### GROUP 14 15 HERBICIDES

## AUTHORITY<sup>®</sup> SUPREME HERBICIDE

COMMERCIAL (AGRICULTURAL) Suspension

For weed control in field peas, chickpeas, and soybeans, sunflowers, alfalfa grown for seed production and field-grown conifers (including Christmas trees).

#### **ACTIVE INGREDIENTS:**

Pyroxasulfone.....250 g/L Sulfentrazone......250 g/L

Contains 5-chloro-2-methyl-4-isothiazolin-3-one at 0.0017% and 2-methyl-4-isothiazolin-3-one at 0.00056% as preservatives. OR Contains 1,2-benzisothiazolin-3-one at 0.029% as a preservative.

Contains petroleum distillates.

REGISTRATION NO. 32562 PEST CONTROL PRODUCTS ACT

#### Warning, contains the allergen sulfites.

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

Net Contents: 1 – 1000 L

FMC of Canada Limited 6755 Mississauga Road, Suite 204 Mississauga, ON L5N 7Y2 1-833-362-7722

#### IN CASE OF EMERGENCY, CALL 1-800-331-3148 (24 HOURS)

#### 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 Product Act* to use this product in a way that is inconsistent with the directions on the label.

#### FIRST AID

#### If Swallowed

Call a poison control centre or doctor immediately for treatment advice. Do not give **any** liquid to the person. 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.

Take the container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

You may also contact **1-800-331-3148** for emergency medical treatment information.

#### TOXICOLOGICAL INFORMATION

Treat symptomatically.

#### **PRECAUTIONS**

KEEP OUT OF REACH OF CHILDREN.

Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

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.

**DO NOT** apply by air.

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.

Do not apply AUTHORITY<sup>®</sup> SUPREME Herbicide using handheld equipment (such as backpack sprayers, manually-pressurized handwands and mechanically-pressurized handguns).

#### Restricted Entry Interval

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

#### Important

- Do not apply this product in a way that will contact workers or other persons, either directly or through drift. For any requirements specific to your area, consult the provincial agency responsible for pesticide regulation.
- Do not apply more than the allowed amount of sulfentrazone per hectare per 24-month period. The 24-month period is considered to begin upon the initial application.
- Do not apply more than the allowed amount of pyroxasulfone per hectare per 12-month period. The 12-month period is considered to begin upon the initial application.

#### **ENVIRONMENTAL PRECAUTIONS**

TOXIC to small wild mammals.

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

This product contains active ingredients and aromatic petroleum distillates which are toxic to aquatic organisms.

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. DO NOT use on coarse soils.

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.

Sulfentrazone is persistent and may carryover. It is recommended that this product not be used in areas treated with any products containing sulfentrazone during the previous 24 months.

DO NOT apply AUTHORITY<sup>®</sup> SUPREME Herbicide in the spring to fields that were treated with applications of FOCUS<sup>®</sup> Herbicide or any other product containing pyroxasulfone during the previous fall.

#### **STORAGE**

Store this product away from food or feed. Store in original container in cool, dry, well-ventilated location. STORE ABOVE 5°C TO KEEP PRODUCT FROM FREEZING. If frozen, thaw before use. If solid crystals are observed, warm material to above 15 °C by placing container in warm location. Shake or roll container periodically to redissolve solids.

#### **DISPOSAL**

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.

#### For 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 refillable containers:

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 reuse this container for any other purpose.

#### For 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.

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### GROUP 14 15 HERBICIDES

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Pyroxasulfone	250 g/L
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**Contains Petroleum Distillates** 

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#### FMC of Canada Limited

6755 Mississauga Road, Suite 204 Mississauga, ON L5N 7Y2 1-833-362-7722

BOOKLET

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#### TOXICOLOGICAL INFORMATION

Treat symptomatically.

#### **PRECAUTIONS**

KEEP OUT OF REACH OF CHILDREN.

Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

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.

**DO NOT** apply by air.

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.

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#### Restricted Entry Interval

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#### Important

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- Do not apply more than the allowed amount of sulfentrazone per hectare per 24-month period. The 24-month period is considered to begin upon the initial application.
- Do not apply more than the allowed amount of pyroxasulfone per hectare per 12-month period. The 12-month period is considered to begin upon the initial application.

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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.

Sulfentrazone is persistent and may carryover. It is recommended that this product not be used in areas treated with any products containing sulfentrazone during the previous 24 months.

DO NOT apply AUTHORITY<sup>®</sup> SUPREME Herbicide in the spring to fields that were treated with applications of FOCUS<sup>®</sup> Herbicide, or any other product containing pyroxasulfone, during the previous fall.

#### **STORAGE**

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- 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.

#### **GENERAL INFORMATION**

AUTHORITY<sup>®</sup> SUPREME Herbicide is a selective soil applied herbicide for the control of annual grasses and annual broadleaf weeds in field peas, chickpeas, soybeans, sunflowers, alfalfa grown for seed production and in field-grown conifers (including Christmas trees).

AUTHORITY<sup>®</sup> SUPREME Herbicide is formulated as a suspension concentrate containing a total of 500 grams of the active ingredients pyroxasulfone and sulfentrazone, per litre, intended for dilution with water for application.

AUTHORITY<sup>®</sup> SUPREME Herbicide is taken up by the plant roots and shoots.

Observe all instructions, mixing directions, application precautions and other label information of AUTHORITY<sup>®</sup> SUPREME Herbicide.

For information regarding the use of this product call 1-833-362-7722 or visit https://ag.fmc.com/ca/en.

#### **DIRECTIONS FOR USE**

#### General Application Instructions

AUTHORITY<sup>®</sup> SUPREME Herbicide may be applied to the soil as a pre-plant or pre-emergence (to weed and crop) surface application. See below for the proper rates of application according to soil texture and organic matter content.

All soil applications of AUTHORITY<sup>®</sup> SUPREME Herbicide require adequate moisture (at least 15 - 25 mm) for herbicidal activation. Dry weather following applications of AUTHORITY<sup>®</sup> SUPREME Herbicide may reduce effectiveness. AUTHORITY<sup>®</sup> SUPREME Herbicide may not control weeds that germinate after application but before an activating rainfall / irrigation, or weeds that germinate through cracks resulting from dry soil. However, when adequate moisture is received after dry conditions, AUTHORITY<sup>®</sup> SUPREME Herbicide may provide a reduced level of control of susceptible germinating weeds. When adequate moisture is not received after AUTHORITY<sup>®</sup> SUPREME Herbicide application, weed control may be improved by irrigation (do not use flood irrigation).

Excessive rainfall, irrigation, or prolonged wet soil conditions after application of AUTHORITY<sup>®</sup> SUPREME Herbicide from seed germination through seedling development, will increase the risk of seedling injury and growth inhibition, especially with shallow seeded crops.

Before applying, verification of AUTHORITY<sup>®</sup> SUPREME Herbicide selectivity on your crop variety must be confirmed to avoid injury to sensitive varieties. If variety tolerance is unknown, such as with new varieties, apply AUTHORITY<sup>®</sup> SUPREME Herbicide on a small area to confirm variety safety before use on large acreage.

#### Timing of Application

#### Spring Application

AUTHORITY<sup>®</sup> SUPREME Herbicide can be applied in the spring pre-plant or pre-emergence up to three-days after seeding.

Do not mechanically incorporate as this can destroy the herbicide barrier and allow weeds to escape.

#### Fall Application

In Western Canada only, AUTHORITY<sup>®</sup> SUPREME Herbicide may be applied in the fall to control labeled weeds prior to planting chickpeas, field peas, soybeans or sunflowers the following spring. AUTHORITY<sup>®</sup> SUPREME Herbicide should be applied to the stubble or soil surface to allow moisture from rainfall or snow to move the product into the soil. Apply the product when the average soil temperature is below 10°C.

Do not mechanically incorporate in the fall or spring as this can destroy the herbicide barrier and allow weeds to escape.

Do not apply to frozen soils or existing snow cover to prevent AUTHORITY<sup>®</sup> SUPREME Herbicide run-off.

#### **General Use Restrictions**

# 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.

**DO NOT** use flood irrigation to activate or incorporate AUTHORITY<sup>®</sup> SUPREME Herbicide.

**DO NOT** apply through any type of irrigation system.

**DO NOT** contaminate irrigation ditches or water used for domestic purposes.

**DO NOT** apply AUTHORITY<sup>®</sup> SUPREME Herbicide when environmental conditions may result in drift to non-target sites. Drift of this product may be harmful to non-target plants near the treatment area.

DO NOT apply AUTHORITY<sup>®</sup> SUPREME Herbicide (or any other product containing pyroxasulfone) in the spring to fields that were treated with applications of FOCUS<sup>®</sup> Herbicide (or any other product containing pyroxasulfone) during the previous fall.

<u>Field sprayer application</u>: 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) medium classification. Boom height must be 60 cm or less above the crop or ground.

DO NOT apply by air.

Sulfentrazone is persistent and will last in the soils (carryover) for one to two years. DO NOT APPLY AUTHORITY<sup>®</sup> SUPREME HERBICIDE TO FIELDS TREATED WITH AUTHORITY<sup>®</sup> 480 HERBICIDE or AUTHORITY<sup>®</sup> SUPREME HERBICIDE <u>or ANY PRODUCT CONTAINING</u> <u>SULFENTRAZONE</u>, IN THE PREVIOUS 24 MONTHS.

In case of drought in any of those years, a subsequent application of AUTHORITY<sup>®</sup> SUPREME Herbicide should be further delayed by the equivalent number of years in which drought occurred. AUTHORITY<sup>®</sup> SUPREME Herbicide requires 15 - 25 mm of rain or irrigation water to be effective.

#### Spray buffer zones

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).

Mothod of	Spray buffer zones (metres) required for the protection of:		
Method of application	Freshwater habitat of depths:		Terrestrial habitat
application	Less than 1 m	Greater than 1 m	Terrestriai nabitat
Field sprayer	5	3	10

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.

#### **Mixing and Spraying Instructions**

AUTHORITY<sup>®</sup> SUPREME Herbicide is a suspension concentrate intended for dilution with water. Use a minimum spray volume of 100 litres of solution per hectare and a spray pressure of 200-275 kPa. Use 50 mesh filter screens or larger (metal or nylon).

Keep bypass line on or near bottom of tank to minimize foaming.

#### Spray Tank Preparation

It is important that spray equipment is clean and free of existing pesticide deposits before using this product. Follow the spray tank clean out procedures specified on the label of product previously applied before adding AUTHORITY<sup>®</sup> SUPREME Herbicide to the tank.

#### Mixing and Loading Instructions

For best results, fill spray tank with one half of the volume of clean water needed for the area to be treated. Start the agitation system. Slowly add the AUTHORITY<sup>®</sup> SUPREME Herbicide to the spray tank. Complete filling the spray tank to the desired level. Continuous spray tank agitation is required at all times to maintain a uniform spray solution. Make sure AUTHORITY<sup>®</sup> SUPREME Herbicide is thoroughly mixed before application.

Use the AUTHORITY<sup>®</sup> SUPREME Herbicide mixture immediately after mixing.

**Tank Mixtures:** Fill spray tank one-half to two-thirds full of water; with agitator operating add the recommended amount of ingredients using the following order:

- Wettable powders and dispersible granules
- Agitate tank mix thoroughly
- Micro-encapsulated suspensions
- Liquid flowables and suspensions
- Emulsifiable concentrate formulations
  - o Fill spray tank nearly full of water
- Glyphosate formulations
- Surfactants
  - Complete filling the spray tank to the desired level

Maintain agitation during filling, mixing and application. When using drift reducing agents, follow specific product label instructions for order of addition to spray tank.

Do not store the sprayer overnight or for any extended period of time with the spray mixture remaining in the tank.

#### Sprayer Equipment Clean-Out

After spraying AUTHORITY<sup>®</sup> SUPREME Herbicide and before using sprayer equipment for any other applications, the sprayer must be thoroughly cleaned using the following procedure:

- 1. Drain sprayer tank, hoses, and spray boom. Use a high-pressure detergent wash to remove physical sediment and residues from the inside of the sprayer tank and thoroughly rinse. Then thoroughly flush all sprayer hoses, booms, and nozzles with clean water.
- 2. Prepare a sprayer cleaning solution by adding three litres of ammonia (containing at least 3% active) per 100 litres of clean water. Prepare sufficient cleaning solution to allow the operation of the spray system for a minimum of 15 minutes to thoroughly flush hoses, spray boom and spray nozzles.
- 3. Convenient and thorough cleaning of the sprayer can be achieved if the ammonia solution or fresh water is left in the spray tank, hoses, spray booms and spray nozzles overnight or during storage.
- 4. Drain the sprayer system. Rinse the tank with clean water and flush through the hoses, boom, and nozzles. Remove and clean spray tips and all strainers and screens separately in an ammonia solution.
- 5. Properly dispose of all cleaning solution and rinsate in accordance with provincial guidelines and regulations.

Do not drain or flush equipment on or near desirable trees or plants. Do not contaminate any body of water including irrigation water that may be used on other plants or crops.

#### Weeds Controlled or Suppressed

The following weeds are either controlled or suppressed by AUTHORITY<sup>®</sup> SUPREME Herbicide. Length of control is dependent on rate applied, amount of rainfall received following application and soil type. Please see crop specific use rates for rate recommendations based on soil type.

#### **GRASSY WEEDS**

**Control** Barnyard grass Brome (Downy, Japanese) Crabgrass (Large, Smooth) Foxtail (Green, Yellow, Giant) Witchgrass

#### BROADLEAF WEEDS

**Control** Amaranth, Palmer Cleavers Cowcockle Groundsel, Common Kochia Lamb's-quarters Nightshade, Eastern Black Pigweed (Green, Redroot, Powell) Purslane, Common Stinkweed Waterhemp, Common

#### Suppression Wild Oats

#### Suppression

Common Ragweed Russian Thistle Wild Mustard

Wild Buckwheat Woodsorrel, Yellow

#### Soil Texture

Unless a specific soil texture is mentioned, rate tables throughout this label refer to the table below for soil texture groups: coarse, medium, medium-fine and fine. This includes a complete listing of soil textures included in each of the soil texture groupings.

Coarse	Medium	Medium-Fine	Fine
Sand	Loam	Sandy clay loam	Silty clay
Loamy sand	Silt loam	Sandy clay	Clay loam
Sandy loam	Silt	Silty clay loam	Clay

#### Rates of Application: Soybeans, Chickpeas, Field Peas and Sunflowers

In the spring, AUTHORITY<sup>®</sup> SUPREME Herbicide can be applied pre-plant or pre-emergence up to three days after planting.

Alternatively, in Western Canada only, AUTHORITY<sup>®</sup> SUPREME Herbicide can be applied in the fall for weed control prior to planting soybeans, chickpeas, field peas or sunflowers the following spring. For fall application, apply a residual treatment rate when the average daily soil temperature is below 10°C.

Crop seeds must be planted a minimum of 2.5 cm deep.

**DO NOT** apply AUTHORITY<sup>®</sup> SUPREME Herbicide to any crop if crop has germinated or emerged.

Before applying to seed sunflower, verify the selectivity of AUTHORITY<sup>®</sup> SUPREME Herbicide on your inbred line or hybrid with your local seed company (supplier) to avoid potential injury. The use of AUTHORITY<sup>®</sup> SUPREME Herbicide may result in temporary growth suppression if extreme conditions, such as high rainfall and extended periods of water-saturated soil, occur during sunflower germination or early seedling development. Similar growth suppression may occur on eroded knolls, hilltops, areas with coarse gravelly deposits, low organic matter and/or high soil pH. These suppressions have not resulted in reduced sunflower yield potential.

Application Timing	Rate (mL/ha) of AUTHORITY <sup>®</sup> SUPREME Herbicide
Setup Treatment* (spring pre-plant or pre-emergence)	400 mL/ha (early season control only)
Residual Treatment [spring pre- plant or pre-emergence or fall application (Western Canada only)]	500 mL/ha (medium texture, O.M. 1.5 – 3%) 600 mL/ha (medium-fine/fine texture, O.M. 3 - 6%)

\*A set-up treatment is an application to remove early weed competition to allow good crop establishment.

Do not apply to soils classified as coarse-textured.

Do not use on peat or muck soils.

Do not apply to soil with an organic matter content less than 1.5% or greater than 6%. Do not use on soils with a pH of 7.8 or greater.

Do not mechanically incorporate in the fall or spring.

Do not apply to frozen soils or existing snow cover.

AUTHORITY<sup>®</sup> SUPREME Herbicide can be applied once per 24-month period. Do not apply additional products containing sulfentrazone in this 24-month period. The 24-month period is considered to begin when the initial application of AUTHORITY<sup>®</sup> SUPREME Herbicide is applied.

Do not apply any other products containing pyroxasulfone for 12 months after an application of AUTHORITY<sup>®</sup> SUPREME Herbicide.

Do not follow a fall application with any product that contains sulfentrazone or pyroxasulfone in the spring.

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than FMC of Canada Ltd. under the User Requested Minor Use Label Expansion program. For these uses, FMC of Canada Ltd. 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.

Field-grown conifers (including Christmas trees)		
Сгор	Field-grown conifers (including Christmas trees)	
Weeds Controlled	Horsetail ( <i>Equisetum arvense</i> )	
Application Timing	Pre-emergence to horsetail, applying as soon as the ground thaws	
Application Volume	200 – 300 L/ha	
Application Rates	1.01 L/ha for horsetail	
Notes	The application is not recommended for over-the-top broadcast spray and should be limited to directed sprays (banded application) only.	
	Maximum one application per season.	
	Due to variability within and among conifer species, crop growth stage, environmental conditions and application techniques, users should first test AUTHORITY <sup>®</sup> SUPREME Herbicide on a small number of actively growing plants under local conditions and their standard production practices. Prior to treating the entire crop, examine test plants for 4-8 weeks for symptoms of phytotoxicity. Testing AUTHORITY <sup>®</sup> SUPREME Herbicide on a small number of plants will determine whether the product is suitable for widespread application.	
Dormant, established	alfalfa grown for seed production	
Сгор	Dormant, established alfalfa grown for seed production.	
Weeds Controlled/ Suppressed	Weeds listed on this label under the section "Weeds Controlled or Suppressed".	
Application Timing	Apply broadcast in early spring to dormant, established alfalfa when no new crop growth is present.	
Application Rates	Set-up treatment: 400 mL/ha (early season control only).	
	Residual treatment: 500 mL/ha (medium texture, O.M. 1-3%.	
	600 mL/ha (medium-fine/fine texture, O.M. 3-6%).	

Application Volume	Apply in at least 100 L of water per hectare.	
Restrictions	Do not apply to soil classified as coarse-textured.	
	Do not apply to soil with an organic matter content less than 1.5% or greater than 6%.	
	Do not apply to soil with a pH of 7.8 or greater.	
	AUTHORITY <sup>®</sup> SUPREME Herbicide can be applied once in a 24- month period. DO NOT apply any additional products containing sulfentrazone during this 24-month period. The 24-month period is considered to begin when the initial application of AUTHORITY <sup>®</sup> SUPREME Herbicide is applied.	
	Complete field burning, cultivation or renovation before applying AUTHORITY <sup>®</sup> SUPREME Herbicide. Disruption of the surface of the soil after application will result in reduced weed control.	
	For seed production only, DO NOT feed seed screenings and aftermath to livestock. Seed produced should not be distributed for human food or animal feed purposes.	
	DO NOT harvest forage or cut hay.	
	DO NOT permit livestock to graze treated fields.	

#### Tank Mixes:

This product may be tank mixed with a fertilizer, or 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 FMC of Canada Limited at 1-833-362-7722 for information before applying any tank mix that is not specifically recommended on this label.

#### AUTHORITY<sup>®</sup> SUPREME HERBICIDE PLUS GLYPHOSATE

#### Glyphosate

Tank mix AUTHORITY<sup>®</sup> SUPREME Herbicide with labeled rates of glyphosate (that are registered for the same uses).

# AUTHORITY<sup>®</sup> SUPREME HERBICIDE PLUS EXPRESS<sup>®</sup> SG HERBICIDE PLUS GLYPHOSATE

For control of broadleaf weeds and grasses pre-seed to field peas and soybean.

Fields treated with this tank mix can be seeded to field peas, or soybeans a minimum of 24 hours after application.

Alternatively, in Western Canada only, this tank mix can be applied in the fall after harvest if field

peas or soybeans are to be planted the following spring.

An adjuvant is not required for this tank mix.

In addition to the weeds controlled by AUTHORITY<sup>®</sup> SUPREME Herbicide, this tank mix will control or suppress emerged weeds listed in the following table:

Tank Mix Partner	Application Rate	Application Stage	Weeds Controlled (emerged only)	Weeds Suppressed * (emerged only)
EXPRESS <sup>®</sup> SG Herbicide +	15 g/ha +	Up to 8 cm	Canada fleabane, common ragweed, narrow leaved hawk's beard	Scentless chamomile
glyphosate	450 g ae/ha	Up to 10 cm		Wild carrot
(present as potassium salt, isopropylamine salt,ammonium salt)		Up to 15 cm	Dandelion, downy brome, flixweed, giant foxtail, green foxtail, hemp nettle, kochia, lady's thumb, lamb's-quarters, Persian darnel, redroot pigweed, Russian thistle, stinkweed, volunteer barley, volunteer canola (including glyphosate- tolerant varieties), volunteer flax, volunteer wheat, wild mustard, wild oats	Tufted vetch
		Up to 3-leaf	Cow cockle, wild buckwheat	
		Up to 8-leaf	Common chickweed	
		Rosette		Canada thistle White cockle
EXPRESS <sup>®</sup> SG Herbicide + glyphosate (present as potassium salt, isopropylamine salt,ammonium salt)	15 g/ha + 810 g ae/ha	Weeds up to 15 cm in height	All annual grasses listed above plus crabgrass (large and smooth) and annual bluegrass. All annual broadleaved weeds listed above plus prickly lettuce, shepherd's purse, annual sow thistle and narrow-leaved vetch.	

\*Weed suppression is a visual reduction in weed competition (reduced population or vigour) as compared

to an untreated area. Degree of suppression will vary with size of weed and environmental conditions prior to and following treatment.

## For pre-seed applications in the spring, injury to pulse crops may occur in fields with variable soils, gravely areas, sandy areas or eroded knolls.

Do not apply to soils classified as coarse-textured.

Do not apply in any type of soils with an organic matter content less than 3% or greater than 6%.

Do not use on soils with a pH of 7.8 or greater.

Do not mechanically incorporate in the fall or spring.

Do not apply to frozen soils or existing snow cover.

This tank mix can be applied once per 24-month period. Do not apply any other products containing sulfentrazone in this 24-month period. The 24-month period is considered to begin when the initial application of AUTHORITY<sup>®</sup> SUPREME Herbicide is applied.

#### **Crop Rotational Restrictions**

If any crop treated with AUTHORITY<sup>®</sup> SUPREME Herbicide is lost, registered crops on this label can be replanted immediately. **DO NOT** make a second application of AUTHORITY<sup>®</sup> SUPREME Herbicide. For any crop other than chickpea, field pea or soybean, please use the crop rotation interval section below for directions.

Сгор	Crop Rotation Interval (Months)	
Chickpea, field pea, soybeans, sunflowers	Anytime	
Winter wheat	4	
Barley, canola, corn (field), mustard, oats, spring and durum wheat	12	
Lentils	24	
Sugar beet	36	

For crops listed in the rotational crop table, the minimum replant interval listed in the table must be observed. For crops not listed in the rotational crop table, A MINIMUM ROTATIONAL CROP INTERVAL OF 36 MONTHS must be observed, and a representative bioassay of the field must be conducted with the rotational crop and adequate soil moisture to evaluate potential crop sensitivity.

If there is a lack of adequate or normal soil moisture due to drought conditions following an application of AUTHORITY<sup>®</sup> SUPREME Herbicide, the minimum rotational crop interval listed in the table must be extended for one additional year and a representative bioassay of the field must be conducted with the potential rotational crop and adequate soil moisture to determine the crop sensitivity to AUTHORITY<sup>®</sup> SUPREME Herbicide.

#### **RESISTANCE MANAGEMENT**

For resistance management AUTHORITY<sup>®</sup> SUPREME Herbicide contains a Group 14 and Group 15 herbicide. Any weed population may contain or develop plants naturally resistant to

AUTHORITY<sup>®</sup> SUPREME Herbicide and other Group 14 or 15 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:

- Where possible, rotate the use of AUTHORITY<sup>®</sup> SUPREME Herbicide or other Group 14 and 15 herbicides within a growing season (sequence) or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as the more resistance-prone partner.
- Herbicide use should be based on an integrated weed management program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical control methods), cultural (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Monitor weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area, if possible, by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and planting clean seed.
- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact FMC of Canada Ltd. representatives at <a href="https://ag.fmc.com/ca/en">https://ag.fmc.com/ca/en</a>.

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