

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN

DO NOT APPLY BY AERIAL APPLICATION EQUIPMENT

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.

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during applications within a closed cab. 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 plus glyphosate is also registered for pre-seed weed control ahead of spring wheat, durum, spring barley and oats.

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 alfalfa, spring wheat, spring barley, canola, fababeans, flax, Juncea canola, field peas, potatoes (except seed potatoes), oriental, brown and yellow mustard, soybeans, oats, sunflower or dry bean (*Phaseolus vulgaris* species including pinto, kidney and white types). 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.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.

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.

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 AERIAL APPLICATION EQUIPMENT

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

Weeds Suppressed:

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

*Light to moderate infestation (up to 150 plants/m²; 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)	lamb's-quarters*
barnyard grass (up to the 5 leaf, 2-tiller stage)	mustard, wild***
buckwheat, wild	narrow-leaved hawk's-beard (up to bolting & 30 cm in height)
canola, volunteer**	ragweed, common (up to 6-leaf stage) ****
chickweed*	redroot pigweed
cleavers (1-9 whorl stage)*	round-leaved mallow (up to the 6-leaf stage)
cow cockle	shepherd's-purse (up to bolting & 20 cm in height)
dandelion (seedlings & over-wintered rosettes up to 30 cm in diameter)	smartweed (green smartweed, lady's thumb)
flax, volunteer (up to 15 cm in height)	sow-thistle, annual (up to 4 leaf stage)
fleabane, Canada (up to 15 cm in height)****	stinkweed***
flixweed (up to 8 leaf & 8 cm in height)	stork's-bill (up to the 8-leaf stage)
hemp-nettle (1-8 leaf stage)*	velvetleaf (up to the 5-leaf stage)

Weeds Suppressed:

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

Weeds Suppressed:

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

*Including Group 2 resistant biotypes

**light to moderate infestations (up to 150 plants/m²; 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) <i>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.</i>
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)* <i>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</i>
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) <i>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</i>
Lontrel 72 or Lontrel 360 or Lontrel XC	104 g/ha or 208 mL/ha or 125 mL/ha	dandelion (seedlings, overwintered rosettes & mature plants) field horsetail (top growth) plantain (top growth)

Herbicide + MCPA Ester 600	+ 700 mL/ha (equivalent to 420 g ae/ha)	sowthistle, perennial (up to the bolting stage & 20 cm in height) sunflower, volunteer thistle, Canada (up to the bud stage) <i>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</i>
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) <i>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</i>

*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 or 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 or 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)

Apply Paradigm at a rate of 25 g/ha, mixed with a glyphosate product such as VP480 Herbicide 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. 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 at 0.94 L/ha

Weeds Controlled

Annual Broadleaf Weeds

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

Annual Grasses

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

Perennial Weeds

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

Weeds Suppressed

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

*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 at 0.94 L/ha (450 g ae/ha) in 50-100 L of water per hectare prior to planting spring wheat (including durum), spring barley or oats. 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 at 0.94 L/ha

Weeds Controlled:

Annual Broadleaf Weeds

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

Annual Grasses

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

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

*** Less than 8 cm in height

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 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 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 chem-fallow)**

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) **
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♦ 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 oats.

Fall Application

Paradigm Herbicide may be applied to stubble or chem-fallow 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, spring wheat (including durum), or oats.

BUFFER ZONES

Spot treatments using hand-held equipment do not require a buffer zone.

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

Paradigm Herbicide (Florasulam + Halauxifen-methyl)

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, oats	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.

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, 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.

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Label Code: CN-31304-018-E

Replaces: CN-31304-017-E

Label Change: Add NLHB for spring pre-seed