REGISTRATION DIVISION (TS-767)
WASHINGTON, DC 20460

TERM OF ISSUANCE
Conditional

**NOTICE OF PESTICIDE:** ☒ REGISTRATION ☐ REREGISTRATION

*(Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)*

NAME OF PESTICIDE PRODUCT

Riverdale 1D Amine

NAME AND ADDRESS OF REGISTRANT *(Include ZIP code)*

PM23
228-238
PC 100575

RIVERDALE CHEMICAL COMPANY
425 West 194th Street
Glenwood, IL 60425-1584

**NOTE:** Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit/cite all data required for registration/reregistration of this product under FIFRA section 3(c)(5) when the Agency requires all registratants of similar products to submit such data.
2. Add the phrase "EPA Registration No. 228-238" to the label before you release the product for shipment.
3. Submit five (5) copies of the final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for you records.

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

Enclosure

☐ ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL: Joanne I. Miller

DATE: 2-1-90

EPA Form 8570-6 (Rev. 5-76) PREVIOUS EDITION MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

A SELECTIVE WEED KILLER

For Control of Many Broadleaf Weeds in both Non-Crop and Certain Crop Areas, Lawns, Ponds, Drainage Ditchbanks, Pastures, and Rangelands. Also for Control of Trees by Injection.

| | |
|---|---|
| ACTIVE INGREDIENT: | |
| Dimethylamine Salt of 2,4-Dichlorophenoxyacetic Acid* ..... | 11.84% |
| INERT INGREDIENTS: ..... | 88.16% |
| TOTAL ..... | 100.00% |

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

KEEP OUT OF REACH OF CHILDREN

WARNING

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

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 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.

EPA Reg. No. 228-EGI NET CONTENTS GALS. EPA Est. No. 228-IL-1

Manufactured by

RIVERDALE CHEMICAL COMPANY

Glenwood, Illinois 60425-1584

Rev. 6/6/88

ACCEPTED with COMMENTS In EPA Letter Dated FEB 1 1990

Under the [illegible] Insecticide, Fungicide, [illegible] Act as amended, for the pesticide registered under [illegible] Reg. No. 228-238

R Dale 1D Amine
- ((Left Side Panel)

## PRECAUTIONARY STATEMENTS
## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### WARNING

Do not get in eyes. Causes substantial but temporary eye injury. Wear goggles or face shield when handling concentrate. Harmful if swallowed. Avoid contact with skin or clothing. Avoid breathing vapors or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

### STATEMENT OF PRACTICAL TREATMENT

**IF SWALLOWED:** Drink promptly a large quantity of milk, egg white, gelation solution, or, if these 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

Do not apply to water or wetlands, except as specified on this label. 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 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 use a separate sprayer for application of insecticides and fungicides.

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 given, 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 date of application. Do not enter without appropriate protective clothing until sprays have dried. In case of accidental exposure, follow precautionary statements on label.

RIVERDALE 1D Amine will kill or control the following weeds in addition to many other noxious plants susceptible to 2,4-D.

| | | |
|---|---|---|
| Alders | Arrowhead | Aster |
| American lotus | Artichoke | Austrian Peldcress |

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Beggarticks
Bitter
Blindweed
Bittersweeds
Bitter winter cress
Blessed thistle
Blue lettuce
box elder
Broomweed
Buckhorn
Bull thistle
Bulrush
Burdock
Bur ragweed
Buttercup
Canada thistle
Carpetweed
Catnip
Chickweed
Chicory
Cocklebur
Cotton bean
Coffeeweed
Common sowthistle
Creeping jenny
Croton
Curly indigo
Dandelion
Docks
Dogbane
Duckweed
Elderberry
Flea bane (daisy)
Flixweed
Florida pusley
Frenchweed
Galinsoga
Goatsbeard
Goldenrod
Ground ivy
Gumweed
Hedsill
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
Parrot feather
Parsnip
Pennycress
Pennywort
Peppergrass
Pepperweed
Pigweed
Plantains
Poison hemlock
Poison ivy
Pokeweed
Poorjoe
Povertyweed
Prickly lettuce
Primrose
Puncture vine
Purslane
Ragweeds
Rush
Russian thistle
Sagebrush
St. Johnswort
Shepardspurse
Sicklepod
Smartweed
Sneezeweed
Southern wild rose
Sowthistle
Spanishneedles
Spatterdock
Stinging nettles
Stinkweed
Sumac
Sunflower
Sweet clover
Tarweed
Thistles
Toadweed
Tumbleweed
Velvet leaf
Vervain
Vetch
Virginia creeper
Water hyacinth
Water lily
Water plantain
Water primrose
Water shield
Wild carrot
Wild garlic
Wild lettuce
Wild onion
Wild radish
Wild rape
Wild strawberry
Wild sweet potato
Willow
Witchweed
Wormwood
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 tassles 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 condi-

tions, 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. Preharvest: 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 ½ to 1 gallon in 30 to 50 gallons of water per acre.
NOTE: Do not forage or feed corn fodder for 7 days following application.

WITH LIQUID NITROGEN SOLUTIONS: For late season control of young 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 ½ 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 ½ 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 corrosive 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 during or immediately following cold weather.

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DIRECTIONS FOR USE (continued)

SORGHUM (Milo): Post-emergence - Apply 2-2/3-4 pints in 6-10 gallons of water per acre when sorghum is 6"-8" tall. Use 4 pints when sorghum is 8" to 15" tall. Treat only after the sorghum is 6 inches high and preferably before it is 15 inches 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 inches, 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, preharvest 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 lay-by, 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 cane 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 inch 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 to 2 gallons Riverdale 1D Amine in 15 to 30 gallons 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; mix 1 to 3 gallons 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. Treatments 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, bentgrasses, carpet, buffalo, and St. Augustine grasses may be injured. Usually colonial bents are more tolerant than creeping types; velvets are most easily injured. Where bentgrass predominates, make 2 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 seeling 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 rangelands, 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 6 gallons of 1D Amine per acre per application. Do not graze dairy animals on treated areas within 7 days of application.

BROADLEAF WEED CONTROL IN NON-CROPLAND GRASS AREAS SUCH AS LAWNS, 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 delayed 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,

(Rear Panel cont.)

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 weedy plants, such as Willows, Honeysuckle, Virginia creeper, Alders and other susceptible to 2,4-D use 2 to 4 gallons in 100 gallons water; 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 weedy growth and spray suckers when 2 to 4 feet high.

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 areas, 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.

WEEDS AND BRUSH ON IRRIGATION 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 one gallon of solution per square rod.

SPRAYING INSTRUCTION: 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 overspray onto water with an average of less than one-foot overspray 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 - Use 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 application of this product for aquatic weed control.

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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.

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.

NOTICE: 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.