

2024-04-24
2023-2762
(Container)



GF2050 Herbicide

GROUP	4	HERBICIDE
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GROUP	2	HERBICIDE
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GF2050 Herbicide is a selective herbicide for post-emergent control of annual and perennial broadleaf weeds, invasive plants and shrubs on rangeland, permanent pasture, rights-of way, industrial and other non-crop areas of Canada.

COMMERCIAL

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

ACTIVE INGREDIENT: Aminopyralid, present as potassium salt 52.50%
Metsulfuron – methyl 9.45%

Warning, contains the allergen sulfites
Wettable Granules

REGISTRATION NO. 29745 PEST CONTROL PRODUCTS ACT

CAUTION – EYE IRRITANT

NET CONTENTS: 0.1 kg - Bulk

Corteva Agriscience Canada Company

Suite 240, 115 Quarry Park Rd. SE
Calgary, AB
T2C 5G9
1-800-667-3852

TMTrademark of Corteva Agriscience and its affiliated companies.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN

May irritate eyes. Avoid contact with eyes

PERSONAL PROTECTIVE EQUIPMENT

Applicators must wear coveralls and chemical resistant gloves.

Mixers and Loaders handling concentrated product, as an extra precaution, should wear coveralls, chemical resistant gloves, goggles, and rubber boots.

Restricted Entry Interval - Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours following application on agricultural areas. For non-crop areas, do not enter or allow worker entry into treated areas until sprays have dried.

SPRAY DRIFT PRECAUTIONS

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

OPERATOR USE PRECAUTIONS

- Wash hands before eating, drinking, using tobacco or using the washroom.
- Avoid breathing spray mist.
- If herbicide penetrates clothing remove immediately; then wash thoroughly and put on clean clothing.
- Remove personal protective equipment immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Follow manufacturer's instructions for cleaning personal protective clothing and equipment. If no such instructions for washables are provided, use detergent and hot water. Keep and wash personal protective equipment separate from household laundry.

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 judgment of the physician in response to reactions of the patient.

ENVIRONMENTAL PRECAUTIONS

TOXIC to terrestrial and aquatic plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.

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.

- To reduce runoff from treated areas into aquatic habitats avoid application to areas with moderate to steep slope, compacted soil, or 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 filter strip between the treated area and the edge of the water body.

STORAGE

Store this product away from food or feed. Do not ship or store with food, feeds, drugs or clothing.

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/territorial 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/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill, and for clean-up of spills.

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.

(booklet)



GF2050 Herbicide

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GROUP	2	HERBICIDE
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KEEP OUT OF REACH OF CHILDREN

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Metsulfuron – methyl 9.45%
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Restricted Entry Interval - Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours following application on agricultural areas. For non-crop areas, do not enter or allow worker entry into treated areas until sprays have dried.

SPRAY DRIFT PRECAUTIONS

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OPERATOR USE PRECAUTIONS

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- Avoid breathing spray mist.
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- Remove personal protective equipment immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Follow manufacturer's instructions for cleaning personal protective clothing and equipment. If no such instructions for washables are provided, use detergent and hot water. Keep and wash personal protective equipment separate from household laundry.

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TOXICOLOGICAL INFORMATION

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

ENVIRONMENTAL PRECAUTIONS

TOXIC to terrestrial and aquatic plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.

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.

- To reduce runoff from treated areas into aquatic habitats avoid application to areas with moderate to steep slope, compacted soil, or 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 filter strip between the treated area and the edge of the water body.

STORAGE

Store this product away from food or feed. Do not ship or store with food, feeds, drugs or clothing.

DISPOSAL

Recyclable containers

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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/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill, and for clean-up of spills.

GENERAL INFORMATION

GF2050 Herbicide, applied as a post emergent, controls annual and perennial broadleaf weeds, invasive plants and shrubs in rangeland, permanent pasture, industrial areas (including but not limited to rights-of-way and military bases) and other non-crop areas. Applications should be avoided under cold or dry conditions or other environmental stresses. **Read all precaution statements before using this product.** For more information contact your local Corteva Agriscience Canada Company representative (1-800-667-3852).

For best results, apply GF2050 Herbicide to plants that are actively growing at time of application. Do not apply when temperatures exceed 28° C.

GENERAL USE PRECAUTIONS

GF2050 Herbicide is selective and highly active against annual and perennial broadleaf weeds, invasive plants and shrubs. This product is recommended for use on areas where loss of broadleaf forage plants, including legumes, can be tolerated. Injury to or loss of desirable plants may result unless the following precautions are observed. Do not apply or drain or flush equipment on or near desirable vegetation or on areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots. Do not apply on walks, driveways, tennis courts or other similar areas.

- Do not apply more than 230 grams per hectare of GF2050 Herbicide per annual growing season in rangeland, pasture, industrial, and other non-crop areas.
- Only one application per growing season is permitted.
- Areas treated for 24 months of control should be treated no more than every second year.
- Apply GF2050 Herbicide with a recommended surfactant.
- GF2050 Herbicide cannot be applied on domestic or commercial turf grass.
- Hay cut from treated grass, in the year of application, should only be used on-farm to feed livestock. The manure or compost from animals fed the treated hay should only be used on registered use sites where the loss of broadleaf forage plants, including legumes, can be tolerated. Contact Corteva Agriscience Canada Company for additional information on sensitive broadleaf plant species.

Sensitive Plants

GF2050 Herbicide works primarily through uptake by plant foliage and translocation throughout the plant. However, secondary herbicide activity may occur through soil uptake of the aminopyralid component of GF2050 Herbicide. Very small amount of GF2050 Herbicide can kill or damage sensitive broadleaf plants. Only spray pastures if injury to existing forage can be tolerated. Care should be taken to avoid spraying desirable broadleaved plants, during both growing and dormant periods.

Avoid application within the drip line (outermost edge of the tree canopy) of desirable coniferous and deciduous trees unless injury can be tolerated. Use special caution when using aminopyralid-based products around species with extensive lateral root systems, shallow rooting species and those that propagate vegetatively through layering.

Clippings or hay from vegetation which has been treated with aminopyralid should not be used for composting or mulching. Aminopyralid residues pass through animals unchanged and are still herbicidally active. The manure from animals grazing treated areas or fed treated hay should not be used around susceptible plants. Do not transfer livestock from treated grazing areas onto broadleaf crop areas without first allowing 3 days of grazing on untreated grass pasture.

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.

DIRECTIONS FOR USE

READ ALL DIRECTIONS CAREFULLY BEFORE APPLYING. FAILURE TO FOLLOW LABEL INSTRUCTIONS MAY RESULT IN ERRATIC WEED CONTROL.

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 during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply when wind speed is greater than 16 km/h at flying height at the site of application. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) coarse classification. Reduce drift caused by turbulent wingtip vortices. Nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan.

RANGELAND, PERMANENT PASTURE, INDUSTRIAL AND OTHER NON-CROP AREAS OF CANADA

GF2050 HERBICIDE ALONE

Apply GF2050 Herbicide at a rate of 135 – 230 g/ha. Apply when targeted undesirable vegetation is actively growing. Only weeds and brush present at the time of application will be controlled. Removal of competing vegetation may result in new Canada thistle shoots emerging. Apply using aerial equipment with a minimum of 30 litres spray volume/ha or ground equipment with a minimum of 110 L spray volume/ha, that will assure uniform coverage. For better coverage use 50 litres/ha for aerial application and 200 litres/ha for ground application. Follow all instructions under Mixing Methods for surfactant requirements and order of mixing.

Weeds Controlled or Suppressed with GF2050 Herbicide Alone – Seasonal Control

Rate of GF2050 Herbicide	Controlled Season Long	Suppression
135 g/ha	Ball mustard, bluebur, Canada fleabane, Canada thistle, chickweed, clover, common groundsel, common ragweed, common tansy, corn spurry, cow cockle, dandelion, field scabious, flixweed, green smartweed, hempnettle, horsenettle, kochia*, lady's thumb, musk or nodding thistle, narrow-leaved hawksbeard, oxeye daisy (pre-bud), perennial sow thistle, plumeless thistle, prostrate pigweed, Russian thistle, scentless chamomile, shepherd's purse, spotted knapweed, stinkweed, stork's bill, sweet clover, tall buttercup, tartary buckwheat, volunteer canola**, western snowberry (buckbrush), wild mustard, yellow starthistle	Canada goldenrod, lamb's quarters, wild buckwheat
170 g/ha	Plants listed above plus Cudweed, curly dock, fireweed, perennial pepperweed, hoary alyssum, pussy toes, volunteer alfalfa, western ragweed, wild carrot, Prairie wild rose, wild strawberry	Absinth wormwood,
200 g/ha	Plants listed above plus Babysbreath, black henbane, wild caraway, wild parsnip	
230 g/ha	Plants listed above plus Absinth wormwood, brown knapweed, diffuse knapweed***, Japanese knotweed, orange hawkweed****, prickly lettuce, purple loosestrife, yellow hawkweed****	Yarrow

*Non ALS resistant biotypes

**All varieties except ALS resistant canola

***Apply GF-2050 at 230 g/ha when plants are actively growing with the optimum time of application occurring from rosette to the bolting stages of development or in the fall. Plants will be controlled by mid-summer and fall application even though plants may not show any changes in form or stature the year of application.

****Apply GF-2050 at 230 g/ha to plants in the bolting stage of development.

Weeds Controlled or Suppressed up to 12 Months After Application with GF2050 Herbicide Alone

Rate of GF2050 Herbicide	Controlled up to 12 Months	Suppression up to 12 Months
135 g/ha	Scentless chamomile	Canada thistle, dandelion
170 g/ha	Plants listed above plus	Pasture sage (fringed sage), prairie sage, western

	Canada thistle*, dandelion, wild strawberry	snowberry (buckbrush), prairie wild rose
200 g/ha	Plants listed above plus prairie wild rose	
230 g/ha	Pasture sage	Silverberry

*Removal of competing vegetation may result in new Canada thistle shoots emerging.

Weeds Controlled or Suppressed up to 24 Months After Application with GF2050 Herbicide Alone

Rate of GF2050 Herbicide	Controlled up to 24 Months	Suppression up to 24 Months
170 g/ha	Wild strawberry	Canada thistle*, dandelion, pasture sage (fringed sage), prairie wild rose
200 g/ha	Plants listed above	Western snowberry (buckbrush)
230 g/ha	Plants listed above plus Dandelion, pasture sage (fringed sage), prairie wild rose, Canada thistle	

*Removal of competing vegetation may result in new Canada thistle shoots emerging.

Preharvest/Grazing Intervals

- There is no restriction on livestock or lactating dairy animals grazing in treated areas.
- Allow 3 days of grazing on an untreated pasture (or feed untreated hay) before transferring livestock to areas where sensitive broadleaf crops may be grown.

TANK-MIX COMBINATIONS WITH GF2050 HERBICIDE

GF2050 Herbicide can be tank mixed with 2,4-D Ester Herbicide or 2,4-D Amine Herbicide to broaden the spectrum of weeds controlled.

Tank-Mix Combination - GF2050 Herbicide plus 2,4-D Ester Herbicide – Season Long Control

Components	Rate	Season long Control
GF2050 Herbicide	135 g/ha	<u>Broadleaf Weeds</u> Absinth wormwood, annual sunflower, annual sowthistle, biennial wormwood, burdock, Canada goldenrod, cocklebur, dog mustard, field bindweed (top growth only), field peppergrass, goat's beard, gumweed, hairy galinsoga, hedge bindweed, hoary cress, lamb's quarters, oak leaf goosefoot, pasture sage, plaintain, red root pigweed, Russian knapweed, tumbleweed, vetch, wild buckwheat, wild radish, prickly lettuce <u>Shrubs</u> Silverberry Plus all the weeds on the 2,4-D Ester label at 1.1 kg ae/ha (equivalent to 1.7 L/ha of 2,4-D Ester 700 Herbicide)
2,4-D Ester	1.1 kg ae/ha (equivalent to 1.7 L/ha of 2,4-D Ester 700 herbicide)	

Tank-Mix Combination - GF2050 Herbicide plus 2,4-D Ester Herbicide – Season Long Control

Components	Rate	Season long Control
GF2050 Herbicide	170 g/ha	<u>Plants listed above plus</u> <u>Broadleaf Weeds</u> Prairie sage <u>Shrubs</u> Shrubby cinquefoil Plus all the weeds on the 2,4-D Ester label at 1.1 kg ae/ha (equivalent to 1.7 L/ha of 2,4-D Ester 700 Herbicide)
2,4-D Ester	1.1 kg ae/ha (equivalent to 1.7 L/ha of 2,4-D Ester 700 herbicide)	

Tank-Mix Combination - GF2050 Herbicide plus 2,4-D Ester Herbicide –Controlled up to 12 Months After Application

Components	Rate	Controlled up to 12 Months After Application
GF2050 Herbicide	135 g/ha	<u>Broadleaf Weeds</u> Canada thistle*, dandelion, wild strawberry
2,4-D Ester	1.1 kg ae/ha (equivalent to 1.7 L/ha of 2,4-D Ester 700)	

*Removal of competing vegetation may result in new Canada thistle shoots emerging.

Tank-Mix Combination - GF2050 Herbicide plus 2,4-D Ester Herbicide –Controlled up to 12 Months After Application

Components	Rate	Controlled up to 12 Months After Application
GF2050 Herbicide	170 g/ha	<u>Plants listed above plus</u> <u>Broadleaf Weeds</u> Prairie sage <u>Shrubs</u> Shrubby cinquefoil, western snowberry (buckbrush) <u>Weeds suppressed at this rate</u> Pasture sage
2,4-D Ester	1.1 kg ae/ha (equivalent to 1.7 L/ha of 2,4-D Ester 700)	

Tank-Mix Combination - GF2050 Herbicide plus 2,4-D Ester Herbicide –Controlled up to 12 Months After Application

Components	Rate	Controlled up to 12 Months After Application
GF2050 Herbicide	200 g/ha	<u>Plants listed above plus</u> <u>Broadleaf Weeds</u> Pasture sage <u>Shrubs</u> silverberry (wolf willow)
2,4-D Ester	1.1 kg ae/ha (equivalent to 1.7 L/ha of 2,4-D Ester 700)	

Tank-Mix Combination - GF2050 Herbicide plus 2,4-D Ester Herbicide –Controlled up to 24 Months After Application

Components	Rate	Controlled up to 24 Months After Application
GF2050 Herbicide	135 g/ha	<u>Broadleaf weeds</u> Dandelion, wild strawberry
2,4-D Ester	1.1 kg ae/ha (equivalent to 1.7 L/ha of 2,4-D Ester 700)	

Tank-Mix Combination - GF2050 Herbicide plus 2,4-D Ester Herbicide –Controlled up to 24 Months After Application

Components	Rate	Controlled up to 24 Months After Application
GF2050 Herbicide	170 g/ha	Plants listed above plus
2,4-D Ester	1.1 kg ae/ha (equivalent to 1.7 L/ha of 2,4-D Ester 700)	<u>Broadleaf weeds</u> Pasture sage (fringed sage)
		Weeds suppressed up to 24 months After Application
		<u>Broadleaf weeds</u> Canada thistle*
		<u>Shrubs</u> Prairie Wild rose

*Removal of competing vegetation may result in new Canada thistle shoots emerging.

Tank-Mix Combination - GF2050 Herbicide plus 2,4-D Ester Herbicide –Controlled up to 24 Months After Application

Components	Rate	Controlled up to 24 Months After Application
GF2050 Herbicide	200 g/ha	Plants listed above plus
2,4-D Ester	1.1 kg ae/ha (equivalent to 1.7 L/ha of 2,4-D Ester 700)	<u>Broadleaf weeds</u> Canada thistle*
		<u>Shrubs</u> Silverberry (wolf willow), western snowberry (buckbrush), prairie wild rose

*Removal of competing vegetation may result in new Canada thistle shoots emerging.

Tank-Mix Combination - GF2050 Herbicide plus 2,4-D Ester Herbicide –Controlled up to 24 Months After Application

Components	Rate	Controlled up to 24 Months After Application
GF2050 Herbicide	230 g/ha	Plants listed above plus
2,4-D Ester	1.1 kg ae/ha (equivalent to 1.7 L/ha of 2,4-D Ester 700)	<u>Broadleaf weeds</u> Prairie sage
		<u>Shrubs</u> Shrubby cinquefoil,

Preharvest/Grazing Intervals for GF2050 Herbicide tank mixed with 2,4-D Ester Herbicide

- There is no restriction on livestock (except lactating dairy animals) grazing in treated areas
- Do not permit lactating dairy animals to graze fields within 7 days after application.
- Do not harvest forage or cut hay within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.
- Allow 3 days of grazing on an untreated pasture (or feed untreated hay) before transferring livestock to areas where sensitive broadleaf crops may be grown.

Tank-Mix Combination - GF2050 Herbicide plus 2,4-D Amine Herbicide – Season Long Control

Components	Rate	Season Long Control
GF2050 Herbicide	135 g/ha	<u>Broadleaf Weeds</u> Absinth wormwood, annual sowthistle, blue lettuce (top growth), bull thistle (top growth), burdock < 4 leaf, cocklebur, Canada goldenrod, common plantain, goat's beard, gum weed (topgrowth), hawkweed, hoary cress (top growth), lamb's quarters, pasture sage (fringed sage), stinging nettle, wild buckwheat, prickly lettuce <u>Shrubs</u> silverberry (wolf willow) Plus all the weeds on the 2,4-D Amine label at 840g ae/ha (equivalent to 1.5 L/ha of 2,4-D Amine 600)
2,4-D Amine	840-1440 g ae/ha (equivalent to 1.5 -2.6 L/ha of 2,4-D Amine 600)	

Tank-Mix Combination – GF2050 Herbicide plus 2,4-D Amine Herbicide – Season Long Control or Suppression

Components	Rate	Season long Plants Controlled
GF2050 Herbicide	170 g/ha	Plants listed above plus <u>Broadleaf Weeds</u> Prairie sage <u>Shrubs</u> Shrubby cinquefoil Plus all the weeds on the 2,4-D Amine label at 840-1440 g ae/ha (equivalent to 1.5 - 2.6 L/ha of 2,4-D Amine 600)
2,4-D Amine	840-1440 g ae/ha (equivalent to 1.5 - 2.6 L/ha of 2,4-D Amine 600)	

Tank-Mix Combination - GF2050 Herbicide plus 2,4-D Amine Herbicide – Controlled up to 12 Months After Application

Components	Rate	Controlled up to 12 Months After Application
GF2050 Herbicide	135 g/ha	Canada thistle*, dandelion, wild strawberry
2,4-D Amine	1.1 kg ae/ha (equivalent to 2.0 L/ha of 2,4-D Amine 600)	

*Removal of competing vegetation may result in new Canada thistle shoots emerging.

Components	Rate	Controlled up to 12 Months After Application
GF2050 Herbicide	170 g/ha	Plants listed above plus
2,4-D Amine	1.1 kg ae/ha (equivalent to 2.0 L/ha of 2,4-D Amine 600)	Shrubby cinquefoil, western snowberry (buckbrush), prairie wild rose <u>Weeds suppressed at this rate</u> Pasture sage

Components	Rate	Controlled up to 12 Months After Application
GF2050 Herbicide	200 g/ha	Plants listed above plus
2,4-D Amine	1.1 kg ae/ha (equivalent to 2.0 L/ha of 2,4-D Amine 600)	Prairie sage, pasture sage (fringed sage), silverberry (wolf willow),

Tank-Mix Combination - GF2050 Herbicide plus 2,4-D Amine Herbicide – Controlled up to 24 Months After Application

Components	Rate	Controlled up to 24 Months After Application
GF2050 Herbicide	135 g/ha	Dandelion, wild strawberry
2,4-D Amine	1.1 kg ae/ha (equivalent to 2.0 L/ha of 2,4-D Amine 600)	

Components	Rate	Controlled up to 24 Months After Application
GF2050 Herbicide	170 g/ha	Plants listed above plus
2,4-D Amine	1.1 kg ae/ha (equivalent to 2.0 L/ha of 2,4-D Amine 600)	Pasture sage (fringed sage) <u>Weeds suppressed at this rate</u> Canada thistle, prairie wild rose

Components	Rate	Controlled up to 24 Months After Application
GF2050 Herbicide	200 g/ha	Plants listed above plus
2,4-D Amine	1.1 kg ae/ha (equivalent to 2.0 L/ha of 2,4-D Amine 600)	Canada thistle*, silverberry (wolf willow), western snowberry (buckbrush), prairie wild rose

*Removal of competing vegetation may result in new Canada thistle shoots emerging.

Components	Rate	Controlled up to 24 Months After Application
GF2050 Herbicide	230 g/ha	Plants listed above plus
2,4-D Amine	1.1 kg ae/ha (equivalent to 2.0 L/ha of 2,4-D Amine 600)	Prairie sage, shrubby cinquefoil

Preharvest/Grazing Intervals for GF2050 Herbicide tank mixed with 2,4-D Amine 600.

- There is no restriction on livestock (except lactating dairy animals) grazing in treated areas
- Do not permit lactating dairy animals to graze fields within 7 days after application.
- Do not harvest forage or cut hay within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.
- Allow 3 days of grazing on an untreated pasture (or feed untreated hay) before transferring livestock to areas where sensitive broadleaf crops may be grown.

TANK-MIX COMBINATION WITH GF2050 HERBICIDE – Non-cropland Uses

GF2050 Herbicide can be tank mixed with glyphosate (present as isopropylamine salt, diammonium salt, trimethylsulfonium salt, potassium salt or dimethylamine salt, registered for use on non-cropland areas) or Arsenal Herbicide to broaden the spectrum of weeds controlled on rights-of-way, industrial area (including but not limited to right-of way and military bases) and other non-crop areas (where bare ground is desirable). These tank mixes will provide control of most grass and broadleaf species.

Tank-Mix Combination - GF2050 Herbicide Plus Glyphosate Herbicide

Tank-Mix Partners and Rate	Plants Controlled
GF2050 Herbicide 135 g/ha Glyphosate 0.8 kg ai/ha – 4.3 kg ai/ha (Equivalent to 1.69 – 9.0 L/ha of Vantage™ XRT*)	Plants controlled by 135 g/ha GF2050 alone plus All the weeds, annual grasses, broadleaf weeds, perennial weeds, brush and trees on the glyphosate label

*Aerial application may be used for brush and tree control in industrial rights-of-way only.

Tank-Mix Combination - GF2050 Herbicide Plus Glyphosate Herbicide

Tank-Mix Partners and Rate	Plants Controlled
GF2050 Herbicide 170 g/ha Glyphosate 0.8 kg ai/ha – 4.3 kg ai/ha (Equivalent to 1.69 – 9.0 L/ha of Vantage XRT*)	Plants listed above plus Plants controlled by 170 g/ha GF2050 plus: plus all the weeds, annual grasses, broadleaf weeds, perennial weeds, brush and trees on the glyphosate label

*Aerial application may be used for brush and tree control in industrial rights-of-way only.

Tank-Mix Combination - GF2050 Herbicide Plus Glyphosate Herbicide

Tank-Mix Partners and Rate	Plants Controlled
GF2050 Herbicide 200 g/ha Glyphosate 0.8 kg ai/ha – 4.3 kg ai/ha (Equivalent to 1.69 – 9.0 L/ha of Vantage XRT*)	Plants listed above plus Plants controlled by 200 g/ha GF2050 plus All the weeds, annual grasses, broadleaf weeds, perennial weeds, brush and trees on the glyphosate label

*Aerial application may be used for brush and tree control in industrial rights-of-way only.

Tank-Mix Combination - GF2050 Herbicide Plus Glyphosate Herbicide

Tank-Mix Partners and Rate	Plants Controlled
GF2050 Herbicide 230 g/ha Glyphosate 0.8 kg ai/ha – 4.3 kg ai/ha (Equivalent to 1.69 – 9.0 L/ha of Vantage XRT*)	Plants listed above plus Plants controlled by 230 g/ha GF2050 plus All the weeds, annual grasses, broadleaf weeds, perennial weeds, brush and trees on the glyphosate label

*Aerial application may be used for brush and tree control in industrial rights-of-way only.

Tank-Mix Combination – GF2050 Herbicide plus Arsenal Herbicide:

Apply 3.0 L of Arsenal Herbicide per hectare tank mixed with 135 – 230 g/ha of GF2050 Herbicide.

MIXING METHODS

Mixing with Water

1. Fill spray tank with water equal to 1/2 to 3/4 of the required spray volume.
2. Add the required amount of GF2050 Herbicide with the agitation running. Pre-slurrying with water may be necessary where there is little or no agitation or an injection system is being used or where herbicide is first added to a tank other than the spray tank.
3. If tank mixing, add the required amount of 2,4-D Ester Herbicide or 2,4-D Amine Herbicide or glyphosate with the agitation running.
4. Add the recommended surfactant (such as Gateway™ Adjuvant, Ag-Surf, Agral 90 or Citowett Plus) at 0.2% v/v or 2 litres per 1000 litres of spray solution.
5. Add antifoaming agent, if required.

APPLICATION METHODS

INVASIVE PLANT MANAGEMENT

Invasive Plant Management Practices

GF2050 Herbicide can be applied postemergence as a broadcast spray or as a spot/strip application to control invasive plants. Post emergence applications should be made before bud stage or early flowering, unless otherwise specified. Best results are obtained when the spray volume is sufficient to provide uniform coverage of treated plants. For optimum uptake and translocation of the herbicide, avoid mowing, haying, shredding or disturbing treated areas for at least 7 days following application.

GF2050 Herbicide can be an important component of integrated vegetation management programs designed to restore desired plant communities. To maximize and extend the benefits of weed control provided by the GF2050 Herbicide, it is important that other vegetation management practices, including proper grazing management, fertilization, prescribed fire, mechanical mowing, hand-pulling, bio control and other methods, be used in appropriate sequences and combinations to further alleviate the adverse

effects of invasive plants on desirable plant species and to promote development of desired plant communities. Consult local agriculture and land management resource specialists and/or invasive plant councils. These organizations can provide guidance on best management practices and the development of integrated vegetation management programs. Rapid response to the early detection of new invasive plants is a key invasive plant management strategy. Containment, eradication and control are essential for the management of spreading and established invasive plants.

Rangeland and Pasture Areas

Make only one application per year for control of invasive plants. For best results, invasive plants should be treated when they are actively growing and under conditions favourable for growth. The GF2050 Herbicide also provides preemergence control of germinating seeds and control of emerged seedlings of susceptible plants following application.

To reduce the spread of invasive plants, it is important to treat identified invasive plants in the target area while observing required spray buffer zones for broadcast applications. Return when the wind is blowing from the opposite direction to complete spraying the targeted plant population.

Individual Plant or Spot/Strip Applications

An important component of Invasive Plant Management programs is early detection and eradication. The instructions for individual plant or spot or strip applications can be used to stop the spread of invasive plants. This is particularly important in riparian areas, where spot application is preferable to broadcast treatment. Use the following mixing chart to mix GF2050 with enough water and surfactant to make the correct amount of spray solution. Use equipment designed for individual plant or spot/strip applications, such as a backpack sprayer or hose and handgun, to spray susceptible invasive plants. Thoroughly and uniformly wet the foliage of all target plants but not to the point of runoff. Direct spray away from aquatic habitats and non-target terrestrial plants.

Mixing Chart

GF2050 Herbicide	Surfactant*	Spray Solution (water and herbicide)
1.35 – 2.3 grams	20 mL	10 litres
13.5 – 23 grams	200 mL	100 litres
135 -230 grams	2000 mL	1000 litres

*Recommended surfactant such as Gateway Adjuvant, Ag-Surf, Agral 90 or Citowett Plus

Use the higher rate in the rate range when growing conditions are less than favourable or when the plant foliage is tall and dense.

Aerial Application

Use GF2050 Herbicide alone, or tank mixed with 2,4-D amine herbicide, 2,4-D ester herbicide or glyphosate, as a broadcast treatment by air to control listed broadleaf weeds and woody plants. Apply GF2050 Herbicide at the recommended rates in a minimum spray volume of 30 L/ha by air. For better coverage use 50 litres/ha. Follow all instructions under Mixing Methods for surfactant requirements and order of mixing.

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate swath marking devices.

Use Precautions

Apply only when meteorological conditions at the treatment site allow for complete and even coverage. Apply only under conditions of good practice specific to aerial application as outlined in the National Aerial Pesticide Application Manual, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

Operator Precautions

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing should be laundered regularly.

Product Specific Precautions

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-800-667-3852 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

Avoid spray drift at the application site. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. Users are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications:

1. The distance of the outer most operating nozzles on the boom must not exceed 75% of the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Sprayer Clean-Out Instructions

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.

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

SPRAY BUFFER ZONES

A spray buffer zone is NOT required for:

- uses with hand-held application equipment permitted on this label.

For application to rights-of-way, spray 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 (e.g., wind direction, low wind speed) and spray equipment (e.g., coarse droplet sizes, minimizing height above canopy), should be used. Applicators must, however, observe the specified spray buffer zones for protection of sensitive aquatic habitats.

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

Method of application	Crop		Spray Buffer Zones (metres) Required for the Protection of:	
			Freshwater Habitat	Terrestrial habitat*
Field sprayer	Permanent pasture, rangeland, industrial and other non-crop areas		10	15
Aerial	Permanent pasture, rangeland, industrial and other non-crop areas	Fixed wing (coarse)	175	750
		Rotary wing (coarse)	150	650
		Fixed wing (coarse to very coarse)	125	475

	Rotary wing (coarse to very coarse)	100	325
	Fixed wing (very coarse)	100	375
	Rotary wing (very coarse)	90	225
	Fixed wing (very coarse to extremely coarse)	80	250
	Rotary wing (very coarse to extremely coarse)	70	175

*Spray 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.

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 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 GF2050 Herbicide is a Group 2 and Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to GF2050 Herbicide or other Group 2 and Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same area. 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 GF2050 Herbicide or other Group 2 and/or Group 4 herbicide 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.

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