

Reg # 62719-86

PM-23

ADJUNK
1916



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 9 1993

Larry E. Hammond
DOWELANCO
QUAD IV 9002 PURDUE ROAD
INDIANAPOLIS, IN. 46268

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 08/17/93 In Response to PR Notice 93-7
EPA Reg. No. 62719-86
CURTAIL M HERBICIDE

IMPORTANT NOTICE: This Letter Requires You to Submit a Notification to the Office of Compliance Monitoring within 20 Days.

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 subject to the comments listed on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

SERIOUS ERROR(S) ON SUBMITTED LABELING:

EPA has determined that one or more of the errors on the labeling you submitted to the Agency is categorized as "serious" as defined in PR Notice 93-11. In general, serious errors are those that may create a potential for harm to workers, handlers, other persons, or the environment; or those that prevent the achievement of the basic goals of the Worker Protection Standard (WPS) or FIFRA.

MUST NOT BE SOLD OR DISTRIBUTED (INCLUDING RE-ENTRY)
AND
distribution of any product with the incorrect labeling is a violation of FIFRA that could result in initiation of an action for civil penalties and/or cancellation of your product. This matter has been referred to the Office of Compliance Monitoring (OCM) for further action.

YOU MUST SUBMIT A NOTIFICATION TO THE OFFICE OF COMPLIANCE MONITORING WITHIN 20 DAYS OF THE DATE OF THIS LETTER.

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Recycled/Recyclable
Printed with Soy/Canola
contains at least 50%

per that

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Each notification must include the following information:

1. Registrant's name and address.
2. EPA Registration number of the product for which the labeling was submitted.
3. Whether any product already has been sold or distributed (this includes released for shipment) bearing the submitted labeling.

In addition, the notification must include the following information, IF you have already sold or distributed any product bearing the submitted labeling:

1. Quantity of the product that has been sold or distributed.
2. EPA Producing Establishment number.
3. Location of the product, if known.
4. Proposed plan for assuring that product with the incorrect labeling in your control, as well as that in the hands of dealers/distributors/users, will be corrected. The plan must include your proposal for assuring that the labeling is corrected as soon as possible.

Submit the notification to:

Michael Wood, Director
 Compliance Division, (7203)
 Worker Protection Notification
 Office of Compliance Monitoring
 U.S. Environmental Protection Agency
 401 M Street SW
 Washington, DC 20460

FIFRA for civil penalties, if you sold or distributed (this includes released for shipment) product bearing the incorrect labeling.

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IN ADDITION, YOU SHOULD CONTACT IMMEDIATELY THE PERSONS TO WHOM YOU SOLD OR DISTRIBUTED YOUR PRODUCT AND INFORM THEM NOT TO SELL OR DISTRIBUTE ANY PRODUCT WITH THE INCORRECT LABELING.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the 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 neither been reviewed nor 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:

Submit the required notification. Then by the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

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

AND

WITHIN one year from date of this acceptance.

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

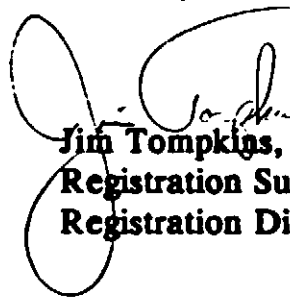
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Hand or courier deliveries of final labeling may be made to:

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
Registration Support Branch
Registration Division (7505W)

Attachment

cc: Office of Compliance Monitoring

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DOWELANCO
CURTAIL M HERBICIDE 08/17/93
62719-86

ORIGINAL SUBMISSION

The statement on your proposed label that references the Agricultural Use Requirements box in your proposed supplemental labeling contains incorrect language. Use the exact text and placement of the referral statement as shown on page 43 in Supplement Three to PR Notice 93-7.

The correct restricted entry interval (REI) for this product is 48 hours. Your REI statement must read: "Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours." The exact location is shown in Section F on Part 2 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

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Labeling amended to meet the requirements of the Worker Protection Standard (WPS).
(Editor's Note: Deleted text indicated by strike-through and added text underlined)
EPA copy dated March 1, 1991

(Container Label)

Curtail* M

For Selective Control of Broadleaf Weeds In Wheat and Barley Not Underseeded with a Legume, Fallow Cropland, Grasses Grown for Seed and Conservation Reserve Program (CRP) Acres

Active Ingredient(s):

3,6-dichloro-2-pyridinecarboxylic acid, 5.0% - 0.42 lb/gal
2-methyl-4-chlorophenoxyacetic acid, 27.8% - 2.35 lb/gal

Acid Equivalents:

3,6-dichloro-2-pyridinecarboxylic acid - 5.0% - 0.42 lb/gal
2-methyl-4-chlorophenoxyacetic acid, 27.8% - 2.35 lb/gal

Contains Petroleum Distillates

In EPA Letter Dated
DEC 9 1993

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

62719-86

Precautionary Statements

Hazards to Humans and Domestic Animals

Keep Out Of Reach Of Children

CAUTION

PRECAUCION:

Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.
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.)

Causes Eye Injury • Harmful If Swallowed, Inhaled Or Absorbed Through Skin

~~Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.~~

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category B on an EPA chemical resistance category selections chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as Barrier Laminate or Butyl Rubber
- Shoes plus socks

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

Engineering Controls Statements

- When handlers use 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

Users 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.

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Statements of Practical Treatment:

If in eyes, flush with plenty of water for at least 15 minutes. Get medical attention if irritation persists.
If on skin, wash with plenty of soap and water. Get medical attention if irritation persists.
If swallowed, do not induce vomiting. Call a physician immediately.

Physical or Chemical Hazards

Combustible. Do not use or store near heat or open flame. Do not cut or weld container.

Environmental Hazards

For terrestrial uses, do not apply directly to water, areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of containers or equipment.

Refer to the label for information on application, safety, first aid, protective clothing (PPE), and directions for use including Agricultural uses requirements and Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" inside label booklet.

In case of an emergency endangering health or the environment involving this product, call collect 517-636-4400

Agricultural chemical: Do not ship or store with food, feeds, drugs, or clothing

EPA Reg. No. 62719-86

E.P.A. Est. 464-MI-1

*Trademark of DowElanco

DowElanco • Indianapolis, IN 46268

Herbicide
Net Contents ___ gal

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(label Booklet)

Curtall* M Herbicide

For Selective Control of Broadleaf Weeds in Wheat and Barley Not Underseeded with a Legume, Fallow Cropland, Grasses Grown for Seed and Conservation Reserve Program (CRP) Acres

Active Ingredient(s):

clopyralid: 3,6-dichloro-2-pyridinecarboxylic acid.....	5.0%
MCPA: 2-methyl-4-chlorophenoxyacetic acid, 2-ethylhexyl ester	43.1%
3,6-dichloro-2-pyridinecarboxylic acid - 5.0% - 0.12 lb/gal	
2-methyl-4-chlorophenoxyacetic acid, 2-ethylhexyl ester - 43.1% - 2.03 lb/gal	

Contains Petroleum Distillates

Keep Out Of Reach Of Children

**CAUTION
PRECAUCION:**

~~Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.
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.)~~

Refer to label booklet for additional precautionary information including Personal Protective Equipment (PPE), and Directions for Use including Agricultural Use Requirements and Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" inside label booklet.

In case of an emergency endangering health or the environment involving this product, call collect 517-636-4400

Agricultural chemical: Do not ship or store with food, feeds, drugs, or clothing

EPA Reg. No. 62719-86

E.P.A. Est. 464-MI-1

*Trademark of DowElanco

DowElanco • Indianapolis, IN 46268

Herbicide

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Precautionary Statements

Hazards to Humans and Domestic Animals

Keep Out Of Reach Of Children

CAUTION

PRECAUCION:

Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente. 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.)

Causes Eye Injury • Harmful If Swallowed, Inhaled Or Absorbed Through Skin

Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and

Resistant To Environmental (R2B)

Chemical-resistant to products listed below. If you want more options, follow the instructions for category B on an EPA chemical resistance category selections chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as Barrier Laminate or Butyl Rubber
- Shoes plus socks

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

Engineering Controls Statements

- When handlers use enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protections 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

Users 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.

Statements of Practical Treatment:

If in eyes, flush with plenty of water for at least 15 minutes. Get medical attention if irritation persists.
If on skin, wash with plenty of soap and water. Get medical attention if irritation persists.
If swallowed, do not induce vomiting. Call a physician immediately.

Physical or Chemical Hazards

Combustible. Do not use or store near heat or open flame. Do not cut or weld container.

Environmental Hazards

For terrestrial uses, do not apply directly to water, 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 or rinsate.

Clopyralid is a chemical which can travel (seep or leach) through soil and under certain conditions contaminate groundwater which may be used for irrigation or drinking purposes. Users are advised not to apply clopyralid where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow, or to soils containing sinkholes over limestone bedrock, severely fractured surfaces, and substrates which would allow direct introduction into

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an aquifer. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

Mixing and Loading: 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 supplies. Use of closed systems for mixing and 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.

Cleaning of Equipment: When cleaning equipment, do not pour washwater on the ground; spray or drain over a large area away from wells and other water sources.

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

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. 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
- Chemical-resistant gloves such as Barrier Laminate or Butyl Rubber
- Shoes plus socks

Storage And Disposal

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

Store above 10°F or warm and agitate before use.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate groundwater. 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 (Metal): Do not reuse container. Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Container Disposal (Plastic): Do not reuse container. Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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General Use Precautions

Chemigation: Do not apply this product through any type of irrigation system.

Apply only once per 12-month period, except for grass grown for seed.

This product can affect susceptible broadleaf plants directly through foliage and indirectly by root uptake from treated soil. Therefore, do not apply Curtail M Herbicide directly to or allow spray drift to come in contact with vegetables, flowers, grapes, tomatoes, potatoes, beans, lentils, peas, alfalfa, sunflowers, soybeans, safflower, or other desirable broadleaf crops and ornamental plants or soil where these sensitive crops will be planted the same season.

Residues of Curtail M herbicide in treated plant tissue, including the treated crop or weeds, which has not decayed may affect succeeding susceptible crops.

Wheat, barley, oats, grasses or sugarbeets (including beets grown for seed) may be planted less than 12 months after treatment.

Rotation Crop Restrictions:

- Do not plant Wheat, barley, oats, grasses and corn within 30 days after a Curtail M herbicide application..
- Do not plant sugarbeets (including beets grown for seed) in the same growing season following a Curtail M herbicide application.
- Do not plant alfalfa, asparagus, canola, cole crops, grain sorghum, onions, popcorn, safflower, sweet corn, and strawberries for 12 months after a Curtail herbicide application.
- Do not plant dry beans, soybeans and sunflowers for 12 months after a Curtail herbicide application, or 18 months if soils contain less than 2% organic matter and natural precipitation is less than 15 inches during the 12 months following treatment. For these areas, see "Special Conditions" below.

To avoid potential phytotoxicity all other crops including peas, lentils, potatoes, and broadleaf crops grown for seed should not be planted for 18 months after treatment unless the risk of injury is acceptable.

SPECIAL CONDITIONS: Curtail M residues in plant tissues which have not completely decayed may affect succeeding susceptible crops. In areas defined previously as low in organic matter and precipitation, sensitive crops such as dry beans, soybeans, and sunflowers may be injured when planted 12 months after treatment. Unless the risk of injury is acceptable, these crops should not be planted until 18 months after treatment. The potential for injury may be reduced by burning, removal, or incorporation of treated crop residues with a minimum of 2 supplemental Fall irrigations.

Avoid Spray Drift

Applications should be made to avoid spray drift since very small quantities of the spray, which may not be visible, may severely injure susceptible crops during both growing and dormant periods. Use coarse sprays to minimize drift since, under adverse weather conditions, fine spray droplets may drift a mile or more. Fine droplets can present a drift hazard. A drift control or deposition agent such as Nalco-Trol may be used with this product to aid in reducing spray drift. If used, follow all use recommendations and precautions on the product label.

Ground Application: To minimize spray drift, apply Curtail M Herbicide in a total spray volume of 10 or more gallons per acre as a large-droplet, low pressure spray. Refer to manufacturer's recommendations for additional information on gallons per acre, spray pressure, sprayer speed, nozzle types and arrangements, nozzle heights above the target canopy, etc., for respective application equipment. Spot treatments should only be applied with a calibrated boom to prevent misapplication. With ground equipment, spray drift can be lessened by keeping the spray boom as low as possible; by applying no more than 20 gallons of spray per acre; by using no more than 30 pounds spraying pressure with large droplet-producing nozzle tips; by spraying when wind velocity is low; and by stopping all spraying when wind exceeds 6 to 7 miles per hour. Do not apply with hollow cone-type insecticide or other nozzles that produce a fine-droplet spray.

Aerial Application: With aircraft, drift can be lessened by applying a coarse spray; by using no more than 30 pounds spray pressure at the nozzles; by using straight-stream nozzles directed straight back; by

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using a spray boom no longer than 3/4 the wing span of the aircraft; and by spraying only when wind velocity is less than 6 mph.

Do Not Apply By Aircraft When An Air Temperature Inversion Exists. Such a condition is characterized by little or no wind and with lower air temperature near the ground than at higher levels. The use of smoke device on the aircraft or continuous smoke column at or near site of application will indicate air direction and velocity, and whether a temperature is present, which is shown by layering of the smoke.

Do not move treated soil and avoid situations where treated soil particles may blow into areas where susceptible crops are grown. Violent windstorms may move soil particles. If this product is on soil particles and they are blown onto susceptible plants, visible symptoms may appear. Serious injury is unlikely. The hazard of movement of this product on dust is reduced if treated fields are irrigated or if rain occurs shortly after application.

Do not use in greenhouses, or on crops from animal products, or on a ground treated field, permit the use of this product on ground in greenhouses, or on susceptible crops in a greenhouse. To promote herbicide decomposition, plant material should be evenly incorporated or buried.

Do not use in a greenhouse. Excessive amounts of this herbicide in the soil may temporarily inhibit seed germination or plant growth.

Do not contaminate water when disposing of equipment washwaters. Apply this product only as specified on this label.

Do not contaminate irrigation ditches or water used for domestic purposes.

Do not transfer livestock from treated grazing areas onto sensitive broadleaf crop areas without first allowing 7 days of grazing on an untreated pasture. Otherwise, urine may contain enough clopyralid to cause injury to sensitive broadleaf plants.

Weeds Controlled

Curtail M Herbicide is recommended for selective, post-emergence control of the following broadleaf weeds in wheat and barley not underseeded with a legume and land in the Conservation Reserve Program (CRP).

- | | |
|----------------------------------|------------------------------------|
| Alfalfa | Mustard, wild |
| Artichoke, Jerusalem | Nightshade, cutleaf |
| Buckwheat, wild | Nightshade, hairy |
| Buffalobur ¹ | Pennycress, field (fanweed) |
| Burdock, common | Pigweed, redroot |
| Chamomile, false (scentless) | Pineappleweed |
| Chamomile mayweed
(dogfennel) | Plantain |
| Clover, sweet | Radish, wild |
| Clover, red | Ragweed, common |
| Cocklebur, common | Ragweed, giant |
| Coffeeweed | Salsify, meadow (goatsbeard) |
| Cornflower (bachelor button) | Shepherdspurse |
| Dandelion | Sicklepod |
| Dock, curly | Smartweed, Pennsylvania |
| Flixweed ¹ | Sorrel, red |
| Groundsel, common | Sowthistle, annual |
| Hawksbeard, narrowleaf | Sowthistle, perennial ¹ |
| Horseweed | Starthistle, yellow |
| Jimsonweed | Sunflower, common |
| Knapweed, diffuse | Tansymustard, pinnate ¹ |
| Knapweed, Russian ¹ | Thistle, Canada |
| | Thistle, musk |

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Knapweed, spotted
 Kochia (2-4 leaf)¹
 Ladysthumb
 Lambsquarters, common
 Lettuce, prickly
 Marshelder
 Mustard, tumble (Jim Hill)

Thistle, Russian (1-3 leaf)¹
 Velvetleaf
 Vetch
 Volunteer beans
 Volunteer lentils
 Volunteer peas

¹These weeds may only be suppressed. Suppression is a visual reduction in weed competition (reduced population or vigor) as compared to untreated areas. The degree of weed control and duration of effect will vary with weed size and density, spray rate and coverage, and growing conditions before, during and after the time of treatment. For perennial weeds, Curtail M Herbicide will control highly susceptible weeds, but may not control or suppress (weed emerging plants). At high rates and in high soil labels, Curtail M Herbicide may cause a reduction in shoot growth in the season following application; however, plant regrowth may be inconsistent due to inherent variability in shoot regrowth from perennial root systems.

Timing: Apply to actively growing weeds. Extreme growing conditions such as drought or near freezing temperatures prior to, at and following time of application may reduce weed control and increase the risk of crop injury at all stages of growth. Only weeds which are emerged at the time of application will be affected. Wet foliage at the time of application may decrease control. The Curtail M Herbicide treatment will be rainfast within 6-8 hours after application.

Rate: Generally, lower labeled application rates will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species, perennials and under conditions where control is more difficult (plant stress conditions such as drought or extreme temperatures, dense weed stands and/or larger weeds) the higher rates will be needed. Weeds in fallow or other areas where crop competition is not a factor will generally require higher rates to obtain control or suppression.

Coverage: Adequate spray coverage and drift control are important. Obtaining a balance between spray coverage and drift control may sometimes be difficult but can be achieved, provided the applicator understands the factors affecting coverage and drift. Factors affecting spray coverage include spray volume, crop canopy and weed density. As crop canopy and weed density increase, spray volume should be increased to obtain equivalent weed control. Refer to manufacturer's recommendations for information on the relationship between gallons per acre, spray pressure, sprayer speed, nozzle type and arrangement, nozzle height above the target canopy, droplet size and drift potential for respective application equipment. Do not apply less than 2 and not more than 40 gallons per acre total spray volume. For best results, apply 5 or more gallons per acre by air and 10 or more gallons per acre by ground. Reducing total spray volume may result in decreased coverage and weed control. Use enough total spray volume and a delivery system to provide thorough coverage and a uniform spray pattern. Do not apply where spray drift may be a problem due to proximity of susceptible crops or other desirable plants.

Use of Surfactants: Addition of wetting and/or penetration agents is not usually necessary when using Curtail M Herbicide; however, if a surfactant will be added to the spray solution, use a non-ionic surfactant approved for use in growing crops, such as X-77, of at least 80% active ingredient and do not exceed 4 pints per 100 gallons of spray solution (0.5% v/v). Adding a surfactant to the spray mixture may increase effectiveness on weeds but may reduce selectivity to the crop, particularly under conditions which promote plant stress.

Use With Sprayable Liquid Fertilizer Solutions:

Curtail M Herbicide is compatible with most non-pressurized liquid fertilizer solutions; however, if these solutions are to be sprayed with Curtail M Herbicide, a compatibility test (jar test) should be made prior to mixing. Jar tests are particularly important when a new batch of fertilizer or pesticide is used, when water source changes, or when tank mixture ingredients or concentrations are changed. A compatibility test is performed by pouring the spray components (in the desired order and proportions) into a clear glass jar before mixing in the spray tank. Use of a compatibility aid such as Unite or Complex may help obtain and maintain a uniform spray solution during mixing and application. Agitation in the spray tank must be

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vigorous to compare with jar test agitation. For best results, liquid fertilizer rates should not exceed 50% of the total spray volume. Premix Curtail M Herbicide with water and add to the liquid fertilizer/water mixture while agitating contents of the spray tank. Apply the spray the same day it is prepared while maintaining continuous agitation.

NOTE: Foliar-applied liquid fertilizers can cause yellowing or leaf burn of crop foliage.

Wheat, Barley and Oats

Timing: Apply Curtail M Herbicide in the spring to actively growing wheat, barley or oats once 3 leaves have unfolded on the main stem up to the jointing stage (first node of main stem detectable). To control or suppress weeds listed above, make application after maximum emergence of the target weeds but before they exceed 3 inches in height or diameter (for rosettes). To obtain season-long control of perennial weeds such as Canada thistle, apply after the majority of the weeds' basal leaves have emerged from the soil, but before bud stage. A later timing of application may be necessary to control weeds that emerge later in the season. Do not apply Curtail M Herbicide to wheat, barley or oats after the jointing stage. Do not apply Curtail M Herbicide to wheat, barley or oats after the jointing stage.

NOTE: Do not permit dairy animals or meat animals being finished for slaughter to forage or graze treated grain fields within 1 week after treatment. Do not harvest hay from treated grain fields.

Rate: Apply 1 3/4 to 2 1/3 pints of Curtail M Herbicide per acre. The higher rate may be used when the condition of the weeds and/or crop at the time of treatment may prevent optimum control.

Note: Higher rates of Curtail M herbicide, or any application of Curtail M herbicide following a spring post-emergence treatment with 2,4-D or MCPA, may increase the risk of crop injury.

Tank Mixtures for Wheat, Barley and Oats: This product may be tank mixed with the following herbicides for control of additional weeds in wheat, barley and oats. Read and follow the label of each tank mix product used for precautionary statements, directions for use, weeds controlled and geographic and other restrictions. When tank mixing, use in accordance with the most restrictive of label limitations and precautions. No label dosages should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

Active Ingredient	Product	Formulation	Amount of Product Per Acre
chlorsulfuron dicamba ^{1,2} difenzoquat ³ diuron	Glean	75% DF	1/8 to 1/4 wt oz
	Barvel	4 lb/gal	1/8 to 1/4 pt
	Avenge	2 lb/gal	2 1/2 to 4 pt
	Direx 4L	4 lb/gal	1 to 1 1/2 pt
	Diuron 4L		
	Diuron 80 WDG	80% DF	1/2 to 1 lb
	Diuron DF	80% WP	
2,4-D ^{2,3} metribuzin ³		4 lb/gal	Up to 1/2 pt
	Lexone DF Sencor DF	75% DF	2 1/2 to 4 wt oz
metsulfuron methyl ³ terbutryn ³	Ally	60% DF	1/10 wt oz
	Igran 80 WP	80% WP	6 to 10 wt oz
tribenuron methyl and thifensulfuron methyl ³ tribuneron methyl ³	Harmony Extra	75% DF	1/3 to 1/2 wt oz
	Express	75% DF	1/8 to 1/4 wt oz

¹Barvel tank mixes with Curtail M Herbicide may be useful in broadening the annual weed control spectrum but may reduce control of perennials, such as Canada thistle.

²Note: Do not tank mix Curtail M Herbicide with 2,4-D or dicamba unless the risk of crop injury is acceptable.

³Tank mix for application on wheat and barley only.

Grasses Grown for Seed

Timing: Apply only to established grasses before the boot stage. Applications in the boot stage and beyond will result in increased injury. Do not apply to bentgrass unless injury can be tolerated. Potential for crop injury increases with higher rates. Re-treat as necessary but do not exceed 3 1/2 pints per acre of Curtail M per season. For control of late-emerging Canada thistle, a pre-harvest treatment may be made after grass seed is fully developed. Treatment of Canada thistle in the bud stage and later may result in less consistent control. Post-harvest fall treatments may be made to actively growing Canada thistle after the majority of basal leaves have emerged.

Rate: Use 1 3/4 to 3 1/2 pints of Curtail M Herbicide per acre for control of annual weeds and Canada Thistle. The potential for crop injury exists due to the 2,4-D component of this product and must be balanced against the benefits of improved weed control.

Tank Mixtures For Grasses Grown for Seed: Curtail M herbicide at 1 3/4 pints per acre may be tank mixed with Paraquat or Butyltin triacetate for control of certain weeds. Refer to the "Small Grains Facts" for use rates and tank mix guidelines.

Conservation Reserve Program (CRP) For Seeding To Permanent Grasses Only

Do not use Curtail M Herbicide if legumes or bentgrass are a desired cover during CRP.

Timing: Curtail M Herbicide can be applied when perennial grasses have become established (tillering, with at least 1.5 inches secondary roots, and good vigor). For control of weeds such as musk thistle, Canada thistle and knapweed (diffuse, spotted and Russian), apply to actively growing weeds after the majority of the basal leaves have emerged, but before bud stage. Later applications may result in less consistent control.

In fields with heavy weed density which are to be planted to CRP grasses, a pre-seeding application may be made. In general, cropland to be planted to CRP in the spring should be treated the previous fall and cropland to be planted to CRP in the fall should be treated the previous spring or summer. A pre-seeding Curtail M herbicide treatment may cause visible injury and reduced seed production in some newly planted grass stands; however, grass stand establishment should be improved because of reduced weed competition. Wait at least 30 days after a Curtail M herbicide treatment before seeding grasses.

After CRP, do not plant broadleaf crops in treated areas until an adequately sensitive bioassay shows that no detectable clopyralid is present in the soil.

Rate: Apply 1 3/4 to 4 3/4 quarts of Curtail M Herbicide per acre. Do not exceed 1 3/4 quarts per acre for pre-seeding treatment.

WARRANTY DISCLAIMER

DowElanco warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. DOWELANCO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

INHERENT RISKS OF USE

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of DowElanco or the seller. All such risks shall be assumed by Buyer.

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LIMITATION OF REMEDIES

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at DowElanco's election, one of the following:

- (1) Refund of purchase price paid by buyer or use for product bought, or
- (2) Replacement of amount of product used.

DowElanco shall not be liable for losses or damages resulting from handling or use of this product unless DowElanco is promptly notified of such loss or damage in writing. In no case shall DowElanco be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimers and this Limitation of Remedies apply to the buyer and any subsequent purchaser. No agent, distributor, or retailer of DowElanco products shall be held liable for any loss or damage resulting from the use of any product. This warranty disclaims and limits the liability of DowElanco for any loss or damage resulting from the use of any product.

Revisions:

- 1) Added label statements required by the Worker Protections Standard (PR Notice 93-7).

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