

# **INFINITY HERBICIDE**

GROUP 6 & 27 HERBICIDE

#### **COMMERCIAL**

**Emulsifiable Concentrate** 





# **WARNING - EYE AND SKIN IRRITANT**

**REGISTRATION NUMBER: 28738**PEST CONTROL PRODUCTS ACT

# **ACTIVE INGREDIENT:**

Warning: Contains the allergen soy

# READ THE LABEL AND BOOKLET BEFORE USING

Product Information: 1-888-283-6847

# **Bayer CropScience Inc.**

Suite 200, 160 Quarry Park Blvd. SE Calgary, AB T2C 3G3

> NET CONTENTS: 1 L – Bulk

IN CASE OF SPILLS, POISONING OR FIRE, TELEPHONE EMERGENCY RESPONSE NUMBER 1-800-334-7577 (24 HOURS A DAY).

#### **PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN. Harmful or fatal if swallowed. Causes eye irritation. DO NOT get in eyes. May irritate the skin. Avoid contact with skin. Wash thoroughly with soap and water after handling and before eating, drinking or smoking. Remove and wash contaminated clothing before reuse.

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

If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Bayer CropScience Canada Inc. at 1-888-283-6847 or www.cropscience.bayer.ca.

DO NOT apply this product in a way that this product will contact workers or other persons, either directly or through drift. Only handlers wearing personal protective equipment may be in the area being treated during application.

DO NOT use in residential areas, which are defined as sites where bystanders may be present during or after spraying, including homes, schools, parks, playgrounds, playing fields, and public buildings.

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

# **Protective Clothing and Equipment:**

To minimize exposure, the following precautions should be followed:

- Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes
  during mixing, loading, clean-up and repair. In addition, wear protective eyewear (i.e., goggles or
  face shield) during mixing and loading activities. Wear a long-sleeved shirt and long pants,
  chemical resistant gloves, and socks plus shoes during applications. Gloves are not required during
  application within a closed cab or cockpit.
- Change contaminated clothing daily and wash before reusing.
- DO NOT handle product with bare hands. Chemical resistant gloves significantly reduce hand exposure. ALWAYS wear gloves for mixing/loading operations and when making sprayer and nozzle repairs and adjustments. DO NOT USE LEATHER OR CLOTH GLOVES.
- Rinse gloves with soap and water before removal, and wash hands thoroughly before eating, smoking or drinking.
- Clean protective equipment daily.
- Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them.
- Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

#### **Re-entry Restriction:**

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

#### **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. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. 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:** Contains petroleum distillates – vomiting may cause aspiration pneumonia. Treat symptomatically.

#### **ENVIRONMENTAL PRECAUTIONS:**

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

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

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. Do not apply, drain, or flush spray equipment on or near desirable trees or other plants or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.

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

This product contains a petroleum distillate which is toxic to aquatic organisms and non-target terrestrial plants. Avoid contamination of aquatic systems during applications. Do not contaminate these systems through direct application, disposal of waste, or cleaning equipment.

USE ONLY FOR RECOMMENDED PURPOSES AND AT RECOMMENDED RATES.

#### **STORAGE:**

Keep in original container during storage.

Store the tightly closed container away from feeds, seeds, fertilizers, plants and foodstuffs.

May be stored at any temperature. After storage, warm to room temperature and shake well before use. If stored for one year or longer, shake or mix well before using.

Do not use or store in or around the home.

#### **DISPOSAL:**

#### **Recyclable Container Disposal:**

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 Container Disposal:**

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

# **Returnable-refillable Container Disposal:**

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not use this container for any other purpose.

# **Disposal of Unused, Unwanted Product:**

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 cleanup 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.

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# **INFINITY Herbicide**

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# For More Information, Contact:

Product Information: 1-888-283-6847

Bayer CropScience Inc. Suite 200, 160 Quarry Park Blvd. SE Calgary, AB T2C 3G3

#### GENERAL INFORMATION

# **SECTION 1: THE PRODUCT**

INFINITY Herbicide is a post-emergent herbicide which controls a broad spectrum of broadleaf weeds in wheat (spring, durum and winter), barley, triticale, timothy, and certain minor use crops.

# SAFETY AND HANDLING

# SECTION 2: PRECAUTIONS, PROTECTIVE CLOTHING AND EQUIPMENT, AND RE-ENTRY RESTRICTIONS

#### **PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN. Harmful or fatal if swallowed. Causes eye irritation. DO NOT get in eyes. May irritate the skin. Avoid contact with skin. Wash thoroughly with soap and water after handling and before eating, drinking or smoking. Remove and wash contaminated clothing before reuse.

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

If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Bayer CropScience Canada Inc. at 1-888-283-6847 or <a href="https://www.cropscience.bayer.ca">www.cropscience.bayer.ca</a>.

DO NOT apply this product in a way that this product will contact workers or other persons, either directly or through drift. Only handlers wearing personal protective equipment may be in the area being treated during application.

DO NOT use in residential areas, which are defined as sites where bystanders may be present during or after spraying, including homes, schools, parks, playgrounds, playing fields, and public buildings.

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

# **Protective Clothing and Equipment:**

To minimize exposure, the following precautions should be followed:

- Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, clean-up and repair. In addition, wear protective eyewear (i.e., goggles or face shield) during mixing and loading activities. Wear a long-sleeved shirt and long pants, chemical resistant gloves, and socks plus shoes during applications. Gloves are not required during application within a closed cab or cockpit.
- Change contaminated clothing daily and wash before reusing.
- DO NOT handle product with bare hands. Chemical resistant gloves significantly reduce hand exposure. ALWAYS wear gloves for mixing/loading operations and when making sprayer and nozzle repairs and adjustments. DO NOT USE LEATHER OR CLOTH GLOVES.
- Rinse gloves with soap and water before removal, and wash hands thoroughly before eating, smoking or drinking.

- Clean protective equipment daily.
- Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them.
- Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

#### **Re-entry Restriction:**

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

# **SECTION 3: FIRST AID AND TOXICOLOGICAL INFORMATION**

**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. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

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**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:** Contains petroleum distillates – vomiting may cause aspiration pneumonia. Treat symptomatically.

# **SECTION 4: ENVIRONMENTAL PRECAUTIONS**

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

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

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. Do not apply, drain, or flush spray equipment on or near desirable trees or other plants or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.

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

This product contains a petroleum distillate which is toxic to aquatic organisms and non-target terrestrial plants. Avoid contamination of aquatic systems during applications. Do not contaminate these systems through direct application, disposal of waste, or cleaning equipment.

USE ONLY FOR RECOMMENDED PURPOSES AND AT RECOMMENDED RATES.

# **SECTION 5: STORAGE**

Keep in original container during storage.

Store the tightly closed container away from feeds, seeds, fertilizers, plants and foodstuffs.

May be stored at any temperature. After storage, warm to room temperature and shake well before use.

If stored for one year or longer, shake or mix well before using.

Do not use or store in or around the home.

# **SECTION 6: DISPOSAL**

# **Recyclable Container Disposal:**

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:

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- 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 Container Disposal:**

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

#### **Returnable-refillable Container Disposal:**

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not use this container for any other purpose.

# **Disposal of Unused, Unwanted Product:**

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 cleanup of spills.

#### **SECTION 7: NOTICE TO USER**

#### **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.

# **DIRECTIONS FOR USE**

# SECTION 8: WEEDS CONTROLLED AND APPLICATION RATE

Application of INFINITY Herbicide at 0.83 L/ha and according to label recommendations will provide control of the following weed species:

BROADLEAF WEED <sup>1</sup>	RECOMMENDED STAGE
Annual sow-thistle	1 to 6-leaf stage
Chickweed	1 to 6-leaf stage
Cleavers <sup>2,3</sup>	1 to 6 whorls
Canada fleabane <sup>2,4,5</sup>	Up to 10 cm in height/diameter
Canada Thistle (Suppression only)	Up to 30 cm in height
Common ragweed	1 to 6-leaf stage
Dandelion (Suppression only) <sup>6</sup>	Up to 10 cm in height and
	25 cm in diameter
Flixweed	Up to 10 cm in height
Giant Ragweed <sup>2,4</sup> (Suppression only)	1 to 6 leaf stage
Hemp-nettle	1 to 6-leaf stage
Kochia	Up to 10 cm in height
Lamb's-quarters	1 to 6-leaf stage
Narrow-leaved hawk's-beard	Up to 10 cm and prior to bolting
Pale smartweed	1 to 6-leaf stage
Perennial sow-thistle (Suppression only)	1 to 6-leaf stage
Redroot pigweed	1 to 6-leaf stage
Round-leaved mallow <sup>2</sup>	1 to 6-leaf stage
Russian thistle	Up to 10 cm in height
Shepherd's purse	1 to 6-leaf stage
Spreading atriplex <sup>2</sup> (Suppression only)	1 to 10 leaf stage
Stinkweed	1 to 6-leaf stage
Stork's-bill (only in tank mix with 2,4-D	1 to 8-leaf stage
Ester) <sup>7</sup>	
Volunteer canola (includes conventional	1 to 6-leaf stage
and herbicide tolerant)	
Volunteer soybean <sup>2</sup>	Up to the 5 <sup>th</sup> trifoliate leaf stage
Wild buckwheat	1 to 6-leaf stage
Wild mustard	1 to 6-leaf stage

- 1 Includes ALS (Group 2) resistant biotypes.
- 2 For control of cleavers at the 4 to 6-whorl growth stage, control of Canada fleabane, volunteer soybean, round-leaved mallow and suppression of giant ragweed and spreading atriplex, add ammonium sulphate at 500 g/ha (99%) or 1 L/ha (49% solution) or 1.25 L/ha (40% solution). If using an ammonium sulphate product with a different concentration, adjust the rate accordingly.
- 3 Includes indoleacetic acid (Group 4) resistant biotypes
- 4 Includes glyphosate resistant biotypes.
- 5 Remove established Canada fleabane plants prior to planting via tillage or a pre-seed burn-off treatment.
- 6 Includes seedlings and overwintered rosettes.
- 7 Control only when tank-mixed with 2,4-D Ester + AMS. Refer to Section 10 for additional directions for use
- Rainfall within 1 hour of application may reduce effectiveness.
- For best results, apply to emerged, young, actively growing weeds according to the weed stages listed.
- Under stressed conditions and/or heavy crop canopy, early application will result in improved weed control.
- Weeds growing under adverse environmental conditions such as drought will be less susceptible to INFINITY Herbicide.

# **SECTION 9: CROP USES**

INFINITY Herbicide can be applied to the following crops when at the indicated growth stages:

CROP	GROWTH STAGE
Wheat, spring	Crops may be treated when at
Wheat, durum	the 1-leaf stage of growth until
Wheat, winter	the flag leaf is just visible but
Barley, spring	still rolled.
Timothy	
Perennial Ryegrass	Apply only once per season.
Bromegrasses	
Red Fescues	
Triticale	

- Application beyond emergence of the flag leaf may result in crop injury.
- Do not apply to a crop that is stressed by severe weather conditions, frost, low fertility, drought, water-saturated soil, disease or insect damage, as crop injury may result.
- DO NOT apply to crops undersown with legume species.

#### WINTER WHEAT -

#### FALL AND SPRING APPLICATIONS IN EASTERN CANADA ONLY

#### **Fall application:**

For control of labelled fall-emerging weeds, apply 0.83 L/ha INFINITY Herbicide when weeds are emerged, young, and actively growing according to the weed stages listed in section 8.

#### **Spring application:**

For control of labelled spring-emerging weeds, apply a second application of 0.83 L/ha INFINITY Herbicide when weeds are emerged, young, and actively growing according to the weed stages listed in section 8.

Winter wheat may be treated at the 1-leaf stage of growth until the flag leaf is just visible but still rolled.

Do not apply more than 2 applications of INFINITY Herbicide per winter wheat crop.

#### **SECTION 10: TANK MIXTURES**

For control of weed species listed for INFINITY Herbicide used alone plus additional broadleaf and grassy weeds, INFINITY Herbicide may be tank mixed at 0.83 L/ha with the following herbicides. Consult the label of the tank mix partner(s) for further instructions regarding directions for use, restrictions and precautions, and always observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

Crop	Tank Mix Product	Tank Mix Product Rate	Weeds Controlled	Growth Stage Timing
Wheat (Spring and Durum), Barley	Puma <sup>120</sup> Super <sup>1</sup>	0.770 L/ha	Weed species controlled by INFINITY Herbicide used alone plus wild oats, green foxtail, yellow foxtail and barnyard grass.	Wheat (spring and durum) may be treated from the 1-to 6-leaf stage plus 3 tillers.  Barley may be treated from the 1- to 5-leaf stage plus 2 tillers.
		0.385 L/ha	Weed species controlled by INFINITY Herbicide used alone plus green foxtail	Apply when the annual grass weeds are at the 1-to 6-leaf stage (up to emergence of 3 <sup>rd</sup> tiller).
Wheat (Spring and Durum), Barley	Puma Advance Herbicide <sup>1</sup>	1.02 L/ha	Weed species controlled by INFINITY Herbicide used alone plus wild oats, green foxtail, yellow foxtail and barnyard grass.	Wheat (spring and durum) and barley may be treated from the 1- to 6-leaf stage plus 3 tillers.  Apply when the annual grass weeds are at the 1- to 6-leaf stage (up to emergence of 3 <sup>rd</sup> tiller).
Wheat (Spring and Durum)	Horizon Herbicide Tank Mix <sup>1</sup>	Horizon 240 EC at 230 mL/ha plus Score adjuvant at 0.8% v/v	Weed species controlled by INFINITY Herbicide used alone plus wild oat, volunteer (tame) oat, green foxtail (wild millet), yellow foxtail, barnyard grass and volunteer canary seed control.	Wheat (spring and durum) may be treated from the 2-leaf until the early flag leaf stage (total leaves including tillers).  Apply when wild oats or volunteer canary seed are at the 1-6 leaf stage of growth and prior to emergence of 4 <sup>th</sup> tiller, when volunteer (tame) oats are at the 3-6 leaf stage and prior to emergence of 4 <sup>th</sup> tiller, and when green foxtail (wild millet), yellow foxtail, barnyard grass are at the 1-5 leaf stage.
Spring Wheat, Barley	Axial 100EC Herbicide <sup>1</sup>	Axial 100 EC at 600 mL/ha plus Adigor adjuvant at 700 mL/ha	Weed species controlled by INFINITY Herbicide used alone plus wild oats, green foxtail, yellow foxtail, volunteer oats, volunteer canary	Spring wheat and barley may be treated up to the flag leaf stage.  Apply when the annual grass weeds are at the 1- to 6-leaf, prior to 4 <sup>th</sup> tiller, stage of growth.

			seed and proso millet.	
Spring Wheat, Durum Wheat, Winter Wheat, Barley, Triticale	Achieve Liquid Herbicide <sup>1</sup>	Achieve Liquid Herbicide at 0.5 L/ha plus Turbocharge adjuvant at 0.5% v/v	Weed species controlled by INFINITY Herbicide used alone plus wild oat, volunteer oat, green foxtail, yellow foxtail, barnyard grass and persian darnel.	Apply when wild oats and volunteer oats are at the 1-6 leaf stage of growth, green foxtail and yellow foxtail are at the 1-5 leaf stage, and barnyard grass and persian darnel are at the 1-4 leaf stage.
Spring Wheat, Durum Wheat, Winter Wheat, Barley	2,4-D Ester + AMS <sup>2</sup>	280 g a.e./ha (e.g., 425 mL/ha of a 2,4-D Ester 700 <sup>3</sup> )  +  1.25 L/ha (40% solution)	Weed species controlled by INFINITY Herbicide used alone plus stork's bill.	Spring wheat, durum wheat and barley may be treated from the 4-leaf stage of growth until the flag leaf is just visible but still rolled. Winter wheat may be treated in the spring from early tillering until the flag leaf is just visible but still rolled. Apply when stork's-bill is at the 1- to 8-leaf stage of growth.
Spring Wheat, Durum Wheat Barley	Lontrel 360 <sup>1</sup>	0.42 L/ha	Weed species controlled by INFINITY Herbicide used alone plus Canada thistle (top growth), vetch ( <i>Vicia</i> spp.), and alsike clover.	Wheat (spring and durum) and barley may be treated from the 3-leaf until the flag leaf emergence stages of growth.
Spring Wheat, Durum Wheat, Barley	FX Herbicide <sup>4,5</sup>	0.4 L/ha	Weed species controlled by INFINITY Herbicide used alone  plus  volunteer soybean, round-leaved mallow and improved control of cleavers, kochia, volunteer flax, chickweed and hempnettle.	Wheat (spring and durum) and barley may be treated from the 2-leaf crop growth stage until the flag leaf is just visible but still rolled.  Weed growth stages: Volunteer Soybean <sup>6</sup> : up to the 5 <sup>th</sup> trifoliate leaf stage Round-leaved mallow: 1-to 6-leaf stage Cleavers: 1 to 9 whorls Kochia and volunteer flax: up to 15 cm in height Chickweed, hempnettle: 1- to 8-leaf stage.

Spring Wheat, Durum Wheat	FX Herbicide <sup>4,5</sup> + Varro Herbicide	0.4 L/ha + 0.5 L/ha	Weed species controlled by INFINITY and FX Herbicide tank-mix  plus  annual grasses and broadleaf weeds listed on the Varro Herbicide label.	Wheat (spring and durum) may be treated when plants have 2-6 leaves on main stem, plus 3 tillers but prior to jointing (presence of first node).  Refer to individual herbicide product labels for respective weed growth stages.
Spring Wheat, Barley	FX Herbicide <sup>4,5</sup> + Axial Herbicide	0.4 L/ha + 1.2 L/ha	Weed species controlled by INFINITY and FX Herbicide tank-mix  plus  wild oats, green foxtail, yellow foxtail, volunteer oats, volunteer canary seed and proso millet.	Spring wheat and barley may be treated from the 2-leaf crop growth stage until the flag leaf is just visible but still rolled.  Refer to individual herbicide product labels for respective weed growth stages.
Spring Wheat, Durum Wheat, Barley	FX Herbicide <sup>4,5</sup> + Puma Advance Herbicide	0.4 L/ha + 1.02 L/ha	Weed species controlled by INFINITY and FX Herbicide tank-mix plus wild oats, green foxtail, yellow foxtail and barnyard	Wheat (spring and durum) and barley may be treated from the 2- to 6-leaf stage plus 3 tillers.  Refer to individual herbicide product labels for respective weed
Spring Wheat, Durum Wheat	FX Herbicide <sup>4,5</sup> + Horizon NG Herbicide	0.4 L/ha + 930 mL/ha	grass.  Weed species controlled by INFINITY and FX Herbicide tank-mix  plus  wild oats, volunteer (tame) oats, green foxtail, yellow foxtail, barnyard grass, volunteer	growth stages.  Wheat (spring and durum) may be treated from the 2-leaf crop growth stage until the flag leaf is just visible but still rolled.  Refer to individual herbicide product labels for respective weed growth stages.

Spring Wheat,	FX Herbicide <sup>4,5</sup>	0.4 L/ha	Weed species	
Durum Wheat,			controlled by	Wheat (spring and durum)
Barley	+	+	INFINITY and FX	and barley may be treated
			Herbicide tank-mix	from the 2-leaf crop
	Achieve Liquid	Achieve Liquid		growth stage until the flag
	Herbicide	Herbicide at	plus	leaf is just visible but still
		0.5 L/ha plus		rolled.
		Turbocharge	wild oat, volunteer	
		Adjuvant,	(tame) oats, green	Refer to individual
		or Turbocharge EST	foxtail, yellow	herbicide product labels
		Adjuvant,	foxtail, barnyard	for respective weed
		or Turbocharge D	grass and persian	growth stages.
		Adjuvant	darnel.	
		or Intake Adjuvant		
		at 0.5% v/v (0.5 L		
		per 100 L of spray		
		mixture)		

- For additional control of cleavers at the 4 to 6-whorl growth stage, add ammonium sulphate at 500 g/ha (99%) or 1 L/ha (49% solution) or 1.25 L/ha (40% solution). If using an ammonium sulphate product with a different concentration, adjust the rate accordingly.
- 2. If using an ammonium sulphate (AMS) product with a different concentration, adjust the rate accordingly (e.g., add ammonium sulphate at 500 g/ha (99%) or 1 L/ha (49% solution) or 1.25 L/ha (40% solution)).
- 3. 2,4-D Ester 700 contains 660 g a.e./L)
- 4. Ammonium sulphate at 500 g/ha (99%) or 1 L/ha (49% solution) or 1.25 L/ha (40% solution) may be added for improved broadleaf weed control. If using an ammonium sulphate product with a different concentration, adjust the rate accordingly.
- 5. Includes ALS (Group 2) resistant biotypes.
- 6. For control of volunteer soybean up to the 9<sup>th</sup> trifoliate leaf stage, add ammonium sulphate at 500 g/ha (99%) or 1 L/ha (49% solution) or 1.25 L/ha (40% solution). If using an ammonium sulphate product with a different concentration, adjust the rate accordingly.

# **SECTION 11: Minor Uses**

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Bayer CropScience under the User Requested Minor Use Label Expansion program. For these uses, Bayer CropScience has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

# GRASSES, GROWN FOR FORAGE OR SEED PRODUCTION

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CROPS	INFINITY RATE	WEEDS CONTROLLED	USE INSTRUCTIONS
Perennial ryegrass (seedling and established)  Red Fescue including Creeping Red Fescue (seedling and established)  Bromegrass including Meadow Bromegrass, Smooth Bromegrass (seedling and established)  Timothy (seedling and established)	0.83 L/ha	Weed species listed under Section 8.	<ul> <li>Apply INFINITY Herbicide when the crop is at the 1-leaf stage of growth until the flag leaf is just visible but still rolled, and when target weed species are at the growth stages listed under Section 8.</li> <li>Apply only once per season.</li> <li>Application beyond emergence of the flag leaf may result in crop injury.</li> <li>Do not apply to a crop that is stressed by severe weather conditions, frost, low fertility, drought, water-saturated soil, disease or insect damage, as crop injury may result.</li> <li>Do not apply to crops undersown with legume species.</li> <li>Do not graze the treated crops within 7 days, or harvest for hay within 30 days, of INFINITY Herbicide application.</li> <li>Refer to Sections 8 and 12 for additional use information and cautions.</li> </ul>

<sup>\*</sup> For additional control of cleavers at the 4 to 6-whorl growth stage, add ammonium sulphate at 500 g/ha (99%) or 1 L/ha (49% solution) or 1.25 L/ha (40% solution). If using an ammonium sulphate product with a different concentration, adjust the rate accordingly.

#### **SECTION 12: APPLICATION INSTRUCTIONS AND CAUTIONS**

- For best results, apply to emerged, young, actively growing weeds.
- Under cool and/or dry conditions activity may be reduced or delayed. Weed control may also be
  reduced if application is made when weeds are dust covered or in the presence of heavy dew, fog,
  or mist/rain.
- If crop is under stress due to abnormal environmental conditions, delay application until stress passes and after both crop and weeds have resumed active growth.
- Follow directions under Sections 8, 9 and 10 for the correct rate and timing of application.
- Avoid contact with desirable plants or crops either from direct application or from spray drift as severe damage may occur.
- 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.

#### **BUFFER ZONES:**

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

Method of	Crop		Buffer Zones (metres) Required for the Protection of:		
Application			Freshwater H	Freshwater Habitat of Depths:	
			Less than 1 m	Greater than 1 m	Habitat
Field Sprayer*	Wheat (spring, durum, winter), barley, triticale, timothy), perennial ryegrass, red fescues, bromegrasses		1	1	5
Aerial	Wheat (spring, durum, winter),	Fixed wing	10	1	375
	barley, triticale, timothy, perennial ryegrass, red fescues, bromegrasses	Rotary wing	10	1	225

<sup>\*</sup>For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy or ground, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy or ground, the labelled buffer zone can be reduced by 30%.

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

#### FIELD SPRAYER APPLICATION.

- **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification. Boom height must be 60 cm or less above the crop or ground.
- Application of INFINITY Herbicide should be made using a minimum of 46.8 litres of water per hectare, at a pressure of 275 kPa, or 310 kPa if using check valves, and at a ground speed of 6-8 kph.
- When tank mixing INFINITY Herbicide with a tank mix partner, ensure you read the tank mix partner label for minimum water recommendations.
- The use of 80° or 110° flat fan nozzles is recommended for optimum spray coverage.
- Do not use flood jet nozzles, controlled droplet application equipment or Sprafoil® equipment.
- Uniform, thorough coverage is important to obtain consistent weed control. Higher water volumes should be used under dense crop and weed canopies to ensure thorough coverage of the target weeds
- Avoid overlapping; shut off spray boom while starting, turning, slowing or stopping to prevent crop injury from over-application.

#### **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) medium classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan.
- Apply INFINITY Herbicide used alone or in tank mixes (ONLY with the recommended tank mix partners that are registered for aerial use) in no less than 28.1 litres of water per hectare at a pressure no less than 300 kPa.
- 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 on this label.
- Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

# Aerial Use Precautions

- Read and understand the entire label before opening this product. If you have questions, call Bayer at 1-888-283-6847 or obtain technical advice from the distributor or your provincial agricultural representative.
- 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.
- Do not apply to terrain where there is a potential for surface run-off to enter aquatic systems.
- Do not apply if rain is expected within 1 hour after spraying. If tank mixing, consult the tank mix partner label and respect the most restrictive interval.

#### **AERIAL OPERATOR PRECAUTIONS:**

- **Aerial applicators:** Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during application. Gloves are not required during application within a closed cockpit. 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 pilots have communication capabilities at each treatment site at the time of application.
- The field crew and the mixer/loaders: Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks, shoes, and goggles or face shield during mixing/loading, clean-up 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, aircraft cockpit and vehicle cabs must be decontaminated regularly.

#### **Product Specific Precautions:**

• Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-888-283-6847 or obtain technical advice from the distributor or your provincial agricultural representative.

# SECTION 13: LIVESTOCK FEEDING AND PRE-HARVEST INTERVALS

DO NOT graze treated perennial ryegrass, red fescue, bromegrass or timothy crops within 7 days of application or harvest for hay within 30 days of application.

DO NOT graze treated wheat, triticale and barley or cut for forage or hay within 25 days of application.

DO NOT harvest wheat or triticale for grain or straw within 50 days of application.

DO NOT harvest barley for grain or straw within 45 days of application.

If tank mixing, always respect the maximum pre-harvest interval stated on the labels of all the tank mix products.

#### **SECTION 14: ROTATIONAL CROP RECOMMENDATIONS**

Only the following crops have been field tested to indicate they may be safely planted at the prescribed interval after an application of INFINITY Herbicide. To avoid the possibility of injury to subsequent crops after an application of the recommended rate of INFINITY Herbicide, follow the crops and replanting interval which appear on this label, and if tank mixing on the label of the tank mix partner, and always observe the most restrictive replanting interval. A field bioassay must be conducted the year prior to growing any other crop of interest to confirm crop safety.

CROP	REPLANTING INTERVAL
Alfalfa	10 months
Barley, spring	10 months
Canaryseed	10 months
Canola	10 months
Corn, field*	10 months
Flax, including low linolenic acid varieties	10 months
Lentils	22 months
Peas, field**	10 months
Potatoes	10 months
Soybeans*	10 months
Sunflower	10 months
Tame oats	10 months
Tomatoes*	10 months
Wheat, spring and durum	10 months

- \* Eastern Canada and Manitoba only.
- \*\* Field peas may be grown the year following INFINITY Herbicide application in all Black, Grey-Wooded and Dark Brown soil zones. **DO NOT** plant field peas the year following an INFINITY Herbicide application in the Brown soil zone where organic matter content is below 2.5% and where soil pH is above 7.5.

# **SECTION 15: MIXING INSTRUCTIONS**

INFINITY Herbicide must be applied with properly calibrated and clean sprayer equipment. INFINITY Herbicide is specially formulated to mix readily in water. Prior to adding INFINITY Herbicide to the spray tank, ensure that the spray tank is thoroughly clean (see Section 16 "Sprayer Cleanup").

- 1. Fill the spray tank 1/4 to 1/2 full with clean water and begin agitation or bypass.
- 2. Add the appropriate rate of INFINITY Herbicide, as specified under Section 8, directly to the spray tank. Maintain sufficient agitation during both mixing and application. Add tank mix partners, if desired.
- 3. Fill the spray tank with balance of water required.
- 4. Maintain sufficient agitation during both mixing and application of INFINITY Herbicide.

INFINITY Herbicide may settle if left standing without agitation. If the spray solution is allowed to stand for one hour or more, re-agitate the spray solution for a minimum of 10 minutes before application.

# **SECTION 16: SPRAYER CLEANUP**

Before and after using INFINITY Herbicide always complete a thorough cleaning of the spray tank, lines and filters. The following procedures are recommended:

- 1. Drain the tank completely, and then wash out tank, boom and hoses with clean water. Drain again.
- 2. Half fill the tank with clean water and add ammonia (i.e., 3% domestic ammonia solution) at a dilution rate of 1% (i.e., 1 litre of domestic ammonia for every 100 litres of rinsate). Complete filling of the tank with water. Agitate/recirculate and flush through boom and hoses. Leave agitation on for 10 minutes. Drain tank completely.
- 3. Repeat step 2.
- 4. Remove nozzles and screens and soak them in a 1% ammonia solution. Inspect nozzles and screens and remove visible residues.
- 5. Flush tank, boom, and hoses with clean water.
- 6. Inspect tank for visible residues. If present, repeat step 2.
- 7. Dispose of rinsings in accordance with provincial regulations.

# **SECTION 17: HERBICIDE RESISTANCE MANAGEMENT**

For resistance management, INFINITY Herbicide is a Group 6 and 27 herbicide. Any weed population may contain or develop plants naturally resistant to INFINITY Herbicide and other Group 6 and 27 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:

- 1. Where possible, rotate the use of INFINITY Herbicide or other Group 6 and 27 herbicides within a growing season (sequence) or among growing seasons with different herbicide groups that control the same weeds in a field.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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.
- 7. For further information or to report suspected resistance contact Bayer via internet at www.cropscience.bayer.ca or telephone at 1-888-283-6847.

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