CIRPREME™ XC Herbicide is a co-pack of Paradigm™ Herbicide And Lontrel™ XC Herbicide

Paradigm™
Herbicide

with ARYLEX™ ACTIVE

GROUP	2		4	HERBICIDES

FOR SALE FOR USE ONLY IN THE PRAIRIE PROVINCES AND PEACE RIVER REGION OF BRITISH COLUMBIA

Paradigm is a selective herbicide for postemergent control of annual broadleaf weeds including chickweed, cleavers, lady's thumb, lamb's-quarters, redroot pigweed, volunteer canola, volunteer flax and wild buckwheat in spring wheat (including durum), winter wheat and spring barley. Paradigm plus glyphosate is also registered for pre-seed weed control ahead of spring wheat, durum and spring barley.

AGRICULTURAL

READ THE LABEL AND BOOKLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN

ACTIVE INGREDIENT:	halauxifen, present as methyl ester	20%
	florasulam	20%

Wettable granule herbicide

POTENTIAL SKIN SENSITIZER

REGISTRATION NUMBER 31304 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 0.4 kg - bulk

Dow AgroSciences Canada Inc.
2400, 215-2nd Street SW
Calgary, Alberta
T2P 1M4
1-800-667-3852

PRECAUTIONS
KEEP OUT OF REACH OF CHILDREN
DO NOT APPLY BY AIR
Potential skin sensitizer.

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

At all times: Wear clean clothing with full length sleeves and pants, socks and shoes.
During mixing and loading, and clean-up and repair: Wear chemical-resistant gloves. Rinse gloves before removal.
At completion of spraying or end of the day: Take a shower immediately. Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing at the end of the work session and store and wash separately from household laundry using detergents and hot water before reuse.

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. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. 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
No specific antidote. Employ supportive care. Treatment should be based on the judgment of the physician in response to reactions of the patient.

AGRICULTURAL CHEMICAL
Do not ship or store with food, feeds, drugs or clothing.

ENVIRONMENTAL HAZARDS
TOXIC to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay. Avoid application when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

This product demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of Paradigm Herbicide in areas where soils are permeable, particularly where water table is shallow, may result in ground water contamination.

STORAGE
Store in original containers in a secure, dry, well ventilated storage. Do not allow contamination of seeds, plants, fertilizers or other pesticides. Do not contaminate food, feedstuffs or domestic water supplies. If containers are damaged or spill occurs, use the product immediately or contain the spill with absorbent materials and dispose of waste.

To prevent contamination store this product away from food or feed.

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).

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.

GENERAL INFORMATION
Paradigm™ is a selective postemergence herbicide for the control of hard-to-kill annual broadleaf weeds such as chickweed, cleavers, lamb's-quarters and wild buckwheat in spring wheat (including durum), winter wheat, and spring barley, not underseeded with legumes. Paradigm is mixed with water and applied as a uniform broadcast spray by ground application. It is non-corrosive, nonflammable, and nonvolatile.

Paradigm must be applied early postemergence, to the main flush of actively growing broadleaf weeds. Warm, moist growing conditions promote active weed growth and enhance the activity of Paradigm by allowing maximum foliar uptake and activity. Weeds hardened off by cold weather or drought stress may not be adequately controlled or suppressed and re-growth may occur. For best results, ensure thorough spray coverage of target weeds. See DIRECTIONS FOR USE section of this label for complete use details.

MODE OF ACTION
Paradigm is a mixture of a systemic auxin-type herbicide (Group 4) and an ALS enzyme inhibitor-type herbicide (Group 2). The product controls weeds by disrupting normal plant growth patterns and/or by inhibiting production of the enzyme essential for production of certain amino acids essential for plant growth.

GENERAL USE PRECAUTIONS

Sensitive Plants
Do not apply Paradigm directly to, or otherwise permit it to come in direct contact with susceptible crops or desirable plants including alfalfa, edible beans, flax, flowers and ornamentals, lentils, lettuce, peas, potatoes, radishes, soybeans, sugar beets, sunflowers, tomatoes or tobacco.

Non-Target Sites
Do not apply where proximity of susceptible crops (e.g. flax and legumes) or other desirable plants is likely to result in exposure to spray or spray drift. See ENVIRONMENTAL HAZARDS section of this label.

Crop Rotation
Fields previously treated with Paradigm can be seeded after a minimum of 10 months to spring wheat, spring barley, canola, flax, Juncea canola, field peas, potatoes (except seed potatoes), oriental, brown and yellow mustard, soybeans, oats, sunflower, dry bean (*Phaseolus vulgaris* species including pinto, kidney and white types) or fields can be summerfallowed. Lentils can be planted 22 months after application of Paradigm.

Tank Mixtures
In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include, but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact Dow AgroSciences Canada Inc at 1-800-667-3852 or www.dowagro.ca for information before mixing any pesticide or fertilizer that is not specifically recommended on this label. The user assumes the risk of losses that result from the use of tank mixes that do not appear on this label or that are not specifically recommended by Dow AgroSciences Canada Inc.

Spray Equipment Precaution
Do not apply through any type of irrigation system.

To Reduce Spray Drift
1. Use nozzles delivering higher volumes and coarser droplets.
2. Use low pressures (200 to 275 kPa).
3. Use 100 L/ha of spray solution.
4. Spray when the wind velocity is 15 km/hr or less.
5. Spot treatments should only be applied with a calibrated boom to prevent over-application.

Sprayer clean-out
To avoid injury to desirable plants, thoroughly clean equipment used to apply this product before re-use or using it to apply other chemicals.
1. Immediately after spraying, completely drain the sprayer tank. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.
2. First rinse:
   - Spray the inside of tank with clean water and fill the sprayer with at least one tenth of the spray tank volume.
   - Agitate and circulate for 15 minutes, and flush through booms and hoses.
   - Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles.
   - Drain tank completely.
3. Second rinse:
   - Fill the tank with clean water.
   - Add All Clear Spray Tank Decontaminator, as per manufacturer's recommendations while filling the tank with clean water.
   - Agitate and then flush the boom and hoses with the cleaning solution. Top up with water making sure the tank is completely full. Allow to stand for 15 minutes with agitation. Flush the solution out of the spray tank through the spray booms. Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles.
   - If possible, let the solution stand in the sprayer tank and booms for an extended period of time, overnight if possible.

- After flushing the boom and hoses, drain tank completely.
- Remove nozzles and all main filter and nozzle screens and clean separately with a cleaning agent or an ammonia solution (100 mL in 10 L water).

4. Third rinse:
   - Rinse the tank with clean water and flush through the boom and hoses using at least one tenth of the spray tank volume.
   - Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles.
   - Drain tank completely.

DIRECTIONS FOR USE
READ THE ENTIRE LABEL BEFORE USE. FAILURE TO FOLLOW LABEL INSTRUCTIONS MAY RESULT IN ERRATIC WEED CONTROL OR CROP DAMAGE. DO NOT APPLY TO CROPS UNDERSEEDED WITH LEGUMES.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests. DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

APPLICATION METHODS

Ground Application
Using ground equipment, apply Paradigm as a broadcast treatment at the recommended rate as specifically listed in the DIRECTIONS FOR USE section of this label.

DO NOT APPLY BY AIR

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 S572.1) coarse classification. Boom height must be 60 cm or less above the crop or ground.

PARADIGM HERBICIDE ALONE

Crops Registered
Spring wheat (including durum), winter wheat and spring barley

Field Sprayer Application Directions
Apply the recommended rate of Paradigm per hectare in 50-100 L per hectare of water. Add Intake Adjuvant at 0.5–1% v/v (use the higher Intake rate for heavy weed infestations or on stressed weeds that are not actively growing at the time of application). Alternatively, add Non-Ionic Surfactant (NIS) at 0.25% v/v or Merge Adjuvant at 0.5% v/v or Turbocharge Adjuvant at 0.5% v/v. See weeds species controlled under “Weeds Controlled or Suppressed by Paradigm Alone.” Apply to actively growing spring wheat and spring barley from the 2 leaf stage to just prior to flag leaf emergence. In winter wheat apply from 3 leaf stage to just prior to flag leaf emergence. Apply when weeds are actively growing. Only weeds emerged at the time of treatment will be controlled. Best results are obtained from applications made to seedling weeds.

Application Timing
Apply to actively growing weeds at the 1-8 leaf stage unless otherwise specified. Extreme growing conditions such as drought or near freezing temperature prior to, at or 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. If foliage is wet at the time of application control may be decreased. Under conditions of low crop and high weed density, control may be reduced.

Applications of Paradigm are rainfast within 1 hour of application.

Weeds Controlled or Suppressed by Paradigm Alone at 25 g/ha (1-8 leaf stage, unless otherwise specified)

Weeds Controlled:

- alfalfa, volunteer (up to 25 cm in height)
- American dragonhead (up to bud stage and 15 cm in height)
- barnyard grass (up to the 5 leaf, 2-tiller stage)
- buckwheat, wild
- canola, volunteer♦♦
- chickweed♦♦♦
- cleavers (1-9 whorl stage)♦♦♦
- cow cockle
- dandelion (seedlings & over-wintered rosettes up to 30 cm in diameter)
- flax, volunteer (up to 15 cm in height)
- fleabane, Canada (up to 15 cm in height) ♦♦♦♦♦
- flixweed (up to 8 leaf & 8 cm in height)
- henbit (up to bud stage and 15 cm in height)
- lamb's-quarters♦♦♦, ♦♦♦♦
- mustard, wild♦♦♦♦
- narrow-leaved hawk's-beard (up to bolting & 30 cm in height)
- ragweed, common (up to 6-leaf stage) ♦♦♦♦♦
- redroot pigweed
- round-leaved mallow (up to the 6-leaf stage)
- shepherd's-purse (up to bolting & 20 cm in height)
- smartweed (green smartweed, lady's thumb)
- sow-thistle, annual (up to 4 leaf stage)
- stinkweed♦♦♦♦
- stork's-bill (up to the 8-leaf stage)
- velvetleaf (up to the 5-leaf stage)

Weeds Suppressed:

- hemp-nettle (1-8 leaf stage)♦♦♦
- kochia♦
- night flowering catchfly (up to bolting stage, 15 cm in height)
- scentless chamomile (up to the bud stage)
- sow-thistle, perennial (up to 6-leaf stage)
- thistle, Canada (up to the bolting stage, 30 cm in height)
- white cockle (spring seedlings and over-wintered plants up to the bud stage)

♦Light to moderate infestation (up to 150 plants/m^2; up to 15 cm in height), including Group 2 resistant biotypes
♦♦Will not control volunteer Imidazolinone-tolerant canola (Clearfield varieties)
♦♦♦Including Group 2 resistant biotypes
♦♦♦♦Best results are obtained when applied to actively growing weeds in the 1 to 4 leaf (seedling) stage
♦♦♦♦♦Including Group 2 and 9 resistant biotypes

Mixing Instructions for Paradigm Alone

1. Fill sprayer tank 1/2 full of water.
2. Start sprayer tank agitation.
3. Add the required amount of Paradigm.
4. Fill the sprayer tank with sufficient water to spray 50-100 L of spray mixture per hectare.
5. Add one of the adjuvants recommended above in the Field Sprayer Application Directions section as the last ingredient.
6. Follow sprayer directions and precautions as outlined above, especially when applying next to sensitive crops (e.g. flax and legumes).
7. Follow sprayer clean-up directions.

Preharvest/Grazing Intervals

- Livestock may be grazed on treated crops 7 days following application.
- Do not harvest the treated crop within 60 days after application.
- Do not cut the treated crop for hay or silage within 21 days after application.

TANK MIXING PARADIGM + OTHER TANK-MIX PARTNERS

MIXING INSTRUCTIONS FOR TANK MIXING PARADIGM+ OTHER TANK-MIX PARTNERS

1. Begin to fill sprayer tank with clean water, and engage agitator. **Agitation must be continued throughout the entire mixing and spraying procedure.**
2. When the sprayer is three quarters full of water, add Paradigm and agitate for 2-3 minutes.
3. If including an annual grass control tank-mix partner add it next. Agitate for 2-3 minutes.
4. If including MCPA ester, Curtail™ M Herbicide, Lontrel™ Herbicide or Lontrel™ XC Herbicide add it next. Agitate for 2-3 minutes.
5. Add the Adjuvant indicated in the below tables for the annual grass control product.
6. Agitate for 1-2 minutes before adding remainder of water and then maintain constant agitation.
7. After any break in spraying operations, agitate thoroughly before spraying again.
8. **Use the spray suspension as soon as it is prepared.**

TANK-MIX COMBINATIONS – PARADIGM HERBICIDE + MCPA ESTER HERBICIDE
Crops Registered
Spring wheat (including durum), winter wheat, spring barley

Application Directions
For control of a wide spectrum of broadleaf weeds apply Paradigm tank mixed with MCPA ester (600 g ae/L) in 50-100 L per hectare of water. Apply to actively growing spring wheat or spring barley from the 3 leaf stage to just prior to flag leaf emergence. In winter wheat apply from 3 leaf stage to just prior to flag leaf emergence. Apply when weeds are actively growing. Only weeds emerged at the time of treatment will be controlled. Best results are obtained from applications made to seedling weeds. When applied as a tank-mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on all product labels.

Weeds Controlled or Suppressed by Paradigm Herbicide at 25 g/ha + MCPA Ester (600 g ae/L) at 467 mL/ha (1-8 leaf stage, unless otherwise specified)

Weeds Controlled:

- alfalfa, volunteer (up to 25 cm in height)
- barnyard grass (up to the 5 leaf, 2-tiller stage)
- buckwheat, wild
- canola, volunteer♦♦
- chickweed♦
- cleavers (1-9 whorl stage)♦
- cow cockle
- dandelion (seedlings & over-wintered rosettes up to 30 cm in diameter)
- flax, volunteer (up to 15 cm in height)
- fleabane, Canada (up to 15 cm in height)♦♦♦♦
- flixweed (up to 8 leaf & 8 cm in height)
- hemp-nettle (1-8 leaf stage)♦
- lamb's-quarters♦
- mustard, wild♦♦♦
- narrow-leaved hawk's-beard (up to bolting & 30 cm in height)
- ragweed, common (up to 6-leaf stage) ♦♦♦♦
- redroot pigweed
- round-leaved mallow (up to the 6-leaf stage)
- shepherd's-purse (up to bolting & 20 cm in height)
- smartweed (green smartweed, lady's thumb)
- sow-thistle, annual (up to 4 leaf stage)
- stinkweed♦♦♦
- stork's-bill (up to the 8-leaf stage)
- velvetleaf (up to the 5-leaf stage)

Weeds Suppressed:

- kochia♦
- night flowering catchfly (up to bolting stage, 15 cm in height)
- scentless chamomile (up to bud stage)
- sow-thistle, perennial (up to 6-leaf stage)
- thistle, Canada (up to the bolting stage, 30 cm in height)
- white cockle (spring seedlings and over-wintered plants up to the bud stage)

♦Including Group 2 resistant biotypes
♦♦Including volunteer Imidazolinone-tolerant canola (Clearfield varieties)
♦♦♦Best results are obtained when applied to actively growing weeds in the 1 to 4 leaf (seedling) stage
♦♦♦♦Including Group 2 and 9 resistant biotypes

Weeds Controlled or Suppressed by Paradigm Herbicide at 25 g/ha + MCPA Ester (600 g ae/L) at 580 mL/ha (1-8 leaf stage, unless otherwise specified)

Weeds Controlled:

- alfalfa, volunteer (up to 25 cm in height)
- barnyard grass (up to the 5 leaf, 2-tiller stage)
- buckwheat, wild
- burdock♦♦♦
- canola, volunteer♦
- chickweed♦
- cleavers (1-9 whorl stage)♦
- cocklebur♦♦♦
- cow cockle
- dandelion (seedlings & over-wintered rosettes up to 30 cm in diameter)
- flax, volunteer (up to 15 cm in height)
- fleabane, Canada (up to 15 cm in height)♦♦♦♦
- flixweed (up to 8 leaf & 8 cm in height)
- hemp-nettle♦
- lamb's-quarters♦
- mustard, ball♦♦♦
- mustard, wild♦♦♦
- narrow-leaved hawk's-beard (up to bolting & 30 cm in height)
- pigweed, redroot♦
- pigweed, Russian♦♦♦
- prickly lettuce♦♦♦
- ragweed, common (up to 6-leaf stage)♦♦♦♦
- round-leaved mallow (up to the 6-leaf stage)
- shepherd's-purse (up to bolting & 20 cm in height)
- smartweed, annual (green smartweed, lady's thumb)
- sow-thistle, annual (up to 4 leaf stage)
- stinkweed♦♦♦
- stork's-bill (up to the 8-leaf stage)
- sunflower, annual♦♦♦
- velvetleaf (up to the 5-leaf stage)
- vetch♦♦♦
- wild radish♦♦♦

Weeds Suppressed:

- kochia♦♦
- night flowering catchfly (up to bolting stage, 15 cm in height)
- scentless chamomile (up to bud stage)
- plantain (top growth)♦♦♦
- sowthistle, perennial (up to 6-leaf stage)
- thistle, Canada (up to the bolting stage, 30 cm in height)
- white cockle (spring seedlings and over-wintered plants up to the bud stage)

♦Including Group 2 resistant biotypes
♦♦light to moderate infestations (up to 150 plants/m^2; up to 15 cm in height), including Group 2 resistant biotypes
♦♦♦Best results are obtained when applied to actively growing weeds in the 1 to 4 leaf (seedling) stage
♦♦♦♦Including Group 2 and 9 resistant biotypes

Mixing Instructions

See mixing Instructions for PARADIGM HERBICIDE + MCPA ESTER HERBICIDE in section entitled MIXING INSTRUCTIONS FOR TANK MIXING PARADIGM + OTHER TANK-MIX PARTNERS.

TANK MIX COMBINATIONS - PARADIGM HERBICIDE plus:

LONTREL 72 OR LONTREL 360 OR LONTREL XC HERBICIDE
OR
LONTREL 72 OR LONTREL 360 OR LONTREL XC HERBICIDE+ MCPA ESTER
OR
CURTAIL M

Crops Registered

Spring wheat (including durum), winter wheat, spring barley

Field Sprayer Application Directions

For control of a wide spectrum of broadleaf weeds apply Paradigm tank mixed with Lontrel 72 Herbicide, Lontrel 360 Herbicide or Lontrel XC Herbicide; Lontrel 72, Lontrel 360 or Lontrel XC plus MCPA ester, or Curtail M at the rates indicated in the table below in 100 L per hectare of water. Apply to actively growing spring wheat or spring barley from the 3 leaf stage to just prior to flag leaf emergence. In winter wheat

apply from 3 leaf stage to just prior to flag leaf emergence. Apply when weeds are actively growing. Only weeds emerged at the time of treatment will be controlled. Best results are obtained from applications made to seedling weeds. When applied as a tank-mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on all product labels.

Refer to the product labels of the herbicide tank-mix partners listed below for a full list of other weeds controlled, rates (if not listed in the table below) and timings of application, water volumes and use precautions.

PARADIGM HERBICIDE AT 25 g/ha PLUS:

Tank Mix Partner	Rate/ha	Additional Pests Controlled
Lontrel 72 **or** **Lontrel 360** **or** **Lontrel XC Herbicide**	104 g/ha or 208 mL/ha or 125 mL/ha	thistle, Canada (up to the bolting stage and 30 cm in height), scentless chamomile (spring seedlings up to bud stage and 15 cm in size) *Note: An adjuvant is required with this tank-mix. Use Intake at 0.5-1% v/v, NIS at 0.25% v/v, or Merge at 0.5% v/v. When tank-mixing with a graminicide, see graminicide label for adjuvant requirements.*
Lontrel 72 **or** **Lontrel 360** **or** **Lontrel XC Herbicide** **+** **MCPA Ester 600**	104 g/ha or 208 mL/ha or 125 mL/ha + 467 mL/ha (equivalent to 280 g ae/ha)	thistle, Canada (up to the bolting stage and 30 cm in height) volunteer canola♦ hemp-nettle (1-8 leaf stage)♦ *Plus all weeds listed earlier in the label as controlled or suppressed by Paradigm Herbicide at 25 g/ha plus MCPA Ester 600 at 467 mL/ha*
Lontrel 72 **or** **Lontrel 360** **or** **Lontrel XC Herbicide** **+** **MCPA Ester 600**	104 g/ha or 208 mL/ha or 125 mL/ha + 580 mL/ha (equivalent to 350 g ae/ha)	thistle, Canada (up to the bolting stage and 30 cm in height) *Plus all weeds listed earlier in the label as controlled or suppressed by Paradigm Herbicide at 25 g/ha plus MCPA Ester 600 at 580 mL/ha*
Lontrel 72 **or** **Lontrel 360** **or** **Lontrel XC Herbicide** **+** **MCPA Ester 600**	104 g/ha or 208 mL/ha or 125 mL/ha + 700 mL/ha (equivalent to 420 g ae/ha)	dandelion (seedlings, overwintered rosettes & mature plants) field horsetail (top growth) plantain (top growth) sowthistle, perennial (up to the bolting stage & 20 cm in height) sunflower, volunteer thistle, Canada (up to the bud stage)

		Plus all weeds listed earlier in the label as controlled or suppressed by Paradigm Herbicide at 25 g/ha plus MCPA Ester 600 at 580 mL/ha
Curtail™ M Herbicide	1.5 L/ha	dandelion (seedlings, overwintered rosettes & mature plants) field horsetail (top growth) plantain (top growth) sowthistle, perennial (up to the bolting stage & 20 cm in height) sunflower, volunteer thistle, Canada (up to the bud stage) *Plus all weeds listed earlier in the label as controlled or suppressed by Paradigm Herbicide at 25 g/ha plus MCPA Ester 600 at 580 mL/ha*

♦Including Group 2 resistant biotypes

Mixing Instructions
See mixing Instructions for PARADIGM HERBICIDE + CURTAIL M HERBICIDE OR LONTREL 72 + MCPA ESTER, LONTREL 360 + MCPA ESTER OR LONTREL XC HERBICIDE + MCPA ESTER in section entitled MIXING INSTRUCTIONS FOR TANK MIXING PARADIGM + OTHER TANK-MIX PARTNERS.

TANK-MIX COMBINATIONS – PARADIGM HERBICIDE + OTHER HERBICIDES FOR ANNUAL GRASS CONTROL
For control of annual grasses (see table below) tank-mix Paradigm with the following graminicides. Refer to the above table for broadleaf weeds controlled or suppressed with Paradigm. When applied as a tank-mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on all product labels.

Tank-Mix Combinations with Paradigm Herbicide for Annual Grass Control

Tank-Mix Partner	Crops Registered	Rate/ha	Adjuvant and Rate	Additional Weeds Controlled
Simplicity GoDRI™♦	spring wheat, durum wheat winter wheat	70 g/ha	Agral 90 at 0.25% v/v	wild oats, barnyard grass, Japanese brome, yellow foxtail, hemp-nettle, flixweed (up to 10 cm in height), green foxtail, downy brome, white cockle (spring seedlings and over-wintered plants up to the bud stage), night flowering catchfly (up to bolting stage, 15 cm in height), scentless chamomile (spring seedlings up to bud stage and 15 cm in size)

Simplicity™♦	spring wheat, durum wheat winter wheat	500 ml/ha	Agral 90 at 0.25% v/v	wild oats, barnyard grass, Japanese brome, yellow foxtail, hemp-nettle, flixweed, green foxtail, downy brome, white cockle, night flowering catchfly (up to bolting stage, 15 cm in height)
Tandem™ A + Tandem™ B	spring wheat, durum wheat	375 mL/ha + 0.21 L/ha	Not required	wild oats (under low wild oat populations (<75 plants/m^2), plus additional broadleaf weeds (refer to Tandem Use Instructions)
		500 mL/ha + 0.31 L/ha	Not required	wild oats, barnyard grass, Japanese brome, yellow foxtail, green foxtail, downy brome, white cockle, night flowering catchfly (up to bolting stage, 15 cm in height), plus additional broadleaf weeds (refer to Tandem Use Instructions)
Axial Herbicide	spring wheat, spring barley	1200 mL/ha	Not required	wild oats, green foxtail, yellow foxtail, barnyard grass, volunteer oats, volunteer canary seed, proso millet
Everest 2.0♦	spring wheat, durum wheat	36-72 mL/ha	Ag-Surf or Agral 90 at 0.25% v/v	wild oats, green foxtail, volunteer tame oats

♦Consult tank-mix partner label for rate-specific claims.

Mixing Instructions
See mixing Instructions for PARADIGM HERBICIDE + OTHER HERBICIDES FOR ANNUAL GRASS CONTROL in section entitled MIXING INSTRUCTIONS FOR TANK MIXING PARADIGM + OTHER TANK-MIX PARTNERS.

TANK MIX COMBINATIONS - PARADIGM HERBICIDE plus:

MCPA ESTER HERBICIDE
OR
LONTREL 72 OR LONTREL 360 OR LONTREL XC HERBICIDE
OR
LONTREL 72 OR LONTREL 360 OR LONTREL XC HERBICIDE + MCPA ESTER 600 (467 and 580 mL/ha rates only)

+ OTHER HERBICIDES FOR ANNUAL GRASS CONTROL
For control of annual grasses (see table below) tank-mix Paradigm + MCPA Ester 600, Paradigm + Lontrel 72, Lontrel 360 or Lontrel XC Herbicide, or Paradigm + Lontrel 72, Lontrel 360 or Lontrel XC Herbicide + MCPA Ester 600 (467 and 580 mL/ha rates only) with the following graminicides. Refer to the above table for broadleaf weeds controlled or suppressed with Paradigm. When applied as a tank-mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on all product labels.

Tank-Mix Combinations with Paradigm Herbicide+ MCPA Ester 600 Paradigm + Lontrel 72, Lontrel 360 or Lontrel XC Herbicide, or Paradigm + Lontrel 72, Lontrel 360 or Lontrel XC Herbicide + MCPA Ester 600 (467 and 580 mL/ha rates only) for Annual Grass Control

Tank-Mix Partner	Crops Registered	Rate/ha	Adjuvant and Rate	Additional Weeds Controlled
Simplicity GoDRI♦	spring wheat, durum wheat winter wheat	70 g/ha	Agral 90 at 0.25% v/v	wild oats, barnyard grass, Japanese brome, yellow foxtail, flixweed (up to 10 cm in height), green foxtail, downy brome, white cockle (spring seedlings and over-wintered plants up to the bud stage), night flowering catchfly (up to bolting stage, 15 cm in height), scentless chamomile (spring seedlings up to bud stage and 15 cm in size)
Simplicity♦	spring wheat, durum wheat winter wheat	500 ml/ha	Agral 90 at 0.25% v/v	wild oats, barnyard grass, Japanese brome, yellow foxtail, hemp-nettle, flixweed, green foxtail, downy brome, white cockle, night flowering catchfly (up to bolting stage, 15 cm in height)
Tandem A + Tandem B	spring wheat, durum wheat	375 mL/ha + 0.21 L/ha	Not required	wild oats (under low wild oat populations (<75 plants/m^2), plus additional broadleaf weeds (refer to Tandem Use Instructions)
		500 mL/ha + 0.31 L/ha	Not required	wild oats, barnyard grass, Japanese brome, yellow foxtail, green foxtail, downy brome, white cockle, night flowering catchfly (up to bolting stage, 15 cm in height), plus additional broadleaf weeds (refer to Tandem Use Instructions)
Axial Herbicide	spring wheat, spring barley	1200 mL/ha	Not required	wild oats*, green foxtail*, yellow foxtail*, barnyard grass, volunteer oats, volunteer canary seed, proso millet
Everest 2.0♦	spring wheat, durum wheat	36-72 mL/ha	Ag-Surf or Agral 90 at 0.25% v/v	wild oats, green foxtail, volunteer tame oats

♦Consult tank-mix partner label for rate-specific claims.

* When applying Paradigm + Lontrel 72, Lontrel 360 or Lontrel XC Herbicide + MCPA Ester 600, control of these weeds may be reduced under adverse conditions, high populations, and / or advanced staging.

Mixing Instructions

See mixing Instructions for PARADIGM HERBICIDE + MCPA ESTER HERBICIDE + OTHER HERBICIDES FOR ANNUAL GRASS CONTROL in section entitled MIXING INSTRUCTIONS FOR TANK MIXING PARADIGM + OTHER TANK-MIX PARTNERS.

TANK MIX COMBINATIONS - PARADIGM HERBICIDE plus:

CURTAIL M HERBICIDE
OR
LONTREL 72 OR LONTREL 360 OR LONTREL XC HERBICIDE + MCPA ESTER 600 (700 mL/ha)

+ OTHER HERBICIDES FOR ANNUAL GRASS CONTROL
For control of annual grasses (see table below) tank-mix Paradigm + Curtail M or Paradigm + Lontrel 72, Lontrel 360 or Lontrel XC Herbicide + MCPA Ester 600 (700 mL/ha) with the following graminicides. Refer to the above table for broadleaf weeds controlled or suppressed with Paradigm. When applied as a tank-mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on all product labels.

Tank-Mix Combinations with Paradigm Herbicide + Curtail M for Annual Grass Control

Tank-Mix Partner	Crops Registered	Rate/ha	Adjuvant and Rate	Additional Weeds Controlled
Simplicity GoDRI♦	spring wheat, durum wheat winter wheat	70 g/ha	Agral 90 at 0.25% v/v	wild oats, barnyard grass, Japanese brome, yellow foxtail, flixweed (up to 10 cm in height), green foxtail, downy brome, white cockle (spring seedlings and over-wintered plants up to the bud stage) ,night flowering catchfly (up to bolting stage, 15 cm in height), scentless chamomile (spring seedlings up to bud stage and 15 cm in size)
Simplicity♦	spring wheat, durum wheat winter wheat	500 mL/ha	Agral 90 at 0.25% v/v	wild oats, barnyard grass, Japanese brome, yellow foxtail, green foxtail, downy brome, white cockle, night flowering catchfly (up to bolting stage, 15 cm in height)
Tandem A + Tandem B	spring wheat, durum wheat	375 mL/ha + 0.21 L/ha	Not required	wild oats (under low wild oat populations (<75 plants/m^2), plus additional broadleaf weeds (refer to Tandem Use Instructions)
		500 mL/ha + 0.31 L/ha	Not required	wild oats, barnyard grass, Japanese brome, yellow foxtail, green foxtail, downy brome, white cockle, night flowering catchfly (up to bolting stage, 15 cm in height), plus additional broadleaf weeds (refer to Tandem Use Instructions)
Everest 2.0♦	spring wheat, durum wheat	36-72 mL/ha	Ag-Surf or Agral 90 at 0.25% v/v	wild oats, green foxtail, volunteer tame oats,

♦Consult tank-mix partner label for rate-specific claims.

Mixing Instructions
See mixing Instructions for PARADIGM HERBICIDE + CURTAIL M HERBICIDE + OTHER HERBICIDES FOR ANNUAL GRASS CONTROL in section entitled MIXING INSTRUCTIONS FOR TANK MIXING PARADIGM + OTHER TANK-MIX PARTNERS.

PARADIGM HERBICIDE PLUS GLYPHOSATE

PRIOR TO PLANTING WINTER WHEAT (IN THE FALL) OR AS AN INITIAL TREATMENT IN SUMMERFALLOW
Apply Paradigm at a rate of 25 g/ha, mixed with a glyphosate product such as VP480 Herbicide or Maverick™ III at 0.94 L/ha (450 g ae/ha) in 50-100 L of water per hectare in the fall prior to planting winter wheat or as an initial treatment in summerfallow. If using a glyphosate product other than 480 g ae/L adjust the rate of product accordingly.

Weeds Controlled or Suppressed with Paradigm Herbicide at 25 g/ha + a glyphosate product such as VP480 Herbicide or Maverick III Herbicide at 0.94 L/ha

Weeds Controlled

Annual Broadleaf Weeds

buckwheat, wild (up to 8 leaves)
canola, volunteer♦
chickweed, common (up to 8 leaves)
cleavers (up to 9 whorls)
cow cockle
flax, volunteer (up to 15 cm)
fleabane, Canada♦♦
flixweed
hemp nettle
kochia
lady's-thumb (up to 8 leaves)
lamb's-quarters (up to 8 leaves)
mustard, wild
narrow-leaved hawk's beard♦♦
pigweed, redroot (up to 8 leaves)
ragweed, common♦♦
shepherd's purse
smartweed (up to 8 leaves)
stinkweed
thistle, Russian

Annual Grasses

barley, volunteer
brome, downey
foxtail, giant
foxtail, green
oats, wild
Persian darnel
wheat, volunteer

Perennial Weeds

dandelion (seedling, overwintered rosettes, mature plants up to 30 cm in diameter)

Weeds Suppressed

sow-thistle, annual
sow-thistle, perennial♦♦♦
white cockle (spring seedlings and over-wintered plants up to the bud stage)

♦Including all herbicide tolerant canola varieties
♦♦ Less than 8 cm in height
♦♦♦Applications made at advanced stages will reduce effectiveness

SPRING APPLICATION PRIOR TO PLANTING CEREAL CROPS
Apply Paradigm at a rate of 18.75 g/ha mixed with a glyphosate product such as VP480 Herbicide or Maverick III at 0.94 L/ha (450 g ae/ha) in 50-100 L of water per hectare prior to planting spring wheat (including durum), and spring barley. If using a glyphosate product other than 480 g ae/L adjust the rate of product accordingly.

Weeds Controlled or Suppressed with Paradigm Herbicide at 18.75 g/ha + a glyphosate product such as VP480 Herbicide or Maverick III Herbicide at 0.94 L/ha

Weeds Controlled:

Annual Broadleaf Weeds

buckwheat, wild (1-2 leaves)
canola, volunteer♦
chickweed, common (up to 8 leaves)
cleavers (up to 9 whorls)
flax, volunteer (up to 15 cm)
fleabane, Canada♦♦
flixweed
hemp nettle
lady's-thumb (up to 8 leaves)
lamb's-quarters (up to 8 leaves)
mustard, wild
ragweed, common♦♦
shepherd's purse
stinkweed
thistle, Russian

Annual Grasses

barley, volunteer
brome, downey
foxtail, giant
foxtail, green
oats, wild
Persian darnel
wheat, volunteer

Perennial Weeds

dandelion (spring rosettes up to 15 cm in diameter)

Weeds Suppressed:

kochia

♦Including all herbicide tolerant canola varieties
♦♦ Less than 8 cm in height and including Group 2 tolerant biotypes

Mixing Instructions

1. Fill sprayer tank 1/2 full of water.
2. Start sprayer tank agitation.
3. Add the required amount of Paradigm, continue agitation.
4. Add the required amount of glyphosate product and continue agitation.
5. Fill the sprayer tank with sufficient water to spray 50 - 100 L of spray mixture per hectare.

TANK-MIX COMBINATION – PARADIGM HERBICIDE + A GLYPHOSATE PRODUCT + ADDITIONAL TOP-UP RATES OF A GLYPHOSATE PRODUCT SUCH AS VP480 HERBICIDE OR MAVERICK III FOR BROADER SPECTRUM WEED CONTROL

Paradigm Herbicide can be tank mixed with a higher rate of glyphosate for control of additional weeds listed in the tables below. When applied as a tank-mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on all product labels.

Tank-Mix Combinations with Additional Glyphosate for Broader Spectrum Weed Control

Additional Top-Up Rate for VP480 Herbicide or Maverick III L/Ha	Additional Weeds Controlled
0.46 (222 g ae/ha) ♦♦♦ Total 672 g ae/ha	Annual weeds: Narrow-leaved hawk's beard (8-15 cm)
0.75 (360 g ae/ha) ♦♦♦ Total 810 g ae/ha	Annual weeds: Crab grass, annual blue grass, prickly lettuce, annual sow thistle, and narrow-leaved vetch

0.94 (450 g ae/ha) ♦♦♦ Total 900 g ae/ha	Perennial weeds: Quack grass (control, light to moderate infestations) Foxtail barley (control, light to moderate infestations) Canada thistle (rosette stage)♦ Toadflax (Vegetative Stage in summerfallow)♦♦
2.62- 4.30 (1257-2064 g ae/ha) ♦♦♦ Total 1707-2514 g ae/ha	Perennial weeds: Quack grass (heavy infestations, longer control) Foxtail barley (heavy infestations or when plants are under stress – low rate only) Canada thistle (bud stage or beyond) ♦♦

♦ Allow 5 or more days after treatment before tillage
♦♦ Allow 10 days after treatment before tillage
♦♦♦ If using a glyphosate product other than 480 g ae/L concentration adjust the rate of product accordingly

Mixing Instructions
1. Fill sprayer tank 1/2 full of water.
2. Start sprayer tank agitation.
3. Add the required amount of Paradigm, continue agitation.
4. Add the required amount of glyphosate formulation, continue agitation.
5. Add tank-mix partner.
6. Fill the sprayer tank with sufficient water to spray 50 - 100 L of spray mixture per hectare.

Application Timing
Apply to actively growing weeds in the 2-4 leaf stage, except where noted above. Extreme growing conditions such as drought or near freezing temperature prior to, at or following time of application may reduce weed control. Only weeds which are emerged at the time of application will be affected. If foliage is wet at the time of application, control may be decreased. Under conditions of high weed density, control may be reduced.

Pre-Seed (spring or fall)
Paradigm Herbicide may be applied prior to seeding and no longer than 48 hours after seeding, prior to any crop emergence. Fields treated with Paradigm Herbicide may be planted to barley, spring wheat (including durum), winter wheat or summerfallowed.

Chem-Fallow
May 1 to July 31: Paradigm Herbicide may be applied to summerfallow fields and seeded in the fall to winter wheat and in the following spring to barley, canola, peas or wheat (including durum) or summerfallowed.

Fall Application
Paradigm Herbicide may be applied to stubble or summerfallow fields after August 1st and prior to freeze-up and may be seeded in the fall to winter wheat and in the following spring to barley or spring wheat (including durum) or summerfallowed.

BUFFER ZONES
Use of the following spray methods or equipment **DO NOT** require a buffer zone: hand-held or backpack sprayer and spot treatment.

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) and sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands).

Method of application	Crop	Buffer Zones (metres) Required for the Protection of:		
		Freshwater Habitat of Depths:		Terrestrial Habitat
		Less than 1 m	Greater than 1 m	
Field sprayer	Spring wheat, durum wheat, winter wheat, spring barley	1	1	1

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

NOTE: Applicators may recalculate a site-specific buffer zone by combining information on current weather conditions and spray configuration for field applications, which specify the following droplet size category wording on the product label: 'DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) [Fine or Medium or Coarse] classification.' To access the Buffer Zone Calculator, please visit the Pest Management Regulatory Agency web site.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, please note that Paradigm is both a Group 2 and a Group 4 herbicide. Any weed population may contain plants naturally resistant to Group 2 and/or Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same fields. 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 Paradigm or other Group 2 and Group 4 herbicides within a growing season (sequence) or among growing seasons 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. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as the more resistance-prone partner.
- Herbicide use should be based on an integrated weed management program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical control methods), cultural (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Monitor weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.
- 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 Dow AgroSciences Canada Inc. at 1-800-667-3852.

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 a 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.

032919

Label Code: CN-31304-016-E
Replaces: CN-31304-015-E

Specimen label notes
Add barnyard grass

Lontrel™ XC
Herbicide

GROUP	4	HERBICIDE

For control of perennial and annual broadleaved weeds in field crops, Christmas tree plantations, pasture, rangeland, vegetable and fruit crops, and non-cropland.

AGRICULTURAL

READ THE LABEL AND BOOKLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN

ACTIVE INGREDIENT: clopyralid: 600 g a.e./L
(present as the dimethylamine salt)
Solution

REGISTRATION NO. 32795 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 1 L – bulk

Dow AgroSciences Canada Inc.
2400, 215 – 2nd Street S.W.
Calgary, Alberta
T2P 1M4
1-800-667-3852

PRECAUTIONS
KEEP OUT OF REACH OF CHILDREN

Avoid contact with eyes, skin and clothing.

Wear a long-sleeved shirt, long pants, chemical resistant gloves, shoes and socks during mixing, loading, application, clean-up and repair. Goggles or a face shield are required during mixing and loading.

Do not enter or allow workers entry into treated areas for 12 hours following application to all crops.

AT COMPLETION OF SPRAYING OR END OF THE DAY: Take a shower immediately. Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing at the end of the work session and store and wash separately from household laundry using detergents and hot water before reuse.

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. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. 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 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.
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.

TOXICOLOGICAL INFORMATION
No specific antidote. Employ supportive care. Treatment should be based on judgment of the physician in response to reactions of the patient.

AGRICULTURAL CHEMICAL
Do not ship or store with food, feeds, drugs or clothing.

ENVIRONMENTAL HAZARDS
TOXIC to non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (for example, sandy soil) and/or the depth to the water table is shallow.

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 (for example, soils that are compacted or fine textured such as clay).

Avoid application of this product when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

STORAGE
Store away from food, feedstuff, fertilizer, seeds, insecticides, fungicides or other pesticides or herbicides intended to be used on crops sensitive to Lontrel XC Herbicide. Store in heated storage; if product is frozen, bring to room temperature and agitate before use.

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).

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.

GENERAL INFORMATION
Lontrel XC Herbicide is a liquid concentrate intended for dilution with water and for use on canola, field corn, sugar beets, rutabagas, summerfallow, flax (including low linolenic acid varieties), wheat (spring & winter), barley (spring), oats, strawberry, seedling and established grasses grown for forage and seed production, non-crop farmland, balsam fir Christmas trees and highbush blueberry. It is readily absorbed by both foliage and roots and translocates both upwards and downwards in plants. The product controls Canada thistle, wild buckwheat, scentless chamomile, common groundsel and volunteer alfalfa. It suppresses growth of perennial sow-thistle through control of top growth.

DIRECTIONS FOR USE

VEGETATION AND CROP PRECAUTIONS
Do not use in greenhouses.

Sensitive Plants
Do not apply Lontrel XC Herbicide directly to, or otherwise permit it to come into contact with sunflowers, legumes (such as peas, beans, lentils or alfalfa), fruit or vegetable crops, flowers or other desirable broadleaved plants. Take precautions to prevent spray mists containing it to drift onto them. Residues of Lontrel XC Herbicide can remain in the soil following the year of use, thereby affecting growth of sensitive crops.

Special precautions should be taken during application to non-cropland areas such as roadsides, pipelines and railways where sensitive desirable vegetation may be present. Do not apply to or allow drift to come into contact with sensitive desirable vegetation such as vetch or clover which may be found on embankments.

Non-Target Sites
Avoid contamination of non-target land, water or irrigation ditches. Do not use Lontrel XC Herbicide in the following areas: standing or flowing water; the inner banks or bottoms of irrigation ditches; in areas where surface water can run off to adjacent croplands either planted or to be planted to sensitive crops.

Crop Rotation
Fields previously treated with Lontrel XC Herbicide can be seeded the following year to wheat, oats, barley, rye (not underseeded with legumes, clover or alfalfa), forage grasses, flax, canola, mustard, soybeans, field peas, sugar beets or it can be summerfallowed.

Western Canada: Fields previously treated with Lontrel XC up to 0.17 L/ha can be seeded after a minimum of 10 months to soybeans or field peas. Very dry soil conditions following application can result in a risk of injury to soybeans or field peas grown in rotation. If severe drought conditions are experienced during the months of June to August inclusive (less than 14 cm rainfall) in the year of application, delay seeding soybeans and field peas an additional 12 months (total 22 months following application).

Eastern Canada: Fields previously treated with Lontrel XC up to 0.25 L/ha can be seeded after a minimum of 10 months to soybeans and field peas. Very dry soil conditions following application can result in a risk of injury to soybeans or field peas grown in rotation. If severe drought conditions (less than 38 cm rainfall in the 10 months following application) are experienced in the year of application, delay seeding soybeans and 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 soybeans or field peas following drought conditions in the previous year.

Do not seed to crops other than those listed above in the calendar year following treatment.

Tank Mixtures
In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include, but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact Dow AgroSciences Canada Inc at 1-800-667-3852 or www.corteva.ca for information before mixing any pesticide or fertilizer that is not specifically recommended on this label. The user assumes the risk of losses that result from the use of tank mixes that do not appear on this label or that are not specifically recommended by Dow AgroSciences Canada Inc.

When Lontrel XC Herbicide is applied as a tank-mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.

Grazing and Harvesting for Feed
For field corn, do not allow livestock to graze treated areas or harvest treated field corn for silage as feed within 40 days after last treatment.

For all other crops on the label, there are no restrictions on the grazing of crops or forages treated with Lontrel XC Herbicide. If necessary, treated areas may be grazed immediately following application.

Manure and Straw
Residues of the herbicide occurring in the straw may be harmful to susceptible plants; therefore, do not use straw or crop residue from treated crops for composting or mulching susceptible broadleaved crops. If the straw or crop residue is used for animal bedding or feed, return the manure to fields to be planted to clopyralid tolerant crops such as wheat, barley, oats, rye, forage grasses, canola or flax. Do not grow susceptible crops such as peas, beans, lentils, potatoes, sunflowers or other sensitive crops on land which has been mulched with straw containing Lontrel XC Herbicide residues within the last 12 months.

SPRAY EQUIPMENT AND CONTAINER PRECAUTIONS
Apply only when the potential for drift to areas of human habitation or areas of human activity (such as houses, cottages, schools and recreational areas) is minimal. Take into consideration wind speed, wind direction, temperature inversions, and application equipment sprayer settings.

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) medium classification. Boom height must be 60 cm or less above the crop or ground.

DO NOT apply by aerial application equipment

To Reduce Spray Drift

- Use nozzles that deliver higher volumes and coarser droplets.
- Use low pressures (200 to 275 kPa).
- Use 100 to 200 L/ha of spray solution.
- Spray when the wind velocity is 15 km/hr or less.

Sprayer clean-out

To avoid injury to desirable plants, thoroughly clean equipment used to apply this product before re-use or using it to apply other chemicals.

1. Immediately after spraying, completely drain the sprayer tank. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.
2. First rinse:
   - Spray the inside of tank with clean water and fill the sprayer with at least one tenth of the spray tank volume.
   - Agitate and circulate for 15 minutes, and flush through booms and hoses.
   - Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles.
   - Drain tank completely.
3. Second rinse:
   - Fill the tank with clean water.
   - Add All Clear Spray Tank Decontaminator, or Clean-Out Spray Tank Cleaner, or 1 L of household ammonia (containing a minimum of 3 % ammonia) per 100 L of water, or similar tank cleaning agent as per manufacturer's recommendations while filling the tank with clean water.
   - Agitate and then flush the boom and hoses with the cleaning solution. Top up with water making sure the tank is completely full. Allow to stand for 15 minutes with agitation. Flush the solution out of the spray tank through the spray booms. Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles.
   - If possible, let the solution stand in the sprayer tank and booms for an extended period of time, overnight if possible.
   - After flushing the boom and hoses, drain tank completely.
   - Remove nozzles and screens and clean separately with a cleaning agent or an ammonia solution (100 mL in 10 L water).
4. Third rinse:
   - Rinse the tank with clean water and flush through the boom and hoses using at least one tenth of the spray tank volume.
   - Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles.
   - Drain tank completely.

Caution: Do not use ammonia with chlorine bleach. Using ammonia with chlorine bleach will release a gas with a musty chlorine odour which may cause eye, nose, throat, and lung irritation. Do not clean equipment in an enclosed area.

APPLICATION DIRECTIONS

Spray Preparation

To prepare the spray solution add about half the desired amount of water to the spray tank, then with mechanical or bypass agitation, add the recommended amount of Lontrel XC Herbicide. Mix thoroughly in the tank. Second, add the recommended tank-mix herbicide. Finally with continued agitation, add the rest of the water.

Spray Application Volume

Apply Lontrel XC Herbicide at 0.17 to 0.50 L/ha plus any other herbicide approved as a tank-mix at the recommended rate in sufficient water to ensure thorough coverage (100 to 200 L/ha of spray solution) by ground equipment only at pressures of 200 to 275 kPa. Treat when weeds are young and actively growing, when the Canada thistle is in the rosette to pre-bud stage and before the purple bud stage and volunteer alfalfa is 5-50 cm in height.

For spot spraying of weed patches, mix the required volume of Lontrel XC Herbicide in 200 L of water and apply to 1000 m^2 of weeds. Refer to the following table for the correct amount of Lontrel XC Herbicide to use:

Recommended Rate of Lontrel XC Herbicide Required Per Hectare	Volume of Lontrel XC Herbicide Required To Treat 1000 m^2
0.17 L	17 mL
0.25 L	25 mL
0.34 L	34 mL
0.50 L	50 mL

Approximate Conversions:
- 200 to 275 kPa = 30 to 40 PSI
- 100 to 200 L/ha = 10 to 20 gallons/acre
- 1 sq. metre = 1.2 sq. yards
- 1 L/ha = 14 fl. oz./acre

DIRECTIONS FOR USE – Lontrel XC Herbicide Applied Alone

CROPLAND AND NON-CROP FARMLAND AREAS

Weeds Controlled	Rate♦
Canada thistle (top growth) vetch (Vicia spp.) alsike clover	0.25 L/ha
Weeds listed above plus: Canada thistle scentless chamomile wild buckwheat perennial sow-thistle (top growth) common groundsel volunteer alfalfa common ragweed sheep sorrel (suppression) ox-eye daisy (suppression) kudzu (for short term suppression of top growth)	0.34 L/ha
Weeds listed above plus: Canada thistle (season-long control of top growth with a reduction in population in the following year) kudzu (for up to season long suppression of top growth)	0.50 L/ha

♦ Refer to individual crop sections below for appropriate use rate.

Weed Stages at Application
Applications of Lontrel XC Herbicide should be made when Canada thistle, perennial sow-thistle and scentless chamomile are in the rosette to pre-bud stage of growth. Best results are obtained when Canada thistle is actively growing and soil moisture is adequate for rapid growth. Under dry soil conditions and poor growing conditions, control of Canada thistle may be severely reduced. Applications of Lontrel XC Herbicide made after the Canada thistle flower has reached the purple bud stage will not provide satisfactory control.

Control of Canada Thistle
For in crop control of top growth of Canada thistle apply Lontrel XC Herbicide at the rate of 0.25 L/ha. This will suppress top growth of Canada thistle for 6 to 8 weeks. Some regrowth may occur by the end of the season but this will not interfere with the harvesting of the crop.

For season long control of top growth of Canada thistle apply Lontrel XC Herbicide at the rate of 0.34 L/ha. This rate will generally provide season long control of Canada thistle. Not all rhizomes will be killed and some regrowth may occur by the end of the growing season.

For season long control of top growth, with a reduction of Canada thistle population in the following year, apply Lontrel XC Herbicide at the rate of 0.50 L/ha. This rate will provide season long control of Canada thistle and suppression into the following season, resulting in a reduction of the total number of Canada thistle shoots in the treated area.

Kudzu
In farmland non-crop areas, e.g., storage areas, farm buildings, fence rows, repeat annual applications in a minimum spray volume of 200 L/ha are required to suppress this vine due to regrowth from tubers and crowns and new growth from dormant seed in response to soil disturbance. Repeat annual applications in a minimum of 100 L water/ha may be required in cultivated fields, including summerfallow, where kudzu seed is known to be present. Application may be made by means of a backpack or hand held sprayer for small infestations.

CANOLA (Western Canada Only)
For use on Polish and Argentine varieties, including canola. Lontrel XC Herbicide should be diluted with water and applied at the 2 to 6 leaf stage of the crop to effectively control Canada thistle, scentless chamomile, common groundsel, wild buckwheat, the top growth of perennial sow-thistle and volunteer alfalfa. For specific directions for control of Canada thistle only refer to the section: Control of Canada thistle.

Tank-mix Combinations in Canola
REFER TO THE PRODUCT LABELS OF THESE HERBICIDES FOR A LIST OF OTHER WEEDS CONTROLLED, RATES (IF NOT LISTED IN THE TABLE BELOW) AND TIMINGS OF APPLICATION, WATER VOLUMES AND USE PRECAUTIONS.

Herbicide Tank-Mix Partner	Rate Lontrel XC Herbicide	Rate Tank-Mix Partner	Additional Weeds Controlled
Poast Ultra	0.25 - 0.50 L/ha	0.32 - 0.47 L/ha plus Merge Adjuvant 0.75-1.0 L/ha	annual grass weeds, Canada thistle
Venture L Herbicide	0.25 – 0.50 L/ha	0.6 - 2.0 L/ha	annual grass weeds, Canada thistle

Select	0.25 - 0.50 L/ha	0.19 L/ha plus Amigo at 0.5% v/v	Canada thistle♦♦♦, wild buckwheat♦♦♦♦, wild oats, green foxtail, volunteer barley, volunteer wheat, and volunteer oats
Odyssey WDG♦	0.25 - 0.34 L/ha	29 - 43 g/ha	Canada thistle (Lontrel XC Herbicide at 0.25 L/ha will provide top growth control of Canada thistle for 6-8 weeks, while the 0.34 L/ha rate will provide season long control of top growth)
VP480™ ♦♦ Roundup Transorb HC Liquid ♦♦ Roundup WeatherMAX With Transorb 2 Technology♦♦	0.17 L/ha	0.94 L/ha 0.83 L/ha 0.83 L/ha	For rates and timing of application for annual grass and broadleaf weeds please see tank-mix partner label. Weeds controlled season long: Canada thistle (season-long top growth), dandelions <15 cm diameter (season-long top growth), dandelions >15 cm diameter (suppression), perennial sowthistle (season-long top growth), wild buck wheat

♦ Clearfield canola varieties only – apply to Clearfield canola when in the 2 to 6 leaf stage and Canada thistle is actively growing.
♦♦ Glyphosate-tolerant canola varieties only – apply to canola when in the 2 to 6 leaf stage. Use 100 L/ha water.
♦♦♦Canada thistle – 0.25 L Lontrel XC Herbicide/ha top growth control to 6-8 weeks, 0.34 L Lontrel XC Herbicide/ha season-long control, 0.50 L Lontrel XC Herbicide/ha control into following year
♦♦♦♦Wild buckwheat – 0.34 L Lontrel XC Herbicide/ha for season-long control

Tank-Mix Instructions
Note 1: When tank mixing water soluble formulations such as Lontrel XC Herbicide with emulsifiable concentrates such as Poast Ultra, Fusion, and Select herbicides, first add the Lontrel XC Herbicide to the spray tank. Once it is half filled with water, add the emulsifiable concentrate as the remaining water is put into the spray tank.
Note 2: If the sprayer has been previously used to apply herbicides which contain 2,4-D or MCPA herbicides, it is imperative that the spray equipment be thoroughly cleaned before Lontrel XC Herbicide is mixed in the spray tank. Trace contamination of the spray solution with these herbicides will result in damage to the canola.
Note 3: Use 100 L/Ha of water. Use a 50 mesh (or coarser) filter screen. Fill the spray tank three-quarters full with water. Add the required amount of Odyssey WDG herbicide soluble bag(s) directly into the sprayer through the tank opening. Agitate for at least ten minutes to dissolve the herbicide. After the herbicide is dissolved, use a separate calibrated measuring device to add the required amount of Lontrel XC Herbicide while agitating the spray solution. After the Lontrel XC Herbicide is dissolved, continue agitation and add the required amount of Merge adjuvant or non-ionic surfactant plus fertilizer. If excess foaming occurs, a silicone anti-foaming agent may be added (e.g. Halt). Complete filling the tank to the desired level with water. If agitation is stopped for more than 5 minutes, re-suspend spray solution by full agitation prior to commencing spraying again. Between loads of Odyssey WDG herbicide, check in-line and nozzle screens and rinse and clean if necessary. Upon completion of spraying Odyssey WDG herbicide, thoroughly flush tank, boom, hoses and in-line and nozzle screens with clean water to avoid possible injury to other crops.

FIELD CORN (glyphosate tolerant - for grain, silage or grazing*)

Apply Lontrel XC alone or in a tank-mix (see tank-mix table) as a broadcast application when field corn is at the spike to 8 leaf stage of growth (V8).

Apply Lontrel XC alone at 0.25 L/ha, or at 0.17 L/ha in tank mix as follows.

Tank-mix Combinations in Field Corn
REFER TO THE PRODUCT LABELS OF THESE HERBICIDES FOR A LIST OF OTHER WEEDS CONTROLLED, RATES (IF NOT LISTED IN THE TABLE BELOW) AND TIMINGS OF APPLICATION, WATER VOLUMES AND USE PRECAUTIONS.

Herbicide Tank-Mix Partner	Rate Lontrel XC Herbicide	Rate Tank-Mix Partner	Additional Weeds Controlled
VP480™	0.17 L/ha	0.94 L/ha	For rates and timing of application for annual grass and broadleaf weeds please see tank-mix partner label. Weeds controlled season long: Canada thistle (season-long top growth), dandelions <15 cm diameter (season-long top growth), dandelions >15 cm diameter (suppression), perennial sowthistle (season-long top growth), wild buck wheat
Roundup Transorb HC Liquid		0.83 L/ha	
Roundup WeatherMAX With Transorb 2 Technology		0.83 L/ha	

* Do not apply to sweet corn, seed corn or popcorn.

FLAX, Including Low Linolenic Acid Varieties
(Western Canada Only)
For use in flax, Lontrel XC Herbicide should be applied when the flax is 5 to 10 cm high and the weeds are actively growing. Use Lontrel XC Herbicide at 0.34 to 0.50 L/ha to control Canada thistle, common groundsel, scentless chamomile, wild buckwheat, perennial sow-thistle (top growth) and volunteer alfalfa.

The 0.50 L/ha rate will extend control of Canada thistle into the following year.

Tank-Mix Combinations in Flax
REFER TO THE PRODUCT LABELS OF THESE HERBICIDES FOR A LIST OF OTHER WEEDS CONTROLLED, RATES (IF NOT LISTED IN THE TABLE BELOW) AND TIMINGS OF APPLICATION, WATER VOLUMES AND USE PRECAUTIONS.

Herbicide Tank-Mix Partner	Rate Lontrel XC Herbicide	Rate Tank-Mix Partner	Additional Weeds Controlled
MCPA Ester or MCPA Amine	0.25 L/ha	420 - 560 g a.e./ha	Canada thistle (top growth control), shepherd's-purse, common groundsel, common ragweed, cocklebur, dandelion, stinkweed, lamb's-quarters tartary buckwheat, scentless chamomile, wild buckwheat, wild mustard, volunteer canola, redroot pigweed♦, perennial sow-thistle (top growth), volunteer alfalfa
MCPA Amine (500 g ae/L) MCPA Ester (500 g ae/L)		0.84 - 1.12 L/ha	
MCPA Ester (600 g ae/L)		0.7 - 0.93 L/ha	

Poast Ultra	0.25 - 0.50 L/ha	0.32 - 0.47 L/ha plus Merge Adjuvant 0.75-1.0 L/ha	annual grass weeds, Canada thistle
Poast Ultra plus MCPA Ester	0.25 - 0.50 L/ha	0.32 - 0.47 L/ha plus Merge Adjuvant 0.75-1.0 L/ha plus 420 - 560 g ai/ha	broadleaved, annual grasses, and certain perennial broadleaved weeds
Select	0.34 - 0.50 L/ha	0.19 L/ha + Amigo Adjuvant at 0.5% v/v	Canada thistle♦♦, wild oats, green foxtail, volunteer barley, volunteer wheat, volunteer oats, and wild buckwheat
Select plus MCPA Ester	0.13 - 0.17 L/ha	0.19 L/ha plus Amigo Adjuvant at 0.5 v/v plus 420 - 560 g a.e./ha	Low rate: 0.13 L/ha Lontrel XC Herbicide + 420 g a.e./ha MCPA Ester – Canada thistle (low infestation), wild oats, green foxtail, volunteer cereals (wheat, barley, oats). High rate: 0.17 L/ha Lontrel XC Herbicide + 560 g a.e./ha MCPA Ester – Canada thistle (medium to high infestation), wild oats, green foxtail, red root pigweed, smartweed, sow-thistle (annual and perennial) (top growth), volunteer cereals (wheat, barley, oats), volunteer canola, and wild buckwheat

♦ Refer to MCPA herbicide label for rates and control rating.
♦♦Canada thistle – 0.34 L Lontrel XC Herbicide/ha for season–long control, 0.50 L Lontrel XC Herbicide/ha control extended into following year.

Tank-Mix Instructions
Note 1: Rates of MCPA ester herbicide of 420 g active ingredient/ha or higher, or MCPA amine herbicide of 490 g active ingredient/ha or higher may cause some delay in maturity with resulting yield reduction.
Note 2: Where contact herbicides such as bromoxynil herbicide are used (which damage the leaves of the Canada thistle) Lontrel XC Herbicide should be applied 7 to 14 days prior or after an interval of 14 days. This allows the Canada thistle to recover and resume growth.
Note 3: Add the correct amount of Lontrel XC Herbicide to spray tank half filled with water and agitate. Add the correct amount of Poast Ultra herbicide and continue to agitate. Add the correct amount of Merge adjuvant along with the remaining amount of water necessary to fill the spray tank. Continue agitation.
Note 4: Add the correct amount of Lontrel XC Herbicide, then MCPA herbicide to half-filled sprayer and agitate for 2 to 3 minutes. Next, add Poast Ultra herbicide, and follow with the addition of Merge adjuvant with the remaining water to the required spray volume. Continuously agitate at all times.

OATS (Western Canada Only), WHEAT (SPRING & WINTER) AND BARLEY (SPRING)
Lontrel XC Herbicide may be used on wheat (spring & winter), barley (spring) and oats to control Canada thistle, common groundsel, perennial sow-thistle (top growth control), wild buckwheat, scentless chamomile and volunteer alfalfa. Lontrel XC Herbicide should be applied when the wheat, barley or oats are between the 3 leaf to flag leaf emergence stages of growth and weeds are actively growing. Apply to winter wheat in the spring from the 3 tiller stage to just before the flag leaf stage. Since Lontrel XC Herbicide damages legumes such as clover and alfalfa, these should not be undersown into the cereals. See Grazing and Harvesting for Feed Section of label for grazing/harvesting intervals for immature crops.

Rates of Use
Lontrel XC Herbicide may be used alone in oats (western Canada only), spring wheat, and spring barley for Canada thistle control.

Use 0.25 L/ha of Lontrel XC Herbicide for the control of top growth of Canada thistle. This rate will suppress top growth of Canada thistle for 6 to 8 weeks. Some regrowth may occur by the end of the season but will not interfere with the harvesting of the crop.

Use 0.34 L/ha of Lontrel XC Herbicide for season long control of Canada thistle.

Tank-Mix Combinations Oats (Western Canada Only), Spring & Winter Wheat and Barley
REFER TO THE PRODUCT LABELS OF THESE HERBICIDES FOR A LIST OF OTHER WEEDS CONTROLLED, RATES (IF NOT LISTED IN THE TABLE BELOW) AND TIMINGS OF APPLICATION, WATER VOLUMES AND USE PRECAUTIONS.

The following tank mixtures will control both annual and perennial broadleaved weeds listed on the tank-mix partner labels and in addition the weeds named in the Comments column below

Herbicide Tank-Mix Partner	Crops Registered	Lontrel XC Herbicide	Tank-Mix Partner	Additional Weeds Controlled
2,4-D Ester or 2,4-D Amine 2,4-D Amine (470 g ae/L) 2,4-D Amine (564 g ae/L) 2,4-D Ester (564 g a.e./L) 2,4-D Ester (660 g ae/L)	spring wheat durum wheat spring barley	0.17 - 0.25 L/ha	420 - 560 g a.e./ha 0.9 - 1.2 L/ha 0.75 - 1.0 L/ha 0.64 – 0.85 L/ha	Canada thistle (Lontrel XC Herbicide at 0.17 L/ha will control Canada thistle for 6 to 8 weeks and at 0.25 L/ha rate will provide season long control) DO NOT USE ON OATS
MCPA Ester or MCPA Amine MCPA Amine (500 g ae/L) MCPA Ester (500 g ae/L) MCPA Ester (600 g ae/L)	spring wheat durum wheat spring barley oats	0.17 - 0.25 L/ha	420 - 560 g ae/ha 0.84 - 1.12 L/ha 0.7 – 0.93 L/ha	Canada thistle (Lontrel XC Herbicide at 0.17 L/ha will control Canada thistle for 6 to 8 weeks and at 0.25 L/ha rate will provide season long control)
MCPA Ester plus Liquid Achieve	spring wheat durum wheat winter wheat spring barley	0.13 - 0.17 L/ha	420 - 560 g ae/ha plus 0.5 L/ha plus Turbocharge 0.5% v/v	green foxtail, yellow foxtail, barnyard grass, Persian darnel, wild oats DO NOT USE ON OATS

MCPA Ester plus Assert 300 SC	spring wheat durum wheat spring barley	0.13 - 0.17 L/ha	420 - 560 g ae/ha plus 1.3 - 1.6 L/ha	wild oats: use 1.3 L/ha of Assert 300 SC on 1-3 leaf wild oats and 1.6 L/ha of Assert 300 SC on 4 leaf wild oats. DO NOT USE ON OATS
MCPA Ester plus Axial 100 EC	spring wheat spring barley	0.13 - 0.17 L/ha	420 - 560 g ae/ha plus 600 mL/ha plus Adigor 700 mL/ha	wild oats, green foxtail, yellow foxtail, volunteer oats, volunteer canary seed, proso millet DO NOT USE ON OATS
MCPA Ester plus Everest Solupak 70DF	spring wheat	0.13 - 0.17 L/ha	420 - 560 g ae/ha plus 43 g/ha	green foxtail, wild oats DO NOT USE ON OATS
MCPA Ester plus Horizon 240 EC	spring wheat durum wheat	0.13 - 0.17 L/ha	420 - 560 g ae/ha plus 230 - 290 mL/ha + Score Adjuvant 0.8 - 1.0% v/v	wild oats, green & yellow foxtail, volunteer (tame) oats, barnyard grass, volunteer canary seed at 230 mL/ha Horizon 240 EC plus 0.8% v/v Score Adjuvant above weeds plus Persian darnel at 290 mL/ha Horizon 240 EC plus 1.0% v/v Score Adjuvant DO NOT USE ON OATS
MCPA Ester plus Puma 120 Super	spring wheat durum wheat spring barley	0.13 - 0.17 L/ha	420 - 560 g ae/ha plus 385 - 770 mL/ha	green foxtail at 385 mL/ha of Puma 120 Super green foxtail, wild oats, barnyard grass at 770 mL/ha of Puma 120 Super DO NOT USE ON OATS
Florasulam SC plus MCPA Ester	spring wheat durum wheat winter wheat spring barley oats	0.13 L/ha	0.1 L/ha plus 420 g ae/ha	Canada thistle, volunteer canola♦, common chickweed, cleavers, dandelions (seedlings; over-wintered rosettes <15 cm), flixweed (spring rosettes only), hempnettle, lamb's quarters, pigweed, redroot, shepherd's purse, smartweed, perennial sowthistle (top growth only)♦♦, annual sowthistle, stinkweed, stork's-bill, wild buckwheat, and wild mustard, and suppression of dandelion (over-wintered rosettes >15 cm; mature plants) ♦Including Roundup Ready, Liberty-Link and Smart herbicide-tolerant canola varieties ♦♦Control not observed until a minimum of 40 days after treatment

Florasulam SC plus MCPA Ester plus Assert 300 SC	spring wheat durum wheat spring barley	0.13 L/ha	0.1 L/ha plus 420 g ae/ha +/- 1.6 L/ha	wild oats Use 1.3 L/ha of Assert 300 SC on 1-3 leaf wild oats and 1.6 L/ha of Assert 300 SC on 4 leaf wild oats DO NOT USE ON OATS
Florasulam SC plus MCPA Ester plus Everest Solupak 70DF	spring wheat durum wheat	0.13 L/ha	0.1 L/ha plus 420 g ae/ha plus 43 g/ha plus Agral 90 or AgSurf 0.25% v/v	green foxtail, wild oats DO NOT USE ON OATS
Florasulam SC Plus MCPA Ester plus Axial 100 EC	spring wheat spring barley	0.13 L/ha	0.1 L/ha plus 420 g ae/ha plus 600 mL/ha plus Adigor 700 mL/ha	wild oats, green foxtail♦, yellow foxtail, volunteer oats, volunteer canary seed, proso millet, and barnyard grass♦♦ ♦Suppression only of green foxtail. ♦♦A reduction in barnyard grass control may be observed with this tank-mix combination. DO NOT USE ON OATS
Starane™ II plus MCPA Ester	spring wheat durum wheat winter wheat spring barley	0.13 L/ha or 0.17 L/ha	0.31 L/ha plus 420 g ae/ha 0.41 L/ha plus 560 g ae/ha	Low rate: cleavers (1-4 whorls), Canada thistle (low infestations), volunteer flax (1-12 cm), flixweed (spring seedling 2-4 lf), kochia ♦♦♦, lamb's-quarters, wild mustard, shepherd's purse, stinkweed, volunteer sunflower and suppression of stork's-bill (1-8 leaf) High rate: cleavers (1-4 whorls), flixweed♦♦, kochia♦♦♦, lamb's quarters, shepherd's-purse, stinkweed, stork's bill (1-8 leaf), sunflower (volunteer),volunteer flax (1-12 cm), wild mustard, tartary, buckwheat, wild buckwheat (1-4 leaf), Canada thistle ♦ (medium to high infestations), volunteer canola, dandelion ♦♦ common groundsel, round-leaved mallow (1-6 leaf), red-root pigweed, Russian pigweed, scentless chamomile, smartweed, annual sowthistle, perennial sowthistle♦, and suppression of common chickweed ♦♦♦, hemp-nettle (2-6 leaf stage) ♦ Season long control, with some regrowth in the fall (top growth control). ♦♦ spring rosettes only. ♦♦♦ Including biotypes resistant to Group 2 herbicides that inhibit the ALS enzyme. DO NOT USE ON OATS

Starane II Plus MCPA Ester plus Liquid Achieve	spring wheat durum wheat winter wheat spring barley	0.13 L/ha or 0.17 L/ha	0.31 L/ha plus 420 g ae/ha plus 0.5 L/ha or 0.41 L/ha plus 560 g ae/ha plus 0.5 L/ha plus Turbocharge 0.5% v/v	plus green foxtail, wild oats DO NOT USE ON OATS
Starane II plus MCPA Ester plus Assert 300 SC	spring wheat durum wheat spring barley	0.13 L/ha or 0.17 L/ha	0.31 L/ha plus 420 g ae/ha plus 1.3 - 1.6 L/ha or 0.41 L/ha plus 560 g a.e./ha plus 1.3 - 1.6 L/ha	wild oats Use 1.3 L/ha of Assert 300 SC on 3-4 leaf wild oats and 1.6 L/ha of Assert 300 SC on 4 leaf wild oats DO NOT USE ON OATS
Starane II plus MCPA Ester plus Everest Solupak 70DF	spring wheat durum wheat	0.13 L/ha or 0.17 L/ha	0.31 L/ha plus 420 g ae/ha plus 43 g/ha or 0.41 L/ha plus 560 g ae/ha plus 43 g/ha	green foxtail, wild oats DO NOT USE ON OATS

Starane II plus MCPA Ester plus Horizon 240 EC	spring wheat durum wheat	0.13 L/ha or 0.17 L/ha	0.31 L/ha plus 420 g ae/ha plus 230 mL/ha + Score Adjuvant 0.8% v/v or 0.41 L/ha plus 560 g ae/ha plus 230 mL/ha + Score Adjuvant 0.8% v/v	green foxtail, wild oats DO NOT USE ON OATS
Starane II plus MCPA Ester plus Puma 120 Super	spring wheat durum wheat spring barley	0.13 L/ha or 0.17 L/ha	0.31 L/ha plus 420 g ae/ha plus 385 - 770 mL/ha or 0.41 L/ha plus 560 g ae/ha plus 385 - 770 mL/ha	green foxtail at 385 mL/ha of Puma 120 Super green foxtail, wild oats, and barnyard grass at 770 mL/ha of Puma 120 Super DO NOT USE ON OATS
Refine Extra plus 2,4-D Ester or MCPA Ester	spring wheat winter wheat spring barley (Western Canada only)	0.13 L/ha	20 g/ha + Agral 90 Adjuvant 0.2% v/v plus 420 g ae/ha	perennial sow thistle, wild buckwheat, volunteer canola, wild mustard, lady's thumb and stinkweed, while providing seasonal control of Canada thistle and suppression of cleavers DO NOT USE ON OATS

Tank-Mix Instructions
Note 1: If a tank-mix partner requires the addition of an adjuvant add the recommended adjuvant and dilution rate to the tank-mix.
Note 2: When tank mixing with Refine Extra, mix Refine Extra herbicide first in fresh water, then add the required amount of Lontrel XC Herbicide followed by MCPA or 2,4-D herbicides. Add the surfactant last.

SUMMERFALLOW AND NON-CROP FARMLAND
Lontrel XC Herbicide may be used on summerfallow (one application per year) and non-crop farmland (around farm buildings, storage areas, fence rows, etc.) at 0.50 L/ha for the control of Canada thistle, scentless chamomile, common groundsel, wild buckwheat, the top growth of perennial sow-thistle and volunteer alfalfa. The Canada thistle plants should be between the rosette and the early bud stage and actively growing at the time of spraying.

SEEDLING AND ESTABLISHED GRASSES FOR SEED PRODUCTION AND FORAGE (WESTERN CANADA ONLY)
Including Kentucky bluegrass, smooth bromegrass, reed canary grass, creeping red fescue, meadow fescue, tall fescue, meadow foxtail, orchard grass, altai wild ryegrass, Russian wild ryegrass, timothy, crested wheatgrass, intermediate wheatgrass, slender wheatgrass and streambank wheatgrass for forage and seed production and tall wheatgrass for forage only: For control of the weeds listed on the label plus alsike clover, apply Lontrel XC Herbicide at the rate of 0.25 to 0.50 L/ha in 110 to 220 L/ha of water. Make one application per season by ground sprayer. For seedling grasses, apply at the 2 to 4 leaf stage. For established grasses, apply at the shot-blade stage, or in the fall after harvest or in early spring. See Grazing and Harvesting for Feed Section.

BALSAM FIR CHRISTMAS TREE PLANTATIONS
For the control of vetch (*Vicia* spp.) apply Lontrel XC Herbicide at 0.25 L/ha in 150 to 200 L/ha of water as a directed foliar application using a hydraulic sprayer. Best control is obtained when vetch stems are 10 to 15 cm long and prior to the vetch climbing into a tree crown. Avoid contact with the upper two thirds of the tree crown. Do not use on seedbeds, transplants or any over-the-top applications.

SUGAR BEETS
For Canada thistle control apply Lontrel XC Herbicide at 0.34 to 0.50 L/ha with ground equipment as a foliar spray either broadcast or in a band over the row. When applied in the band, the amount of Lontrel XC Herbicide should be reduced proportional to the band width. Lontrel XC Herbicide should be applied when sugarbeets are in the cotyledon to 8 leaf stage. For the most effective control of Canada thistle, apply Lontrel XC Herbicide as a broadcast treatment to the entire infested area. Do not apply within 90 days of harvest.

RUTABAGA
For control of common ragweed, apply Lontrel XC Herbicide with a boom sprayer at the rate of 0.34 L/ha in approximately 200 to 300 L/ha of water. Apply as a postemergent spray when ragweed plants are 5 to 10 cm tall. Application to larger ragweed plants will result in reduced weed control. Make only one application per season. Preharvest interval is 83 days.

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 on this label.

DIRECTIONS FOR USE

HIGHBUSH BLUEBERRY: Make one application per year, post emergent for the control of vetch and red and white clover. Apply as a directed spray treatment (ground equipment) targeting weeds and away from the plants (avoid contact with foliage or woody portions to reduce the risk of crop injury) or as a spot treatment under the canopy of highbush blueberry plants. Plants are more sensitive to Lontrel XC applied in the spring prior to bloom, before and/or during the crop's annual flush of growth, than after bloom. Do not apply Lontrel XC from one week prior to bloom until one week after bloom. Apply at a rate of 0.25 L/ha for vetch and 0.50 L/ha for red and white clover. The Pre-harvest interval is 45 days.

CANOLA - ONTARIO ONLY: To be used on Canola in Ontario on the following NATIONALLY REGISTERED in Canada spring canola cultivars: Cyclone, Ebony, Jewel, 46A65 and Hyola 401.

Weeds Controlled	Rate	For Optimum Results
Canada thistle, scentless chamomile, wild buckwheat, perennial sow-thistle (top growth), common groundsel	0.25 L/ha to 0.34 L/ha	1. Treat when weeds are actively growing. 2. Use 100 to 200 L/ha spray solution for uniform coverage

Make one application per season; post emergent. Apply at the 2-6 leaf stage of canola, when weeds are actively growing. Apply to Canada thistle at the rosette to pre-bud stage.

BEARING AND NON-BEARING APPLES: To be used as a spot treatment on bearing and non-bearing apples for control of perennial vetch species. When using a hand gun or backpack sprayer to treat small infestations, apply Lontrel XC herbicide at a rate of 34 ml per 1000 square metre area in 200 L of water when vetch species are in the early flowering stage. When applying with a boom sprayer to treat larger infestations, apply 340 ml of Lontrel XC Herbicide per hectare in 150-200 L water. Avoid contact of the spray with the tree limbs. For best results apply in early spring. Allow at least 30 days between weed treatment application and harvest.

CABBAGE, CAULIFLOWER, BROCCOLI AND KOHLRABI (ALL TRANSPLANTED), NAPPA CABBAGE (TRANSPLANTED AND SEEDED), CHINESE RADISH, MUSTARD CABBAGE AND CHINESE BROCCOLI (ALL SEEDED). Make one application per year to control ragweed, vetch, common groundsel, Canada thistle and for suppression of sheep sorrel. Apply post planting as a ground application only.

Application rate: Apply at a rate of 0.34 L/ha in 300 L water/ha.
The pre-harvest interval (PHI) is 30 days.

CRANBERRY: Make one-two applications per year, for the control of vetch. Apply with wiper-type application equipment.

Wipe treatments may be applied as a spot application. The treatment may be applied using equipment such as a hockey stick applicator**. The treatment solution should be wiped onto weed foliage which extends above the cranberry canopy.** Wiper applications may be made in the fall at least 2 weeks after harvest and after the vines have attained their winter dormancy colour, and in the spring prior to bud-break. Wiper application treatments may also be applied following cranberry bud-break (first emergence

(1 to 2 mm) of terminal meristem) to control late emerging weeds or weeds which escaped earlier control measures. **Contact of the treatment solution with cranberry foliage after bud break should be avoided since it will result in plant injury.**

Application rate: Apply a 2% solution of Lontrel XC Herbicide in water (12 mL product/L water).
The preharvest interval is 60 days.

TURNIP
For control of labeled weeds, apply Lontrel XC Herbicide with a boom sprayer at the rate of 0.25 -0.34 L/ha in approximately 200 to 300 L/ha of water. Apply as a postemergent spray when weeds are young and actively growing. Make only one application per season. Preharvest interval for turnip roots is 30 days, for turnip greens is 15 days.

WEED CONTROL IN SHELTERBELTS: For control of Canada thistle in shelterbelts of villosa lilac, acute willow, Colorado spruce, white spruce, buffaloberry and chokecherry. Make one application per year. Apply to Canada thistle at the rosette to pre-bud stage, post emergent, ground application only.

Application rate: Apply at a rate of 0.50 L/ha.

STRAWBERRY (Renovation)
For control of tufted vetch and Canada thistle and suppression of sheep sorrel and ox-eye daisy, apply Lontrel XC Herbicide at the rate of 0.34 to 0.50 L/ha. Apply as a broadcast application with a boom sprayer calibrated to deliver a total volume of 150 to 200 L/ha. For Canada thistle control, refer to the Control of Canada Thistle section for rate selection. For control of tufted vetch apply at the 0.34 L/ha rate. For sheep sorrel and ox-eye daisy, apply at the 0.50 L/ha rate. Apply as the single treatment immediately after harvest but before mowing. Wait at least 7 to 10 days after Lontrel XC Herbicide application before mowing. Do not apply Lontrel XC Herbicide after mid-August because of its possible effects on runner development and flower bud formation. Later applications of Lontrel XC Herbicide may cause crop damage resulting in reduced yields in the season following treatment.

Apply Lontrel XC Herbicide only as a summer renovation treatment.

Do not apply Lontrel XC Herbicide more than once per year.

Early strawberry varieties such as Annapolis or Veestar may be more susceptible to injury. Certain environmental stresses such as drought, flooding or severe overwintering conditions may increase the risk of injury from Lontrel XC Herbicide.

CONTROL OF TUFTED VETCH IN LOWBUSH BLUEBERRY IN EASTERN CANADA ONLY
Apply Lontrel XC Herbicide to control tufted vetch in lowbush blueberry. **FOR SPOT APPLICATION ONLY.** When using a hand gun or backpack sprayer to treat small infestations, apply Lontrel XC herbicide at a rate of 25 ml per 1000 square metre area in 200 L of water. When applying with a boom sprayer to treat larger infestations, apply 250 ml of Lontrel XC Herbicide per hectare in 150-200 L water. Make one application per year, in the non-bearing year (prune year). Apply in June OR when tufted vetch is in early bloom. Applications of Lontrel XC Herbicide may cause crop damage resulting in reduced yields in the season following application. The Pre-harvest interval is 10 months.

CONTROL OF CANADA THISTLE AND OTHER LABELLED WEEDS IN POPLAR SPECIES AND THEIR HYBRIDS
Apply Lontrel XC Herbicide at a rate of 0.50 L/ha to control Canada thistle and other labelled weeds in new and established short rotation intensive culture crops of poplar (*Populus*) species and their hybrids. Make one application per year. Apply to Canada thistle in the rosette to pre-bud stage. Apply by ground application only using an overall spray or as a directed spray to the base of the tree. Some leaf cupping and stem twisting may occur, but will not adversely affect growth.

WARNING: Poplar clones/hybrids vary in their tolerance to Lontrel XC Herbicide. Injury observed includes leaf injury, leaf cupping, stem twisting, height reduction and diameter reduction. As not all clones/hybrids have been tested for tolerance to Lontrel XC Herbicide, use of this product should be limited to a small area of each clone/hybrid to confirm tolerance prior to adoption as a general field practice.

POST EMERGENCE WEED CONTROL IN CONIFERS FOR FIELD PRODUCTION
For the control of labeled weeds in established conifer plantations including Balsam fir, Fraser fir, White spruce, and White pine, apply Lontrel XC Herbicide at 0.25 to 0.34 litres of product in 150 to 300 litres of water per hectare as a directed spray. Apply as banded sprays on either side of the trees contacting the bottom foliage only. Avoid contact with the upper two thirds of the tree crown. Do not use on seedbeds, transplants, or any over the top applications. Make one application per season.

Lontrel XC Herbicide has been tested on Balsam Fir, Fraser Fir, White pine and White spruce. Lontrel XC Herbicide may be applied to other non-listed conifer species, however, non-listed conifer species may vary in tolerance to Lontrel XC. The first use of Lontrel XC Herbicide applied to any non-listed conifer species should be limited to a small area to confirm tolerance of each species prior to adoption as a general field practice.

CONTROL OF BROADLEAF WEEDS INCLUDING VETCH ON STONE FRUIT CROP GROUP 12-09
For the control of broadleaf weeds including vetch, apply Lontrel XC Herbicide at the rate of 0.25 to 0.50 litres of product per hectare in 150 to 300 litres of water per hectare. When using a hand gun or backpack sprayer to treat small infestations, apply Lontrel XC Herbicide at a rate of 25 to 50 mL per 1000 square meter area in 300 L of water when vetch species are in the early flowering stage. Apply up to the early flowering stage as a spot treatment. Use the higher rate for heavy infestation or when greater residual control is required. Avoid contact of the spray with the tree limbs. For best results apply in the early spring. Do not apply within 30 days of harvest.

REFER TO THE MAIN LONTREL XC HERBICIDE LABEL FOR ADDITIONAL DETAILS AND INSTRUCTIONS, INCLUDING ROTATIONAL CROPPING RESTRICTIONS, BEFORE USING THIS PRODUCT

TRANSLINE™ IVM SYSTEM (NON-CROP USES)

FOR USE IN BRITISH COLUMBIA INTERIOR, PRAIRIE (including the Peace River Region of B.C.), CENTRAL AND ATLANTIC REGIONS OF CANADA ONLY.

Lontrel XC Herbicide may be used on the following non-crop areas: rights-of-way (hydro, railroad, communication lines, pipelines) and associated stations, industrial manufacturing sites, storage sites, vacant lots and roadsides, military bases and low maintenance rough turf areas♦. This product is not registered for use on fine turf lawns or turf grass receiving high maintenance. Apply between 0.25 to 0.50 L/ha depending on weeds present and level of Canada thistle control required. Refer to the Weeds Controlled table for appropriate application rate.

♦Low-maintenance turf that may contain a diverse mix of hardy, drought-tolerant, slow-growing and low-height turf grasses, fescues, various other taller grasses and wear-tolerant broadleaf species such as clover. Low maintenance turf areas also include those that have little or no fertilizer applications, no irrigation and only receive occasional mowing/cutting. Does not include high maintenance fine turf and turf grass.

TANK-MIX COMBINATIONS
Lontrel XC Herbicide may be tank mixed with 2,4-D Amine or Ester or MCPA Amine or Ester for control of additional broadleaf weeds on roadsides and vacant lots. Lontrel XC Herbicide may also be tank mixed with 2,4-D Amine for additional broadleaf use control on rights-of-way (hydro, railroad, communication lines, pipelines) and associated stations, industrial manufacturing sites and storage sites. Read and follow the label of each tank-mix product used for precautionary statements, directions for use, weeds controlled and any other restrictions. When tank mixing adhere to the most restrictive label limitations and precautions.

Lontrel XC Herbicide at 0.25 to 0.50 L/ha may be tank mixed with 2,4-D or MCPA Herbicides at the rate of 420 to 560 g active ingredient/ha. The tank-mix will control many weeds, including: Canada thistle, cocklebur, common ragweed, dandelion, lamb's-quarters, scentless chamomile, perennial sow-thistle, shepherd's-purse, stinkweed, tartary buckwheat, wild buckwheat and wild mustard. Apply up to the 15 cm height of annual broadleaf weeds.

RANGELAND AND GRASS PASTURE
Including Kentucky bluegrass, smooth bromegrass, reed canary grass, creeping red fescue, meadow fescue, tall fescue, meadow foxtail, orchard grass, altai wild ryegrass, Russian wild ryegrass, timothy, crested wheatgrass, intermediate wheatgrass, slender wheatgrass, streambank wheatgrass and tall wheatgrass.

For control of the weeds on the label plus alsike clover, apply Lontrel XC Herbicide at the rate of 0.25 to 0.50 L/ha in 110 to 120 L/ha of water. Make one application per season by ground sprayer. For seedling grasses, apply at the 2 to 4 leaf stage. For established grasses, apply at the shot-blade stage or in the fall after harvest or early spring. Do not apply tank mixtures containing 2,4-D or MCPA.

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 on this label.

DIRECTIONS FOR USE

FOR USE IN BRITISH COLUMBIA INTERIOR, PRAIRIE (including the Peace River Region of B.C.), CENTRAL AND ATLANTIC REGIONS OF CANADA ONLY.

CONTROL OF SPOTTED AND DIFFUSE KNAPWEED IN NON-CROPS AREAS (rights-of-way [hydro, railroad, communication lines, pipelines] and associated stations, industrial manufacturing sites, storage sites, roadsides, airports, military bases and low maintenance rough turf areas♦) AND IN RANGELAND, PASTURE AND BALSAM FIR CHRISTMAS TREE STANDS OR PLANTATIONS.

♦Low-maintenance turf that may contain a diverse mix of hardy, drought-tolerant, slow-growing and low-height turf grasses, fescues, various other taller grasses and wear-tolerant broadleaf species such as clover. Low maintenance turf areas also include those that have little or no fertilizer applications, no irrigation and only receive occasional mowing/cutting. Does not include high maintenance fine turf and turf grass.

Weeds Controlled	**Application Rate**
Spotted and Diffuse Knapweed	0.42 L/ha

Make one application per year for the control of spotted and diffuse knapweed. Apply in the spring prior to the bud stage of the weeds. Apply in 100 - 200 L water/ha. Apply to both seedling or established plants.

DIRECTIONS FOR USE

FOR USE IN EASTERN CANADA ONLY

POST EMERGENCE WEED CONTROL IN DURUM WHEAT
For the control of labelled weeds, apply Lontrel XC Herbicide at 0.25 to 0.34 L of product per hectare in 100 to 200 litres of water per hectare. Apply once during the three leaf to flag leaf stage contacting the foliage only. Pre-harvest interval is 60 days.

For the control of giant ragweed, from emergence to the five leaf stage, apply Lontrel XC Herbicide at a rate of 0.34 litres of product per hectare in 100 to 200 litres of water per hectare. Pre-harvest interval is 60 days.

REFER TO THE MAIN LONTREL XC HERBICIDE LABEL FOR ADDITIONAL DETAILS AND INSTRUCTIONS, INCLUDING ROTATIONAL CROPPING RESTRICTIONS, BEFORE USING THIS PRODUCT.

BUFFER ZONES
Spot treatments using hand-held equipment DO NOT require a buffer zone. Use of low-clearance hooded or shielded sprayers that prevent spray contact with crop, fruit or foliage DO NOT require a buffer zone.

For applications to rights-of-way, buffer zones for protection of sensitive terrestrial habitats are not required; however, the best available application strategies which minimize off-site drift, including meteorological conditions (for example, wind direction, low wind speed) and spray equipment (for example, coarse droplet sizes, minimizing height above canopy), should be used.

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, woodlots, hedgerows, riparian areas and shrublands).

Method of Application	Crop	Buffer Zones (metres) Required for the Protection of Terrestrial Habitat
field sprayer	wheat, barley, corn, oats, flax, canola, forage grasses, high-bush blueberry, low-bush blueberry, strawberry, sugar beet, rutabaga, cabbage, broccoli, cauliflower, turnip, balsam fir, Christmas tree plantations, shelterbelts, poplar and their hybrids, non-crop uses, rangeland and grass pasture	2♦
	apple and crop group 12-09 (Stone fruit)	3

♦Buffer zones for the protection of terrestrial habitats are not required for use on rights-of-way, including railroad ballast, rail and hydro rights-of-way, utility easements, roads and training grounds and firing ranges on military bases.

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the label for those tank-mix partners.

The buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site.

RESISTANCE MANAGEMENT RECOMMENDATIONS
For resistance management, Lontrel XC Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to Lontrel XC 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 Lontrel XC Herbicide or other Group 4 herbicides within a growing season (sequence) or among growing seasons 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. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as the more resistance-prone partner.

- Herbicide use should be based on an integrated weed management program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical control methods), cultural (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Monitor weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.
- 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 Dow AgroSciences Canada Inc. at 1-800-667-3852 or at www.corteva.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.

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Label Code: CN-32795-004-E
Replaces: CN-32795-003-E

Specimen Label Notes:
Add winter wheat, add corn and rotational crops soy, and peas and update sprayer clean out statement