

# Curtail™ M

**Herbicide**

**AGRICULTURAL**



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Distributed by:  
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Calgary, Alberta T2H 1H9

24 Hour Emergency Response Number  
1-800-424-9300

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GROUP	4	HERBICIDE
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**EMULSIFIABLE CONCENTRATE**

**For sale for use in the Prairie Provinces and the Peace River, Okanagan and Creston regions ONLY of British Columbia.**

**GUARANTEE:**

Clopyralid . . . 50 g a.e./L (present as acid)  
MCPA . . . 280 g a.e./L  
(present as 2-ethylhexyl ester)

**READ THE LABEL AND ATTACHED BOOKLET BEFORE USING**

**KEEP OUT OF REACH OF CHILDREN**

For selective control of various broadleaved weeds in wheat, barley, oats and flax (including low linolenic acid varieties).

REGISTRATION NO. 22764  
PEST CONTROL PRODUCTS ACT



**PRECAUTIONS:**

**HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH THE SKIN.  
EYE IRRITANT.**

**KEEP OUT OF REACH OF CHILDREN.**

1. DO NOT APPLY BY AIR.
2. Do not take internally. Handle with care and mix only in a closed container. Use only in a well ventilated area.
3. May cause irritation of eyes and skin. Avoid inhalation of vapour or spray mist and contact with eyes, skin or clothing.
4. Wash thoroughly after handling and before eating, drinking, smoking or using the bathroom. Take a shower immediately after work.
5. If clothing becomes contaminated, remove immediately and wash. Store and wash all protective clothing separately from household laundry. Wash in detergent and hot water before reuse. Wear freshly laundered clothes daily.
6. Do not contaminate domestic or irrigation water, lakes, ditches, streams or ponds by the cleaning of equipment or the disposal of wastes.
7. Do not apply where run-off or erosion is likely to occur.
8. Do not use in residential areas, which are defined as sites where bystanders may be present during or after spraying, including homes, schools, parks, playgrounds, playing fields and public buildings.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at [www.croplife.ca](http://www.croplife.ca).

**PROTECTIVE CLOTHING AND EQUIPMENT:****All Application Equipment**

Applicators must wear a hat, long-sleeved shirt, long pants, socks, rubber boots and chemical-resistant gloves. During mixing, loading, repair and clean-up, or when handling the concentrate, wear the above-mentioned protective equipment and clothing as well as goggles or face shield, and an apron. Applicators using a closed cab are not required to wear chemical resistant gloves.

**PHYSICAL OR CHEMICAL HAZARDS:**

**COMBUSTIBLE.** Do not use or store near heat or open flame.

**FIRST AID:**

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**If swallowed:** Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

**If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

**If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

**If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

### **TOXICOLOGICAL INFORMATION:**

The decision of whether to induce vomiting or not should be made by the attending physician. If lavage is performed, suggest endotracheal and/or oesophageal control. Danger from lung aspiration of petroleum based solvents must be weighed against toxicity when considering emptying the stomach. No specific antidote. Employ supportive care. Treatment should be based on judgment of the physician in response to reactions of the patient. High concentrations of MCPA may cause severe irritation to the eyes. Symptoms of overexposure to MCPA could include slurred speech, twitching, jerking and spasms, drooling, low blood pressure and unconsciousness. Treat symptomatically.

### **ENVIRONMENTAL HAZARDS:**

This product contains a petroleum distillate which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning equipment. Toxic to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

**Surface runoff:** To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to, heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted, fine-textured, or low in organic matter such as clay). Avoid applying this product when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip (buffer zone) between the treated area and the edge of the water body.

**Leaching:** The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g. sand, loamy sand and sandy loam soils) and/or the depth to the water table is shallow.

### **STORAGE:**

Store in original, tightly-closed container and do not allow water to be introduced into this container. Do not ship or store near food, feed, seed and fertilizers. Store in cool (above 5°C) dry, locked, well-ventilated area without floor drain. If product is frozen, bring to room temperature and agitate before use. Herbicides should be shipped or stored separately from other pesticides to avoid cross-contamination.

**DISPOSAL:****Recyclable Containers:**

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

**Returnable Containers:**

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

**Refillable Containers:**

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

**EMERGENCY TELEPHONE NUMBERS:**

For spills or transportation accidents, Chemtrec, 1-800-424-9300.

For health or environmental emergencies, Prosar, 1-877-325-1840.

For product and use information, Nufarm Agriculture Inc., 1-800-868-5444.

**GENERAL INFORMATION:**

Curtail M Herbicide should be diluted in water and applied by ground application equipment for the control of the following broadleaved weeds:

**1.5 L/ha (low rate)**

Canada thistle* (low infestations)	prickly lettuce
burdock	radish, wild
cocklebur	ragweed
flixweed (spring rosettes 2-4 leaf)	shepherd's-purse (spring rosettes only)
field horsetail**	stinkweed (spring rosettes)

lamb's-quarters	sunflower, annual
mustard, wild	sunflower, volunteer
plantain**	vetch

\* Season long control, with some regrowth in the fall.

\*\* Top growth only

## 2.0 L/ha (high rate) - the above listed weeds plus

buckwheat, tartary	pigweed, redroot
buckwheat, wild	pigweed, Russian
Canada thistle* (medium to high infestations)	scentless chamomile (2 to 4 leaf)
canola, volunteer	smartweed
common groundsel	sow-thistle, annual
dandelion (spring rosettes only)	sow-thistle, perennial (top growth)
kochia (suppression) (2 to 4 leaf)	

### DIRECTIONS FOR USE:

#### Field sprayer application:

DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) coarse classification. Boom height must be 60 cm or less above the crop or ground.

Best results are obtained when Curtail M Herbicide is applied to actively growing weeds in the 1 to 4 leaf (seedling) stage and when Canada thistle is between 10 cm and up to but not including the early bud stage. Poor weed control may result under cool or dry conditions.

#### Wheat, Barley, Oats:

Apply to the crop from 3 leaf to just before flag leaf. Apply Curtail M Herbicide as a ground treatment using enough spray volume to provide adequate spray coverage. Apply 100 to 150 L/ha total spray volume by ground. Higher spray volumes will provide better coverage and weed control, particularly when the weeds are not actively growing. Maximum 1 application per year.

#### Flax (including low linolenic acid varieties):

Apply to the flax when the crop is 5 to 15 cm tall. Early spraying will reduce the risk of crop injury. Apply Curtail M Herbicide in 100 to 150 L/ha total spray volume by ground equipment at spray pressures of 200 to 275 kPa. For optimum spray coverage, use flat fan nozzles tilted 45° forward to ensure better coverage. Maximum 1 application per year.

**NOTE:** Some delay in maturity and crop injury may result in flax from the use of the high rate but any potential yield reductions will usually be more than offset by increased yields due to better weed control.

### **Spray Preparation:**

Add half the required amount of water to the spray tank, then add with agitation the required amount of Curtail M Herbicide and the tank-mix partner if applicable. Add the balance of the water and continue to agitate while spraying.

The use of flood jet or hollow cone nozzles is not recommended because of uneven and inadequate spray coverage. Ensure thorough and uniform spray coverage over the entire leaf area of the target weeds.

### **GENERAL USE PRECAUTIONS:**

**DO NOT APPLY BY AIR.**

### **Sensitive Plants:**

Do not apply Curtail M Herbicide directly to or otherwise permit it to come into contact with sunflowers, legumes, fruit or vegetable crops, flowers or other desirable broadleaved plants and take precautions to avoid spray mists drifting onto them.

### **Crop Rotation:**

Fields previously treated with Curtail M Herbicide can be seeded to wheat, barley, oats and rye (not under-seeded to forage legumes, clover or alfalfa), canola, corn, field peas, flax, forage grasses, mustard, sugar beets or can be summer-fallowed. Seed only those crops listed above in the year following treatment. Do not seed to field peas for at least 10 months following treatment. Very dry soil conditions following application can result in a risk of injury to field peas grown in rotation. If severe drought conditions are experienced during the months of June to August inclusive in the year of application, delay seeding field peas an additional 12 months (total 22 months following application). Contact your local Dow AgroSciences Canada representative or retailer for more information before seeding field peas following drought conditions in the previous year.

### **Preharvest/Grazing Interval:**

- Do not cut or graze treated fields of wheat, barley, oats or flax within 7 days after application.
- Do not harvest wheat, barley, oats or flax within 60 days after application, or within 7 days after application when harvesting for forage.
- Withdraw meat animals from treated fields at least 3 days before slaughter.

### **Restricted Entry Interval (REI):**

- Re-entry is not permitted until 12 hours after application for all agricultural situations.

### **Stress Conditions:**

When weeds are stressed due to drought, flooding or prolonged hot or cool temperatures (8°C or less), control can be reduced or delayed since weeds are not actively growing. Weed escapes may occur under prolonged stress conditions or low fertility.

Do not make applications to weeds stressed longer than 20 days due to lack of moisture as unsatisfactory control can result.

### To Reduce Spray Drift:

1. Use coarse sprays at low pressures (200 to 275 kPa).
2. Use 100 to 200 L/ha of spray solution.
3. Spray when the wind velocity is 16 km/hr or less.

### Equipment Clean-Up:

Equipment used to apply Curtail M Herbicide should not be used to apply other pesticides to sensitive crops without thorough cleaning.

### TANK MIXTURES:

Do not mix or apply this product with any other additive, pesticide or fertilizer except as specifically recommended on this label.

### TANK-MIXES WITH CURTAIL M HERBICIDE FOR BROADLEAVED WEED AND ANNUAL GRASS CONTROL IN WHEAT AND BARLEY:

Curtail M Herbicide may be tank-mixed with one of the tank-mix partners indicated in the table below for wide spectrum control. All broadleaved weeds listed elsewhere on this label plus the annual grasses listed below for each tank-mix partner will be controlled by the tank-mix. Follow all precautions, directions, and recropping/rotation limitations that appear on both product labels and follow those that are the most restrictive.

Herbicide Tank-Mix Partner	Crops	Curtail M Herbicide + tank-mix partner rate product/ha	Annual Grasses	Adjuvant Rate
Achieve <sup>1</sup> Liquid Herbicide	spring wheat, durum wheat, barley	1.5 - 2.0 L + 0.5 L	wild oats, green & yellow foxtail, barnyard grass, Persian dandelion	Turbocharge: 0.5 % v/v
Assert <sup>2</sup> 300 SC Herbicide	spring wheat, durum wheat, barley	1.5 - 2.0 L + 1.3 L or 1.5 - 2.0 L + 1.6 L	wild oats, 1 to 3 leaf or wild oats, 4 leaf	Refer to Assert 300 SC label
Axial <sup>3</sup> 100 EC Herbicide	spring wheat, barley	1.5 - 2.0 L + 600 mL	wild oats, green foxtail, yellow foxtail, volunteer oats, volunteer canary seed, proso millet	Adigor 700 mL/ha
Everest <sup>7</sup> Solupak <sup>8</sup> 70 DF	spring wheat	1.5 - 2.0 L + 43 g	wild oats, green foxtail	Refer to Everest Solupak 70 DF label

Horizon <sup>4</sup> 240EC	spring wheat, durum wheat	1.5 - 2.0 L + 230 mL	wild oats, green & yellow foxtail, volunteer (tame) oats, barnyard grass, volunteer canary seed	Score: 0.8 % v/v
		1.5 - 2.0 L + 290 mL	above weeds, plus Persian darnel	Score: 1.0 % v/v
Puma <sup>5</sup> 120 Super	spring wheat, durum wheat, spring barley	1.5 - 2.0 L + 385 mL	green foxtail only	not required
		1.5 - 2.0 L + 770 mL	green foxtail, wild oats, barnyard grass	

### TANK-MIXES WITH CURTAIL M HERBICIDE FOR WIDE SPECTRUM BROADLEAVED WEED CONTROL:

Curtail M Herbicide may be tank-mixed with Refine Extra Herbicide for wide spectrum broadleaved weed control. All broadleaved weeds listed elsewhere on this label plus those listed on the Refine Extra label will be controlled by this tank-mix. Follow all precautions, directions, and recropping/rotation limitations that appear on both product labels and follow those that are the most restrictive.

Herbicide Tank-Mix Partner	Crops	Curtail M Herbicide + Refine Extra Herbicide rate product /ha	Additional Weeds	Adjuvant Rate
Refine Extra <sup>6</sup> Herbicide	spring wheat, spring barley	1.5 L + 20 g	refer to the list of broadleaved weeds on the Refine Extra Herbicide label	Agrial 90, AgSurf or Citowett Plus, 0.2 % v/v

#### NOTE TO USER:

READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS: The DIRECTIONS FOR USE for this product for the use(s) described below were developed by persons other than Dow AgroSciences Canada Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Dow AgroSciences Canada Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed below.

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Dow AgroSciences Canada Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the use(s) described below.

**DIRECTIONS FOR USE:****ESTABLISHED TIMOTHY FOR HAY AND FORAGE PRODUCTION IN WESTERN CANADA:**

For the control of labeled weeds on Established Timothy for hay and forage production in Western Canada, apply Curtail M Herbicide at a rate of 2 L/ha. Apply only one post-emergent application per season. Do NOT apply within 7 days of harvest. For use in the prairie provinces and the Peace River, Okanagan and Creston regions of British Columbia only.

**ESTABLISHED TIMOTHY FOR SEED PRODUCTION IN WESTERN CANADA:**

For the control of labeled weeds on Established Timothy for seed production in Western Canada, apply Curtail M herbicide at a rate of 1.5 - 2 L/ha. Apply only one post-emergent application per season. Apply to the crop from 3 leaf to just before flag leaf. Do not cut or graze treated fields within 7 days after application. For use in the prairie provinces and the Peace River, Okanagan and Creston regions of British Columbia only. Timothy is particularly sensitive to stress conditions, and some crop injury or seed yield reduction may occur when herbicides are applied under stress (e.g. drought or frost) conditions.

**LABELLED ANNUAL AND PERENNIAL BROADLEAVED WEEDS IN CANARY SEED (*Phalaris canariensis*):**

For the control of labelled annual and perennial broadleaved weeds in Canary Seed (*Phalaris canariensis*), apply Curtail M Herbicide at a rate of 1.5 – 2.0 L/ha in a minimum of 100 L water/ha to thoroughly cover the weeds with a spray pressure of 200 to 275 kPa. Apply when weeds are in the seedling stage (2 to 4 leaf) and when Canary Seed (*Phalaris canariensis*) is in the 3 leaf stage to just before flag leaf emergence stage using a ground boom sprayer. Apply only one post-emergent application per season. Do NOT apply within 60 days of harvest. For use in the prairie provinces and the Peace River, Okanagan and Creston regions ONLY of British Columbia.

REFER TO THE MAIN CURTAIL M HERBICIDE LABEL FOR ADDITIONAL DETAILS AND INSTRUCTIONS.

**BUFFER ZONES TO PROTECT SENSITIVE TERRESTRIAL AND AQUATIC HABITATS:**

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

## Buffer Zone Table:

Method of Application	Crop	Buffer Zones (metres) Required for the Protection of:				
		Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial Habitat
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer*	Cereals, flax, grasses, canaryseed (Phalaris canariensis)	1	1	1	1	4

\* For field sprayer application, buffer zones can be reduced with the use of drift-reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labelled buffer zone can be reduced by 30%.

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

### RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, Curtail M Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to Curtail M Herbicide and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

#### To delay herbicide resistance:

- Where possible, rotate the use of Curtail M Herbicide or other Group 4 herbicides with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted.
- Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Nufarm Agriculture Inc. at 1-800-868-5444 or at [www.nufarm.ca](http://www.nufarm.ca).

**NOTICE TO USER:**

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in any way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

<sup>4</sup> Horizon and <sup>9</sup> Axial and are trademarks of a Syngenta Group company

<sup>2</sup> Assert is a trademark of Nufarm Agriculture Inc.

<sup>5</sup> Puma is a trademark of the Aventis Group

<sup>6</sup> Refine Extra is a trademark of E.I. Dupont de Nemours and Co.

<sup>7</sup> Everest is a trademark of Bayer Corp., used under license by Bayer Inc.

<sup>8</sup> Solupak is a trademark of Bayer Inc.

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