Russell F. Sawyer
EPA Form 8570-1 (Rev. 12-90)

Previous editions are obsolete.

White - EPA File Copy (onginal)

June 18, 1993

Yellow - Applicant copy

RIVERDALE

1D AMINE

A SELECTIVE WEED KILLER

For Control of Many Broadleaf Weeds in both Non-Crop and Certain Crop Areas, Lawns, Ponds, Drainage Ditchbanks, Pustures and Rangelands.

Also for Control of Trees by Injection.

ACTIVE INGREDIENT:

*2,4~Dichlorophenoxyacetic Acid Equivalent: 9.83%, 0.85 lbs./gal. Isomer Specific by AOAC Method

KKEP OUT OF REACH OF CHILDREN

WARNING - AVISO

Si Usted no entiende la etiqueta, busque a alguien para que se la explique a Usted en detalle.

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

NET CONTENTS

GALS.

EPA REG. NO. 228-238

EPA EST. NO. 228-IL-1

MANUFACTURED BY

RIVERDALE CHEMICAL COMPANY

GLENWOOD, ILLINOIS 60425-1584

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING - AVISO

Do not get in eyes. Causes substantial but temporary eye injury. Harmful if swallowed. Avoid contact with skin or clothing. Avoid breathing vapors or spray mist. Remove saturated clothing as soon a possible and shower.

Revised A/O 3/9/93

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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.

Please see additional Precautionary Statements in Directions For Use instructions.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Drink promptly a large quantity of milk, egg white,

gelatin solution, or, if theses are not available, large

quantities of water. Avoid alcohol.

NOTE TO PHYSICIAN: Probable mucosal damage may

contraindicate the use of gastric lavage.

IF ON SKIN:

Wash skin with soap and water.

IF IN EYES:

Hold eyelids open and flush with a steady, gentle stream

of water for 15 minutes.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and 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. Do not apply this product through any type of irrigation system. Do not contaminate water used for irrigation or domestic purposes. Use care to avoid spray contact or drift to 2,4-D susceptible plants such as cotton, tomatoes, flowers, grapes, fruit trees and ornamentals. Excessive amounts of this product in soil may temporarily inhibit seed germination and plant growth. 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 to minimize drift. 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 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 use a separate sprayer for application of insecticides and fungicides.

Most cases of 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 all impervious pad to contain spills will help prevent groundwater contamination.

When using an Pastures and Rangeland Grasses there is a (1) 7 day pre-grazing interval for dairy cattle; (2) 30 day preharvest interval for grass cut for hay; and (3) 3 day pre-slaughter interval for meat animals.

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Do not forage or graze treated fields within 2 weeks after treatment with 2,4-D.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. READ ENTIRE LABEL DIRECTIONS BEFORE USING.

RE-ENTRY STATEMENT

Do not enter treated areas without protective clothing until sprays have dried. Because certain states may require more restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Warnings should state: "Do not enter treated areas unless wearing chemical resistant full body clothing including NIOSH approved respirator, goggles and gloves until sprays have dried". When oral warnings are give, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information:

WARNING: Area treated with 2,4-D Amine Salt on <u>date of application</u>. Do not enter without appropriate protective clothing until sprays have dried. In case of accidental exposure, follow precautionary statements on label.

ADDITIONAL PRECAUTIONARY STATEMENTS FOR AGRICULTURAL CROP USES (Including Sod Farms and Forestry workers engaged in the commercial production of wood fiber or timber products including forestry site preparation)

ALSO INDUSTRIAL/AQUATIC APPLICATIONS

When mixing, loading or applying this product or repairing or cleaning equipment used with this product, wear eye protection (face shield or safety glasses), chemical resistant gloves, long-sleeved shirt, long pants, socks and shoes. It is recommended that safety glasses include front, brow and temple protection. For aerial applications in an enclosed cockpit and applicators applying this product from a tractor that has been 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. Wash hands, face and arms with soap and water before eating, smoking or drinking. Wash hands and arms before using toilet. After work, remove all clothing and shower using soap and water. Do not reuse clothing worr during the nrevious day's mixing and loading or application of this product without cleaning first. Clothing must be kept and washed separately from other household. laundry. The rates of applications for pastures and rangelands are personnel.

acre per application site. Do not enter or allow worker entry into treated areas during the restricted-entry interval of 24 hours. There isn't any reentry restriction for Industrial/Aquatic applications, nor non-crop uses of pastures, rangelands and forests.

RIVERDALE 1D AMINE will kill or control the following weeds in addition to many other noxious plants susceptible to 1,4-D.

Alders American lotus Arrowhead Artichoke Aster Austrian fieldcress Beggarsticks Biden Bindweed Bitterweeds Bitter winter cress Blessed thistle Blue lettuce Box elder Broomweed Buckhorn Bull thistle Bulrush Burdock Bur ragweed Buttercup Canada thistle Carpetweed Catnip Chickweed Chicory Cockle Cocklebur Coffee bean Coffeeweed Common sowthistle Creeping jenny Croton Curly indigo Dandelion Docks Dogbane DackWeed Elderberry Fleabane (daisy Flixweed Fiorida pusley Frenchweed: Galinsoga

Goatsbeard Goldenrod Ground ivy Gumweed Healall Hemp Henbit Hoary cress Honeysuckle Horsetail Indigo Indiana mallow Ironweed Jewelweed Jimsonweed Kochia Knotweed Lambsquarters Locoweed Lupines Mallow Marshelder Mexican weed Morningglory Musk thistle Mustards Nettles Nutgrass Orange hawkweed Parrotfeather Parsnip Pennycress Pennywort Peppergrass Pepperweed Pigweed Plantains Poison hemlock Poison ivy Pokeweed Poor ioe Povertyweed

Prickly lettuce

Primrose

Puncturevine

Purslane Ragweeds Rush Russian thistle Sagebrush St. Johnswort Shepherdspurse Sicklepod Smartweed Sneezeweed Southern wild rose Sowthistle Spanishneedles Spatterdock Stinging nettles Stinkweed Sumac Sunflower Sweet clover Tarweed Thistles Toadflax Tumbleweed Velvetleaf Vervain Vetch Virginia creeper Water hyacinth Water lilv Water plantain Water primrose Watershield Wild carrot Wild garlic Wild lettuce Wild onion Wild radish Wild rape Wild strawberry Wild sweet potato Willow Witchweed Wormseed Yellow rocket

Generally the lower dosages given will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species and under conditions where control is more difficult, the higher dosages will be needed. Apply 1D Amine during warm weather when weeds are young and growing actively. Use enough spray volume for uniform coverage by ground or air application. If only bands or rows are treated, leaving middles unsprayed, the dosage per crop per acre is reduced proportionately. Do not apply when temperature exceeds 90°F.

TO PREPARE THE SPRAY: Mix 1D Amine only with water. Add about half the water to the mixing tank, then add the 1D amine with agitation, and finally the rest of the water with continuing agitation. Note: Adding oil, wetting agent, or other surfactant to the spray may increase effectiveness on weeds but also may reduce selectivity to crops resulting in crop damage.

CORN (Field and Sweet): Pre-emergence (For annual grasses and broadleaf weeds) - Apply to soil anytime after planting but before corn emerges. Do not use on light sandy soil, or where soil moisture is low. Use 1 to 2 gallons in 15-30 gallons of water per acre.

Emergence - Apply 2 quarts in 15-30 gallons of water per acre just as corn plants are breaking ground.

Post-emergence - (For broadleaf weeds) - Apply 1 to 2 quarts in 8-15 gallons of water per acre, when most weeds have germinated. Spray after corn emerges and until 8" tall. Use low rates on inbreds. Corn is susceptible to injury shortly after emergence and after unfolding of leaves. Do not spray during this period nor after first tassels appear. When corn is over 8" tall, use drop nozzle to keep spray off corn foliage. Spray must strike tops of weeds but should not drench corn plants. Do not apply from tasseling to dough stage. Injury to corn is most likely to occur if 1D Amine is applied when corn is growing rapidly under high temperatures and high soil moisture conditions. In such conditions, use the low rate. For resistant weeds, use up to 1 gallon per acre though corn injury may result. Do not use higher rates unless possible crop injury will be acceptable. After application, delay cultivation for 8-10 days to allow the corn to overcome any temporary brittleness.

Pre-harvest: After the hard dough or denting stage, apply by air or ground equipment to suppress perennial weeds, decrease weed seed production, and control tall weeds such as bindweed, cocklebur, dogbane, jimsonweed, ragweed, sunflower, velvetleaf, and vines that interfere with harvesting. Use 1/2 to 1 gallon in 30 to 50 gallons of water per acre.

WITH LIQUID NITROGEN SOLUTIONS: For late season control of your smartweed, cocklebur, annual morningglory and other annual broadleaf weeds less than 1 inch high. Field should be as clean as possible and corn 20 to 30 inches tall. Apply 1/2 gallon with 80 to 120 lbs. Nitrogen per acre; the spray must be prepared by first adding the required amount of liquid nitrogen solution to spray tank. Next dilute 1/2 gallon Riverdale 1D Amine with 2 quarts clean water for each acre to be treated with one tankful. Start the tank agitator and (slowly) add the diluted 2,4-D solution. Spray immediately, maintaining continuous agitation until spray tank is empty. Direct the spray to lower 3" to 4" of corn stalk. Use spray equipment designated to handle corn cosive liquid nitrogen solutions. After spraying, remove any remaining solution and rinse rig thoroughly with water. Mix only one tank at a time. Do not spray diffing of the immediately following cold weather.

SORGHUM: Post-emergence - Apply 2-2/3 to 4 pints in 6-10 gallons of water per acre when sorghum is 6" - 8" tall. Use 4 pints when sorghum is 8" - 15" tall. Sreat, only

after the sorghum is 6" high and preferably before it is 15" high. Do not treat during the boot, tasseling, or early dough stages. Reduce spray drift by keeping the boom and spray nozzle as low as possible. If crop is taller than 8", use drop nozzle to keep the spray off the leaves. Temporary spray injury can be expected under conditions of high soil moisture and high air temperatures. If it is necessary to apply 1D Amine under these conditions, use no more than 2-2/3 pints per acre.

NOTE: Corn & Sorghum Hybrids vary in tolerance to 2,4-D. Some are easily injured. Spray only varieties known to be tolerant to 2,4-D. Consult the seed company or your Agricultural Experiment Station or Extension Service weed specialist for this information.

BARLEY, WHEAT, OATS AND RYE: Spring Post-emergence - In spring grown grains, spray after grain begins tillering and before the boot stage (usually 4"-8" tall) and weeds are small. Apply 1 to 2 quarts of 1D Amine in 5-10 gallons of water per acre. Oats are more sensitive to 2,4-D than other grains and should be sprayed in the spring when well established and tillered and before jointing after crop has reached the dough stage. In winter grains, use 2-4 quarts of 1D Amine to control large weeds that will interfere with harvest or to suppress perennial weeds, pre-harvest treatment can be applied when the grain is in the dough stage. Best results will be obtained when soil moisture is adequate for plant growth and weeds are growing well.

NOTE: Do not permit dairy animals or meat animals being finished for slaughter to forage or graze treated grain fields within 2 weeks after treatment. Do not feed treated straw to livestock.

SUGARCANE: Pre-emergence - Use 2 gallons in 15-20 gallons of water per acre as a blanket spray through layby, to aid in control of Johnsongrass seedlings and susceptible broadleaf weeds.

Post-emergence - Use 3/4-1 gallon in 10-30 gallons of water. Apply when can is 1'-2' tall.

RICE: Use 3/4 to 1-1/4 gallon of 1D Amine in 5-10 gallons of water per acre to control curly indigo and other broadleaf weeds. Apply in the late tillering stage of rice development, at the time of first joint development (first to second green ring), usually 6 to 9 weeks after emergence. Do not apply after panicle initiation, after rice internodes exceed 1/2" at early seeding, early panicle, boot, flowering or early heading growth stages.

NOTE: Some rice varieties under certain conditions can be injured by 2,4-D. Therefore before spraying, consult local Extension Service or University specialist for appropriate rates and timing of 2,4-D sprays.

ON FALLOW LAND: Use 1 to 2 gallons of 1D Amine per acre on annual broadleaf weeds and up to 3 quarts per acre on established perennial species, such as Canada thistle and field bindweed. Apply to weeds actively growing. Do not plant any crop for 3 months after treatment or until chemical has disappeared from soil.

GRASSES! In established pastures and rangelands, use 1-2 gallons Riverdale 1D Amine in 15 to 30 galloss of water per acre. Use the light rate on more easily injured grasses. For small areas, use 3 to 4 fluid ounces (6 to 8 Tablespoons) per 1,000 square feet; mixibeto 3 galions of water and apply uniformly over the area. Apply preferably when weeds are small and growing actively before bud stage. Fall or spring is the best time to treat. Repeated treatments may be needed for less susceptible weeds. Treatment will kill or injure alfalfa, sweet clover and other legumes. White clover (including Ladino) may be injured by light application but recovers; repeated treatments will kill it. In some areas dichondra, bent, carpet, buffalo, and St.

Augustine grasses may be injured. Usually colonial bents are more tolerant than creeping types; velvets are most easily injure. Where bentgrass predominates, make 1 applications of 1/2 gallon per acre at 3 week intervals. Do not graze dairy animals within 7 days after application.

GRASS SEED CROPS: Use 1/2 to 2 gallons in 15-30 gallons of water per acre in Spring or Fall to control broadleaf weeds in grass being grown for seed. Do not apply from early boot to the milk stage. Spray seeding grass only after the five leaf stage, using 3 to 4 pints per acre to control small seeding weeds. After the grass is well established higher rates of up to 2 gallons can be used to control hard-to-kill annual or perennial weeds. For best results, do not use on bentgrass unless grass injury can be tolerated. Do not graze dairy animals nor cut forage for hay within 7 days after application.

CONTROL OF SOUTHERN WILD ROSE: On roadsides and fencerows, use 4 gallons of 1D Amine plus 4 to 8 ounces of an agricultural surfactant per 100 gallons of water and spray thoroughly as soon as foliage is well developed. Two or more treatments may be required. On rangeland, apply a maximum of 2.4 gallons of 1D Amine per acre per application per site. Do not graze dairy animals on treated areas within 7 days of application.

ADDITIONAL PRECAUTIONARY STATEMENTS FOR TURF CONTROL

When using this product, wear long-sleeved shirt, long pants, socks, shoes, rubber gloves and eye protection. It is recommended that safety glasses include front, brow and temple protection. In addition to the clothing and eye protection commercial mixers/loaders/applicators must wear chemical resistant in place of rubber gloves except when the product is to be applied to a golf course. After using this product, rinse gloves before removing, remove clothing and launder separately before reuse, and promptly and thoroughly wash hands and exposed skin with soap and water. The maximum number of broadcast applications per treatment site is 2 per year. Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment areas until spray has dried.

BROADLEAF WEED CONTROL IN NON-CROPLAND GRASS AREAS SUCH AS LAWN, GOLF COURSES, CEMETERIES AND PARKS, AIRFIELDS, RIGHTS-OF-WAY, FENCEROWS, ROADSIDES, VACANT LOTS, DRAINAGE DITCHBANKS AND SIMILAR PLACES: Use 2 to 4 gallons of this product in 15 to 50 gallons of water per acre. Treat when weeds are young and growing well. Do not use on dichondra or other herbaceous ground covers. Do not use on creeping grasses such as bent except for spot treatment nor on freshly seeded turf until grass is well established. Reseeding of lawns should be belayed following treatment. With spring application, reseed in the fall. With fall application, reseed in spring. Legumes are usually damaged or killed. Thoroughly wet weeds when applying this mixture. Bindweed, Whitetop, Perennial sow thistle, Blue lettuce, Bur ragweed, Canada thistle, and other noxious perennials somewhat resistant to 2,4-D will require repeated treatments to kill.

To control small areas of woody plants, such Willows, Honeysuckle, Virginia creeper, Alders and other susceptible to 2,4-D use 2 to 4 gallons in 100 gallons ..ater, spray to thoroughly wet plants when in full leaf. Re-treat as necessary for control of regrowth and seedlings. In general, it is better to cut tall woody growth and spray suckers when 2 to 4 feet high.

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SPOT TREATMENT IN NON-CROP AREAS: To control broadleaf weeds in small areas with a hand sprayer, use 1 pint of 1D Amine in 3 gallons of water and spray to thoroughly wet all foliage.

TREE INJECTIONS (Pine Release): To control hardwoods, such as Oaks, Hickory, Maple, Pecan, Elm, Sumac, Sweetgum and Hawthorn in forest and other non-crop area, apply undiluted 1D Amine in a concentrate tree injector calibrated to apply 3 ml. per injection. Space injections 2" apart, edge to edge, completely around the tree and close to the base. The injector bit must penetrate the inner bark. On hard-to-kill species such as Hickory, Dogwood, Red maple, Blue beech and Ash make injections 1" to 1-1/2" apart, edge to edge. Treatment may be made at any time of the year. For best results, injections should be made during growing season, May 15 - October 15.

ADDITIONAL PRECAUTIONARY STATEMENTS FOR BRUSH CONTROL
The maximum application rate for forestry site preparation is 1 gallon
6 ounces per acre per application per site. There isn't any restrictions
on the annual maximum number of applications for brush control. No reentry restriction for non-agricultural uses.

WEEDS AND BRUSH ON TRRIGATION CANAL DITCHBANKS - SEVENTEEN WESTERN STATES: Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, New Mexico, Nevada, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington and Wyoming. For control of annual and perennial broadleaf weeds, apply 1 to 2 gallons of 1D Amine per acre in approximately 20 to 100 gallons of water per acre. Treat when weeds are young and actively growing before the bud of early bloom stage. For harder-to-control weeds, a repeat spray after 3 to 4 weeks using the same rates may be needed for maximum results. Apply no more than two treatments per season.

For woody brush and patches of perennial broadleaf weeds, mix 4 gallons of 1D Amine in 150 gallons of water. Wet foliage thoroughly using about 1 gallon of solution per square rod.

SPRAYING INSTRUCTIONS: Apply with low pressure (10 to 40 psi) power spray equipment mounted on truck, tractor or boat. Apply while traveling upstream to avoid accidental concentration of chemical into water. Spray when the air is fairly calm; 5 mph or less. Do not use on small canals (less than 10 cfs) where water will be used for drinking purposes. Boom spraying onto water surfaces must be held to a minimum and no cross-stream spraying to opposite banks should be permitted. When spraying shoreline weeds, allow no more than two-foot over-spray onto water with an average of less than one-foot over-spray to prevent introduction of greater than negligible amounts of chemical into the water.

Do not allow dairy animals to graze on treated area for at least 7 days after spraying. Water within treated banks should not be fished.

FOR AQUATIC WEEDS IN STILL LAKES, PONDS, DRAINAGE DITCHES AND MARSHES:

Aerial Application • Use 9-1/2 quarts of 1D Amine in 5 to 15 gallons of water to cover one surface acre.

Boat Application. 12: 9-1/2 quarts of 1D Amine in 50 to 100 gallons of water per acre. Uniform coverage is essential. Avoid submerging plants after treatment. Application should be made when leaves are fully developed above water line and plants are actively growing. Consult your State Game and Fish Department or Water Control Agency prior to

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application of this product for aquatic weed control. Treatment of aquatic weeds can result in oxygen loss from decomposition of dead weeds. This loss can cause fish suffocation. Therefore, to minimize this hazard, treat 1/3 to 1/2 of the water area in a single operation and wait at least 10 to 14 days between treatments. Begin treatments along the shore and proceed outwards in bands to allow fish to move into untreated areas.

STORAGE AND DISPOSAL

STORAGE: Always store pesticide in a secured warehouse or storage building. Do not store near seeds, fertilizers, insecticides of fungicides. Store at temperatures above 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 stack cardboard cases more than two pallets high. Do not contaminate water, food or feed by storage or disposal.

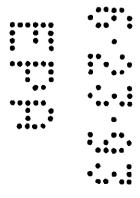
PESTICIDE DISPOSAL: Pesticide wastes are toxic. If container is damaged or if pesticide has leaked, contain all spillage. Absorb and clean up all spilled material with granules or sand. Place in a closed, labeled container for proper disposal. Improper disposal of excess pesticide, spray mixtures, or rinsate is a violation of Federal law. 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.

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

WARRANTY

Riverdale Chemical Company warrants that this product conforms to the chemical description on this label. Seller makes no warranty, express 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. (ERP 102393)(PR923 042194)



TELEPHONE (800) 345-3330 FAX (708) 754-0314



OFFICE: 425 WEST 194th STREET, GLENWOOD, IL 60425-1584 PLANT: 220 EAST 17th STREET, CHICAGO HEIGHTS, IL 60411-3699

June 18, 1993

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Document Processing Desk (Notification) Registration Division - H7505C U. S. Environmental Protection Agency 401 M Street S.W. Washington, DC 20460

Dear Sir/Madam:

PR Notice 93-3 dated March 9, 1993 Subject:

> Riverdale 1 D Amine EPA Reg. No. 228-238 OPP Identifier No. 196244

Please find enclosed the necessary paperwork to notify the Agency that we are revising our label in accordance with the above subject PR Notice. Be advised that this product is part of our "John Doe" private label program. As such, we do not market this product under the Riverdale name. Thus, there will not be any final printed label. If there is anything else we should do at this time, please contact us immediately.

Sincerely yours,

RIVERDALE CHEMICAL COMPANY

By Russell F. Sawyer

Regulatory Affairs Manager

RFS:1s

Enc.



