apply in Spring or Summer as a broadcast or basal (soil) treatment.

NOTE: For effective brush control and prevention of damage to desirable vegetation, do not apply to brush standing in water; do not use water from treated ditches for irrigation; do not use in irrigation ditches nor on rights-of-way or other sites where marketable timber or other desirable trees or shrubs are immediately adjacent to the treated area.

BROADCAST TREATMENT: Apply 18 to 40 gals. per acre to control oak, pine, sweet gum, and willow; apply 48 to 57 gals. per acre to control brush such as American elm, cottonwood, hackberry, sumac, and winged elm. Use the higher levels of the dosage ranges on adsorptive soils (those high in organic matter or carbon).

BASAL (SOIL) TREATMENT: Apply at the rate of 2 to 4 fl. oz. per stem 2" to 4" in basal diameter; wet base of stem to run-off. Treatment controls woody planes such as cottonwood, hackberry, maple, oak, poplar, red bud, sweet gum, wild cherry, willow and winged elm.

STORAGE AND DISPOSAL

STORAGE: Always store pesticides in a secured warehouse or storage building. Do not store near seeds, fertilizers, insecticides or fungicides. Store at temperatures above

Riverdale 2.5% Bromacil / uid Ready-To-Use Weed Killer (

32°F. If allowed to freeze, rewarm to 40°F, remix thoroughly 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 contaminate water, food or feed by storage or disposal.

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

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in 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.

NOTE: Riverdale Chemical Company 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.

(RED 080096/RV 110999)