

# Riverdale MCPA L.V.4 Ester

For the selective control of broadleaf weeds in flax,  
grasses, pastures, rangelands, small grains, and  
non-crop areas

**ACTIVE INGREDIENT:**

Isooctyl (2-ethylhexyl)

Ester of 2-Methyl-4-Chlorophenoxyacetic Acid\* ..... 68.7%

**OTHER INGREDIENTS:** ..... 31.3%

**TOTAL:** ..... 100.0%

Contains petroleum distillates

Isomer Specific by AOAC Method, Equivalent to:

\*2-Methyl-4-Chlorophenoxyacetic Acid.....44.1%, 3.7 lbs./gal.

**KEEP 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. (If you do not understand the label, find someone to explain it to you in detail.)

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL  
PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or  
Exposure, Call CHEMTREC  
(800) 424-9300

For Medical Emergencies Only,  
Call (877) 325-1840

Manufactured for  
Nufarm Americas Inc.  
150 Harvester Drive  
Burr Ridge, IL 60527

EPA Reg. No. 228-156



**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
WARNING / AVISO**

May be fatal if absorbed through skin. Causes skin irritation. Harmful if swallowed. Do not get in eyes, on skin, or on clothing.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):**

Some materials that are chemical-resistant to this product are made of barrier laminate, nitrile rubber, neoprene rubber, or Viton. If you want more options, follow the instructions for category E on an EPA chemical-resistance category selection chart.

**Mixers, loaders and all other handlers must wear:**

- coveralls over short-sleeved shirt and short pants,
- socks and chemical-resistant footwear, and
- chemical-resistant gloves.

**Mixers and loaders supporting aerial applications to rangelands, pasture lands, or non-cropland must also wear:**

- chemical-resistant apron, and
- NIOSH-approved respirator with a dust/mist filter with MSHA/NIOSH approval number prefix TX-21C or any N, R, P or HE filter.

**Pilots must wear:**

- long-sleeved shirt and long pants, and
- shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining Personal Protective Equipment (PPE). If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering Controls Statements:** 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. Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(6)].

**USER SAFETY RECOMMENDATIONS**

**Users Should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE 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.

**FIRST AID**

|                               |  |
|-------------------------------|--|
| <b>IF ON SKIN OR CLOTHING</b> | <ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>   |
| <b>IF SWALLOWED</b>           | <ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give any liquid to the person.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul> |
| <b>IF INHALED</b>             | <ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>                |
| <b>IF IN EYES</b>             | <ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>                 |

**HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

**NOTE TO PHYSICIAN**

May pose an aspiration pneumonia hazard. Contains petroleum distillate.

## ENVIRONMENTAL HAZARDS

Do not apply directly to water, 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 washwater or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Spray equipment used in applying this product should be thoroughly cleaned before using for any other purpose. Use repeated flushing with soap and warm water or suitable chemical cleaner. It is best to use a separate sprayer for application of insecticides and fungicides. This product will kill or seriously injure many desirable forms of vegetation. Do not apply directly to flowers, fruits, grapes, tomatoes, ornamentals, cotton or other desirable plants. Vapors from this product may injure susceptible plants in the immediate vicinity. Do not apply when weather conditions favor drift from target area. Avoid use of small-diameter nozzles. (Coarse sprays are less likely to drift.) Excessive amounts of this product in the soil may temporarily inhibit seed germination and plant growth. Most cases of groundwater contamination involving phenoxy herbicides such as MCPA have been associated with mixing/loading and disposal sites. Caution should be exercised when handling MCPA pesticides at such sites to prevent contamination of groundwater.

## 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, 40 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 (REI). 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 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,
- shoes plus socks, and
- chemical-resistant gloves made of any waterproof material.

## WEEDS CONTROLLED

This product is effective on a large number of broadleaf weeds. On Mustard, Thistle, and White top or Hoary cress, it has superiority over 2,4-D. The following are some of the weeds killed:

|                 |                           |                        |                         |
|-----------------|---------------------------|------------------------|-------------------------|
| Beggarticks     | Field bindweed            | Pepperweed             | Sunflower               |
| Burcucumber     | Galinsoga                 | Perennial morningglory | Thornapple              |
| Burdock         | Goatsbeard                | Perennial ragweed      | Tree-of-heaven          |
| Buttercup       | Goldenrod                 | Pigweed                | Vetch                   |
| Canada thistle  | Halbertleaved salt brush  | Poison hemlock         | Whitebrush              |
| Carpetweed      | Hempnettle                | Prickly lettuce        | Wild carrot             |
| Catsear         | Hoary cress               | Puncturevine           | Wild gooseberry         |
| Chervil         | Honeysuckle               | Purslane               | Wild jute               |
| Cocklebur       | Jimsonweed                | Red root               | Wild marigold           |
| Croton          | Knotweed                  | Redstem                | Wild petunia            |
| Daisy           | Kochia                    | Shepherdspurse         | Wild radish             |
| Dandelion       | Lambsquarters (Goosefoot) | Sicklepod              | Wild sage               |
| Dock            | Marshelder                | Small plantain         | Witchweed               |
| Dragonhead mint | Mexican poppy             | Sneezeweed             | Yellow charlock-mustard |
| Dwarf nettle    | Miner's lettuce           | Sowthistle             | Yellow daisy            |
| Fanweed         | Narrow leaf plantain      | Spanish needle         | Yellow rocket           |
| Fat hen         | Nutgrass                  | Stinging nettle        |                         |
| Fennel          | Pennycress                | Stinkweed              |                         |

## SELECTIVE SPRAYING

**NOTE:** When using on grains and flax - do not forage or graze dairy and meat animals on treated areas within seven days of slaughter. Also, except for small underseeded grains, use at least 8 to 10 gallons of water per acre for ground application and at least 3 to 5 gallons of water per acre for aerial application.

**SMALL GRAINS:** Barley, Rye, Wheat (For small grains underseeded with legumes, see the small grains paragraph below.) Spring planted - not seeded to legumes. Apply as a water mix spray by ground sprayer or airplane. Use 0.5 to 1.5 pints of this product per acre for the more susceptible weeds and up to 1.75 pints per acre for less susceptible weeds. Treat when fully tillered grains have reached the 3 to 4-leaf stage (8 to 10 inches tall). Do not spray grain in the boot to dough stage.

Fall planted - Fall application - not seeded to legumes. The safest time to treat is when fall planted small grains are fully tillered and have reached the 3 to 4-leaf to the boot stage (8 to 10 inches tall). Infestations of broadleaf weeds germinating in fall and winter may, however, justify treatment at an earlier stage. Fall planted barley, rye or wheat can be sprayed with 1/2 to 1 pint of this product per acre from the 3 to 4-leaf stage to the boot stage. Spring application - Apply in early spring when annual broadleaf weeds are small and grain is fully tillered but before grain is in the jointed stage.

**SMALL GRAINS - Underseeded with Alfalfa, Birdsfoot Trefoil, Lespedeza, Red and White Clover:** For emergency control of serious infestations of Mustard, Yellow rocket, and other susceptible broadleaf weeds, apply 0.25 to 0.5 pint in not more than 5 to 10 gallons of water per acre. Make application after cereal is well tillered (4 to 8 inches tall) and before reaching boot stage. The nurse crop and weeds should provide a protecting canopy which, together with the use of low gallonage applied at low pressure, will reduce the risk of damage to the legumes. Do not apply to small grains underseeded with vetch or sweet clover, which are very susceptible. There is also some risk to other legumes if only thinly protected by a canopy.

### RESTRICTIONS AND LIMITATIONS FOR USE ON SMALL GRAINS

Do not apply more than 1.6 pints of product (0.75 lb ae) per acre per year.

**OATS:** Spray after oats are fully tillered (4 to 6 inches tall) but before they are in the boot to dough stage. Apply the lower rate of 1/2 pint where annual weeds are the problem, the higher rate of 1 pint for perennial weeds.

### RESTRICTIONS AND LIMITATIONS FOR USE ON OATS

Do not apply more than 1.6 pints of product (0.75 lb ae) per acre per year.

**FLAX:** Use 0.25 to 0.5 pint per acre. Use lower rate where susceptible weeds such as Mustard are the main problem. Use higher rate when weeds such as Cocklebur, Lambsquarters, Pigweed, Ragweed and Stinkweed are the problem. Apply only when weeds are up and when flax is 2 to 8 inches high and before it comes into bud. Treatment after early bud stage may result in severe damage. If Canada thistle is present, it may be necessary to go as high as 0.5 pint per acre to prevent seed head production. Some injury to flax may result.

### RESTRICTIONS AND LIMITATIONS FOR USE ON FLAX

Do not apply more than 0.5 pint per acre per year.

**RANGE AND TIMBERLANDS:** For control of Whitebrush - Use 1-1/4 quarts in mixture of 1 gallon of diesel oil and sufficient water to make 8 gallons of solution per acre. Apply in spring or fall under good moisture conditions, full leaf, before blossoms begin to fall.

### GRASSES:

**Not for use on turf grown for sale or other commercial use as sod, or for research purposes.**

**Established Golf Courses, Lawns and similar Turf Grasses:** Use 1 to 3 pints per acre in 10 to 100 gallons of water to give thorough coverage. Use higher rate for White top and Canada thistle. On smaller areas, use 1 fluid ounce (4 tablespoonfuls) mixed in 3 to 5 gallons of water and apply uniformly over 2,000 square feet. Do not mow within 2 days before or after application. Spring and fall are best times to treat. Do not use on lawns of creeping grasses, such as bent, except for spot spraying, nor on freshly-seeded turf until the grass has become well established.

### RESTRICTIONS AND LIMITATIONS FOR USE ON GOLF COURSES, LAWNS AND TURFGRASSES

Do not apply more than 3.25 pints per acre per year. Do not apply more than 2 applications per year with a minimum retreatment interval of 21 days.

**Established Grassland and Pastures:** Use 1 to 3 pints per acre in sufficient water (10 to 100 gallons) in airplane or ground spray application and give thorough coverage. Use higher rate for Canada thistle, White top and other less easy-to-kill weeds. Spray perennials in early bud to full bloom stage and regrowth in fall; other weeds in spring or fall, when actively growing.

### RESTRICTIONS AND LIMITATIONS FOR USE ON ESTABLISHED GRASSLAND AND PASTURES

Do not apply more than 1.5 lbs. ae per acre per year. Do not apply more than 2 applications per year with a minimum retreatment interval of 21 days.

**Grasses Grown for Seed:** Use 1 to 2 pints per acre in 5 to 50 gallons of water by air or ground sprayer application. Use higher rate where weed stands are heavy. In established grasses, apply in spring before head comes into boot stage and on seedling grass after grass has tillered.

**NOTE:** For weed control in grasses, repeat treatment may be needed for less susceptible weeds. White clover and other legumes may be temporarily injured or killed. In some areas, bent, buffalo, carpet, centipede, dichondra and St. Augustine may also be injured by the treatment.

## RESTRICTIONS AND LIMITATIONS FOR USE ON GRASS GROWN FOR SEED

Do not apply more than 3.25 pints per acre per year. Do not apply more than 2 applications per year with a minimum retreatment interval of 21 days.

**NON-CROP SPRAYING:** Canada thistle, Meadow buttercup and White top. (In Non-Crop Areas such as Fence rows, Rights-of-way, Roadsides and similar places): For spot treatment use 1/4 pint to 3 to 4 gallons of water or 3/4 gallon per acre in 12 to 20 gallons of water to give coverage for most extensive areas. Spray to wet weeds thoroughly when in bud to early bloom and again on fall regrowth.

## RESTRICTIONS AND LIMITATIONS FOR USE ON NON-CROPLAND

Do not apply more than 3.0 lbs. ae per acre per year.

## SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Apply only when the wind speed is 2 to 10 mph at the application site.

### For aerial applications:

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy.

When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

Do not make applications into temperature inversions.

### For ground boom applications:

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Always store pesticides in a secured warehouse or storage building. Do not store near open containers of fertilizer, seed or other pesticides. 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.

**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:

**Nonrefillable Containers 5 Gallons or Less:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. 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.

**Nonrefillable Containers Larger than 5 Gallons:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**Refillable Container Larger than 5 Gallons:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

## **WARRANTY DISCLAIMER**

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

## **LIMITATION OF LIABILITY**

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

**If you do not agree with or do not accept any of the directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.**

(RV061809)