2019-6966 2023-05-15

(Container)



# with RINSKOR™ ACTIVE

# **Restore™ NXT Herbicide**

GROUP 4 HERBICIDE

# SELECTIVE HERBICIDE FOR CONTROL OF BROADLEAF WEEDS AND INVASIVE PLANTS IN RANGELAND AND PASTURE AREAS OF CANADA

**COMMERCIAL** 

**SOLUTION CONCENTRATE** 

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

**ACTIVE INGREDIENTS:** 

Contains 1,2-benzisothiazolin-3-one 0.018% OR 5-Chloro-2-methyl-4-isothiazolin-3-one 0.001% and 2-Methyl-4-isothiazolin-3-one 0.0004% as preservatives

REGISTRATION NO. 34730 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 1 L - bulk

Corteva Agriscience Canada Company 2450, 215-2<sup>nd</sup> Street SW Calgary, Alberta T2P 1M4

Tel. 1-800-667-3852

# PRECAUTIONS KEEP OUT OF REACH OF CHILDREN

#### PERSONAL PROTECTIVE EQUIPMENT

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 application within a closed cab and/or cockpit.

#### **AERIAL APPLICATION PRECAUTIONS**

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. The pilot is allowed to load premixed chemicals with a closed system.

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

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

#### **RESTRICTED ENTRY INTERVALS**

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

#### **SPRAY DRIFT PRECAUTIONS**

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.

#### **TANK-MIXTURES**

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.

## **OPERATOR USE PRECAUTIONS**

- Wash hands before eating, drinking, using tobacco or using the washroom.
- 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 aquatic and non-target terrestrial 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 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.

#### **STORAGE**

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.

#### **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)



# with RINSKOR™ ACTIVE

# Restore™ NXT Herbicide

GROUP 4 HERBICIDE

# SELECTIVE HERBICIDE FOR CONTROL OF BROADLEAF WEEDS AND INVASIVE PLANTS IN RANGELAND AND PASTURE AREAS OF CANADA

COMMERCIAL

SOLUTION CONCENTRATE

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

**ACTIVE INGREDIENTS:** 

Contains 1,2-benzisothiazolin-3-one 0.018% OR 5-Chloro-2-methyl-4-isothiazolin-3-one 0.001% and 2-Methyl-4-isothiazolin-3-one 0.0004% as preservatives

REGISTRATION NO. 34730 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 1 L - bulk

**Corteva Agriscience Canada Company** 

2450, 215-2<sup>nd</sup> Street SW Calgary, Alberta T2P 1M4

Tel. 1-800-667-3852

# PRECAUTIONS KEEP OUT OF REACH OF CHILDREN

#### PERSONAL PROTECTIVE EQUIPMENT

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 application within a closed cab and/or cockpit.

#### **AERIAL APPLICATION PRECAUTIONS**

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. The pilot is allowed to load premixed chemicals with a closed system.

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

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

#### **RESTRICTED ENTRY INTERVALS**

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

#### **SPRAY DRIFT PRECAUTIONS**

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.

#### **TANK-MIXTANK-MIXTURES**

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.

#### **OPERATOR USE PRECAUTIONS**

- Wash hands before eating, drinking, using tobacco or using the washroom.
- 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 aquatic and non-target terrestrial 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 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.

#### **STORAGE**

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**

Restore™ NXT Herbicide, applied post emergent, controls broadleaf weeds, invasive plants and woody plants in rangeland and permanent pasture. Applications should be avoided under conditions of drought or other environmental stresses. **Read all precaution statements before using this product.** For more information, contact your local Dow AgroSciences representative.

For best results, apply Restore NXT Herbicide to young weeds that are actively growing at time of application.

#### Tank-mixTank-mixtures

In some cases, tank-mixtank-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 Corteva Agriscience at 1-800-667-3852 or <a href="https://www.corteva.ca">www.corteva.ca</a> for information before mixing any pesticide or fertilizer that is not specifically recommended on this label tank-mixtank-mix.

#### **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.

#### **GENERAL USE PRECAUTIONS**

Restore NXT Herbicide is 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 spray during periods of high temperatures when desirable vegetation may be under stress as damage to the desirable vegetation may occur.

For best results, apply Restore NXT Herbicide to young weeds that are actively growing at time of application.

#### **Sensitive Plants**

Restore NXT 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 Restore NXT Herbicide. Very small amounts of aminopyralid can kill or damage sensitive broadleaf plants. Only spray pastures if injury to existing forage legumes can be tolerated. Care should be taken to avoid spraying desirable broadleaved plants during both growing and dormant periods.

Avoid application within the dripline (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. Do not transfer livestock from treated grazing areas onto broadleaf crop areas without first allowing 3 days of grazing on untreated grass pasture.

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 or grazing treated areas should only be used on registered use sites where the loss of broadleaf forage plants, including legumes, can be tolerated. Contact Dow AgroSciences Canada Inc. for additional information on sensitive broadleaf plant species.

Only one application per growing season is permitted.

- 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/drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.
- Restore NXT Herbicide cannot be applied on domestic or commercial turf grass.
- Do not exceed 1.5 L/ha per year.

# RANGELAND AND PERMANENT PASTURE AREAS OF CANADA

#### **APPLICATION METHODS**

Restore NXT Herbicide can be applied post-emergence as a broadcast spray (ground or aerial) or as a spot/strip application to control weeds. 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, having, shredding or disturbing treated areas for at least 7 days following application.

Applications of Restore NXT Herbicide may be made once grasses are well-established (have developed a good secondary root system and show good vigour).

# **Individual Plant or Spot/Strip Applications**

Use the following mixing chart to mix Restore NXT Herbicide with enough water to make the correct amount of spray solution. Use equipment designed for individual plant or spot/strip application, such as a backpack sprayer or hose and handgun, to spray weeds. 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. DO NOT apply this product directly to fresh water habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), estuaries or marine habitats.

#### **Mixing Chart**

Restore NXT Herbicide	Surfactant (at 0.5%v/v)*	Spray Solution (water and herbicide)	
7.5 – 15 mL	50 mL	10 litres	
7.5 – 150 mL	500 mL	100 litres	
7.5 – 1500 mL	5000 mL	1000 litres	

<sup>\*</sup> surfactant such as Gateway Adjuvant, MSO, NIS (such as 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.

## **Preharvest/Grazing Intervals**

- The following restrictions for livestock or lactating dairy animals grazing in treated areas must be followed:
  - Forage: Grazing/feeding is permitted on the day of application (0 days)
  - Hay: Allow 7 days after application to cut or feed hay.
  - 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.

## RESTORE NXT HERBICIDE ALONE

Apply Restore NXT Herbicide at a rate of 0.75 – 1.50 L/ha. Apply when targeted undesirable vegetation is actively growing. Only weeds and brush present at the time of application will be controlled. Apply with a minimum of 100 L spray volume/ha, which will assure uniform coverage. For better coverage use 200 litres/ha for ground application. For aerial applications, apply Restore NXT Herbicide at the recommended rates in a minimum spray volume of 30 L/ha by air. For better coverage use 50 litres/ha. Use a surfactant, such as Gateway Adjuvant or an NIS at 0.25-0.5% v/v or methylated seed oil (MSO) at 0.5-1% v/v.

#### WEEDS CONTROLLED OR SUPPRESSED BY RESTORE NXT HERBICIDE ALONE

Rate of Restore NXT Herbicide	Weeds controlled	Weeds suppressed	
750 mL/ha	Canada fleabane <sup>1</sup> velvetleaf <sup>2</sup> common waterhemp <sup>3</sup>	Canada thistle spotted knapweed	
870 mL/ha	common ragweed yellow star thistle <sup>4</sup> plumeless thistle musk or nodding thistle Canada fleabane horsenettle perennial sowthistle oxeye daisy <sup>6</sup>	western ragweed curly dock Canada goldenrod scentless chamomile sulphur cinquefoil <sup>5</sup>	

	4 . 11 . 1	
	tall buttercup	
	Canada thistle	
	spotted knapweed	
	common broomweed	
	bull thistle	
	tropical soda apple <sup>7</sup>	
	hairy buttercup	
	tropic croton	
1120 mL/ha	Weeds listed above plus:	absinth (wormwood)
	cudweed	Canada goldenrod
	curly dock	
	western ragweed	
	scentless chamomile	
	bitter sneezeweed	
	hairy fleabane	
	tansy ragwort	
	clover	
	poison hemlock	
1500 mL/ha	Weeds listed above plus:	Canada goldenrod
	absinth (wormwood)	common yarrow
	prickly lettuce	common tansy
	Fuller's teasel	diffuse knapweed <sup>8</sup>
	tall ironweed	dandelion
	fireweed	Russian knapweed <sup>9</sup>
	purple loosestrife	Japanese knotweed <sup>10</sup>
	orange hawkweed <sup>11</sup>	dapanese knotweed
	mullein	
	rush skeletonweed	
	Scotch thistle	
	wild caraway	
	cleavers <sup>12</sup>	
	common lamb's quarter <sup>13</sup>	
	•	
	annual sowthistle <sup>14</sup>	
	wild chervil <sup>15</sup>	
	wild parsnip	

<sup>&</sup>lt;sup>1</sup>Canada fleabane: Bolting up to 20 cm <sup>2</sup>Velvetleaf: Up to 3 leaf and 8 cm

#### TANK-MIX COMBINATIONS WITH RESTORE NXT HERBICIDE

Restore NXT Herbicide can be tank-mixtank-mixed with 2,4-D herbicide to broaden the spectrum of weeds controlled.

<sup>&</sup>lt;sup>3</sup>Common waterhemp: Up to 3 leaf and 8 cm

<sup>&</sup>lt;sup>4</sup>Yellow star thistle: Apply to plants at the rosette through bolting growth stage

<sup>&</sup>lt;sup>5</sup>Sulfur cinquefoil: Apply to plants in the prebud stage of development.

<sup>&</sup>lt;sup>6</sup>Oxeye daisy: Apply to plants in the pre-bud stages of development

<sup>&</sup>lt;sup>7</sup>Tropical soda apple: Apply to any growth stage but application by flowering will reduce seed production

<sup>&</sup>lt;sup>8</sup>Diffuse knapweed: Apply to plants in the bolting stage of development

<sup>&</sup>lt;sup>9</sup>Russian knapweed: Apply to plants in the spring and summer that are in the bud to flowering

<sup>&</sup>lt;sup>10</sup>Japanese knotweed: Apply to plants 0.9-1.2 m tall

<sup>&</sup>lt;sup>11</sup>Orange hawkweed: For seasonal and 12 month control, apply to plants in the bolting stage of development.

<sup>&</sup>lt;sup>12</sup> Cleavers: up to 10 cm

<sup>&</sup>lt;sup>13</sup>Common lamb's quarter: Prior to budding stage

<sup>&</sup>lt;sup>14</sup>Annual sowthistle: Up to 3 cm

<sup>&</sup>lt;sup>15</sup>Wild chervil: Up to budding stage and 40 cm

Herbicide Component	Rate	Weeds Controlled
Restore NXT Herbicide	870 mL/ha	Control of annual sow thistle, bluebur, burdock (<4 leaf), cocklebur, common plantain, flixweed, goat's
2,4-D	840 g ae/ha	beard, prickly lettuce, ragweeds, stinging nettle, sweet clover, curled dock (<4 leaf), hawkweed, peppergrass, season long control of Canada thistle, spotted knapweed, scentless chamomile, Canada goldenrod, and top growth control of blue lettuce, bull thistle, buttercup, gumweed, hoary cress, perennial sow thistle
		Plus all the weeds controlled by 870 mL/ha of Restore NXT alone and all the weeds listed on the
		2,4-D label at 840 g ae/ha
Herbicide Component	Rate	Weeds Controlled
Restore NXT Herbicide	1120 mL/ha	all weeds listed above plus season long control of absinth wormwood, dandelion
2,4-D	1080 g ae/ha	Plus all the weeds controlled by 1120 mL/ha of Restore NXT alone and all the weeds listed on the 2,4-D label at 1080 g ae/ha
Herbicide Component	Rate	Weeds Controlled
Restore NXT Herbicide	1500 mL/ha	all weeds listed above plus season long control of common tansy
2,4-D	1440 g ae/ha	Plus all the weeds controlled by 1500 mL/ha of Restore NXT alone and all the weeds listed on the 2,4-D label at 1440 g ae/ha

### **MIXING METHODS**

# Mixing with Water

- 1. Fill the spray tank 3/4 full of clean water
- 2. Add the required amount of Restore NXT 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-mixtank-mixing, add the required amount of the tank-mix partner with the agitation running.
- 4. Add the surfactant.
- 5. Add antifoaming agent, if required.

# **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.

#### INVASIVE PLANT MANAGEMENT

# **Invasive Plant Management Practices**

Restore NXT 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 Restore NXT Herbicide, it is important that other vegetation management practices, including proper grazing management, fertilization, prescribed fire, mechanical mowing, hand-pulling, biocontrol 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

For best results, invasive plants should be treated when they are actively growing and under conditions favourable for growth. Restore NXT Herbicide provides 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 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 mixing charts and directions listed under the "APPLICATION METHODS" section.

# 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.

Use Restore NXT Herbicide as a broadcast treatment by air to control listed broadleaf weeds and woody plants. Apply Restore NXT 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. Refer to the tank-mix partner label for additional instructions, directions for aerial application and precautions.

Apply tank-mixtank-mix 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 crop 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.

# **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.

#### SPRAY DRIFT PRECAUTIONS AND SPRAY BUFFER ZONES

Do not apply to any body of water. Take care to minimize the incidental overspray along the shoreline when applying to terrestrial plants at the water's edge or to water in areas where surface water is present.

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.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction

pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt).

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

1. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Tank-mixtank-mixtank-mixtank-mixtank-mix **SPRAYSPRAY BUFFER ZONES**A spray buffer zone is NOT required for uses with hand-held application equipment permitted on this label.

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).

		Aircraft rop type	Spray Buffer Zones (metres) Required for the Protection of:		
Method of application	Crop		Freshwater Habitat of Depths:		_
			Less than 1 m	Greater than 1	Terrestrial Habitat:
Field sprayer	Rangeland and permanent pasture areas of Canada	NA	5	3	10
	Rangeland	Fixed wing	275	150	225
Aerial and permanent pasture areas of Canada	Rotary wing	125	75	150	

When tank-mixtank-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-mixtank-mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank-mixtank-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, Restore NXT Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to Restore NXT Herbicide and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance:

- Development of plant populations resistant to this herbicide mode of action is usually not a problem on rangeland, permanent grass pastures, Conservation Reserve Program (CRP), or non-cropland sites since these sites receive infrequent pesticide applications.
- Similar looking biotypes of a given weed species occurring in a treated area may vary in their susceptibility to a herbicide. Application of a herbicide below its labeled rate may allow more tolerant weeds to survive and a shift to more tolerant biotypes within the treated area.
- Where possible, rotate the use of Restore NXT Herbicide or other Group 4 herbicides within a
  growing season (sequence) or among growing seasons with different herbicide groups that control
  the same weeds in a field.
- Use tank-mixtank-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 at 1-800-667-3852 or at www.corteva.ca.

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

™ Trademark of Corteva Agriscience and its affiliated companies.