



Paradigm™ PRE Herbicide

with ARYLEX™ ACTIVE

GROUP	2	4	HERBICIDES
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FOR SALE FOR USE IN THE PRAIRIE PROVINCES AND THE INTERIOR OF BRITISH COLUMBIA (INCLUDING THE PEACE RIVER REGION) ONLY

Paradigm™ PRE plus glyphosate is registered for pre-seed weed control or suppression ahead of spring wheat, durum, winter wheat, spring barley and oats.

COMMERCIAL (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

Corteva Agriscience Canada Company

2450, 215-2nd Street SW

Calgary, Alberta

T2P 1M4

1-800-667-3852

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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 to agricultural crops when the potential for drift to areas of human habitation and 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 PRECAUTIONS

- TOXIC to aquatic organisms and non-target terrestrial plants. Observe spray 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 filter strip between the treated area and the edge of the water body.
- This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

STORAGE

Store this product away from food or feed. 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.

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 PRE plus glyphosate is registered for pre-seed weed control ahead of spring wheat, durum, winter wheat, spring barley and oats. Paradigm PRE 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.

Paradigm PRE is mixed with water and applied as a uniform broadcast spray by ground application. It is non-corrosive, nonflammable, and nonvolatile.

Paradigm PRE 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 PRE 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 PRE 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 PRE 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 PRECAUTIONS section of this label.

Crop Rotation

Fields previously treated with Paradigm PRE can be seeded after a minimum of 10 months to alfalfa, spring wheat, spring barley, canola, corn, 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 PRE.

Tank Mixtures

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Corteva Agriscience Canada Company at 1-800-667-3852 or www.corteva.ca for information before applying any tank mix that is not specifically recommended on this label.

When tank-mixes are permitted, read and observe all label directions, including rates and restrictions 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.

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 UNDERSEEDING 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.

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.

Aerial application

DO NOT apply using aerial application equipment

Ground Application

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

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.

PARADIGM PRE HERBICIDE PLUS GLYPHOSATE

PRIOR TO PLANTING WINTER WHEAT (IN THE FALL)

Apply Paradigm PRE at the recommended rate, 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 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)	flixweed	ragweed, common♦♦
canola, volunteer♦	hemp nettle	shepherd's purse
chickweed, common (up to 8 leaves)	lady's-thumb (up to 8 leaves)	stinkweed
cleavers (up to 9 whorls)	lamb's-quarters (up to 8 leaves)	stork's-bill (up to the 8-leaf stage)
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 (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

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

Weeds Controlled

Annual Broadleaf Weeds

alfalfa, volunteer (up to 25 cm in height)	flixweed	shepherd's purse
buckwheat, wild (up to 8 leaves)	hemp nettle	smartweed (up to 8 leaves)
canola, volunteer♦	kochia	stinkweed
chickweed, common (up to 8 leaves)	lady's-thumb (up to 8 leaves)	stork's-bill (up to the 8-leaf stage)
cleavers (up to 9 whorls)	lamb's-quarters (up to 8 leaves)	thistle, Russian
cow cockle	mustard, wild	velvetleaf (up to the 5-leaf stage)
flax, volunteer (up to 15 cm)	narrow-leaved hawk's beard♦♦	
fleabane, Canada♦♦	pigweed, redroot (up to 8 leaves)	
	ragweed, common ♦♦	

Annual Grasses

barley, volunteer	brome, downey	oats, wild
barnyard grass (up to the 5 leaf, 2-tiller stage)	foxtail, giant	Persian darnel
	foxtail, green	wheat, volunteer

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 PRE 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 PRE 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)	flixweed	ragweed, common♦♦
canola, volunteer♦	hemp nettle	shepherd's purse
chickweed, common (up to 8 leaves)	lady's-thumb (up to 8 leaves)	stinkweed
cleavers (up to 9 whorls)	lamb's-quarters (up to 8 leaves)	stork's-bill (up to the 8-leaf stage)
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 (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 PRE, 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 PRE HERBICIDE + A GLYPHOSATE PRODUCT + ADDITIONAL TOP-UP RATES OF A GLYPHOSATE PRODUCT SUCH AS VP480 HERBICIDE OR FOR BROADER SPECTRUM WEED CONTROL

Paradigm PRE Herbicide can be tank mixed with a higher rate of glyphosate for control of additional weeds listed in the tables below.

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) **

* 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 PRE, 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. 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)

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

Fall Application

Paradigm PRE 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.

SPRAY BUFFER ZONES

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

The spray 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).

Paradigm PRE Herbicide (Florasulam + Halauxifen-methyl)

Method of application	Crop	Spray 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	2

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray 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 spray buffer zones for this product that are larger than 1m can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, please note that Paradigm PRE 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 PRE 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 Corteva Agriscience Canada Company 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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Replaces: CN-31304-021-E

Specimen Notes:
Florasulam re-evaluation