

2019-2222  
2019-06-10

GROUP	4	HERBICIDE
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**Container label**

ADAMA  
Fluroxypyr 180 EC

Emulsifiable Concentrate Herbicide

FOR SALE FOR USE ONLY IN THE PRAIRIE PROVINCES AND PEACE RIVER REGION OF  
BRITISH COLUMBIA

Fluroxypyr 180 EC is a selective herbicide for postemergent control of annual broadleaved weeds including cleavers and certain ALS-resistant broadleaved weeds such as kochia in spring wheat, durum wheat, and spring barley. Fluroxypyr 180 EC will also suppress hemp-nettle, common chickweed and wild buckwheat.

AGRICULTURAL

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

ACTIVE INGREDIENT: fluroxypyr 180 g/L (present as 1-methylheptyl ester)

REGISTRATION NO. 30815 PEST CONTROL PRODUCTS ACT

**WARNING – SKIN AND EYE IRRITANT**

NET CONTENTS: 4.8 L- Bulk

ADAMA Agricultural Solutions Canada Ltd.  
300 – 191 Lombard Avenue  
Winnipeg, Manitoba  
R3B 0X1

1-855-264-6262 **PRECAUTIONS** Keep out of reach of children. Causes eye and skin irritation, DO NOT get in eyes or on skin. Avoid breathing spray mist. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. 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.

**DO NOT APPLY BY AIR**

**PROTECTIVE CLOTHING AND EQUIPMENT** At all times: Wear clean, body-covering coveralls.

**During mixing and loading, and clean-up and repair:** Wear goggles or face shield and chemical-resistant gloves. Rinse gloves before removal.

**OPERATOR USE PRECAUTIONS**

Wear freshly laundered clothing and clean protective equipment daily. At completion of spraying or end of the day take a shower immediately. Wash thoroughly with soap and water before eating, drinking, smoking or using the toilet. Remove contaminated clothing at the end of the work session and store and wash separately from household laundry using detergents and hot water before reuse. If herbicide penetrates clothing, remove immediately; then wash thoroughly and put on clean clothing. Throw away clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Avoid contact with eyes, skin and clothing. Avoid breathing spray mist.

**PHYSICAL OR CHEMICAL HAZARDS**

**COMBUSTIBLE.** Do not use or store near heat or open flame.

**FIRST AID**

**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.

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

#### TOXICOLOGICAL INFORMATION

This product contains petroleum distillates. Treatment should be based on judgment of the physician in response to reactions of the patient. Vomiting may cause aspiration pneumonia.

#### AGRICULTURAL CHEMICAL

Do not ship or store with food, feeds, drugs or clothing.

#### ENVIRONMENTAL HAZARDS

Overspray or drift to important wildlife habitats, such as ponds, wetlands, streams, woodlots and shelterbelts, should be avoided. A 15 metre buffer zone should be established between the area to be sprayed and aquatic environments or terrestrial habitats listed above. Do not contaminate water when disposing of equipment washwaters. Do not contaminate irrigation ditches or water used for domestic purposes.

This product contains a petroleum distillate which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning of equipment.

#### STORAGE

Store in original containers in a secure, dry heated storage. If product is frozen, bring to room temperature and agitate before use. Do not allow contamination of seeds, plants, fertilizers or other pesticides. Do not contaminate food, feedstuffs or domestic water supplies. If containers are damaged or spill occurs, use the product immediately or contain the spill with absorbent materials and dispose of waste.

#### DISPOSAL

##### **Recyclable Containers:**

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

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##### **Returnable Containers:**

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##### **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 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)**

**Container label**

ADAMA  
Fluroxypyr 180 EC

Emulsifiable Concentrate Herbicide

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BRITISH COLUMBIA**

Fluroxypyr 180 EC is a selective herbicide for postemergent control of annual broadleaved weeds including cleavers and certain ALS-resistant broadleaved weeds such as kochia in spring wheat, durum wheat, and spring barley. Fluroxypyr 180 EC will also suppress hemp-nettle, common chickweed and wild buckwheat.

**AGRICULTURAL**

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KEEP OUT OF REACH OF CHILDREN**

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### **STORAGE**

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#### **GENERAL INFORMATION**

Fluroxypyr 180 EC is a selective postemergent herbicide for the control of annual broadleaved weeds in spring wheat, durum wheat and spring barley, not underseeded with legumes.

Fluroxypyr 180 EC offers a novel mode of action for controlling hard-to-kill annual broadleaved weeds such as kochia (including ALS resistant biotypes) and cleavers. Fluroxypyr 180 EC will also provide suppression of hempnettle, wild buckwheat and chickweed.

#### **MODE OF ACTION**

Fluroxypyr 180 EC is a systemic auxin-type herbicide and moves within the plant for control of exposed and underground plant tissues. The product controls weeds by disrupting normal plant growth patterns. Symptoms of weeds include epinasty (twisting of the stems) and swollen nodes.

#### **GENERAL USE PRECAUTIONS**

##### **Sensitive Plants**

Do not apply Fluroxypyr 180 EC directly to, or otherwise permit it to come in direct contact with susceptible crops or desirable plants including alfalfa, edible beans, canola, flowers and ornamentals, lentils, lettuce, peas, potatoes, radishes, soybeans, sugar beets, sunflowers, tomatoes or tobacco.

##### **Non-Target Sites**

Do not apply where proximity of susceptible crops or other desirable plants is likely to result in exposure to spray or spray drift. See Environmental Hazards section of the label.

##### **Crop Rotation**

Fields previously treated with Fluroxypyr 180 EC can be seeded the following year to barley, canola, flax, forage grasses, lentils, mustard, oats, peas, rye or wheat or fields can be summerfallowed.

##### **Tank Mixtures**

Do not apply this product with any other additive, pesticide or fertilizer except as specifically recommended on this label. 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.

##### **Spray Equipment Precaution**

Do not apply through any type of irrigation system.

**DO NOT APPLY BY AIR.**

**To Reduce Spray Drift:**

- Use nozzles delivering higher volumes and coarser droplets.
- Use low pressures (200 to 275 kPa).
- Use 100 L/ha of spray solution.
- Spray when the wind velocity is 15 km/hr or less.
- Spot treatments should only be applied with a calibrated boom to prevent over-application.

**To Reduce Runoff from Treated Areas:**

To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to: heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted, fine textured, or low in organic matter such as clay). Avoid application of this product when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip (buffer zone) between the treated area and the edge of the water body.

**Equipment Clean-Up**

Equipment used to apply Fluroxypyr 180 EC should not be used to apply other pesticides to sensitive crops without thorough cleaning. Contact your Fluroxypyr 180 EC dealer for detailed equipment cleaning procedures.

**DIRECTIONS FOR USE**

READ THE ENTIRE LABEL BEFORE USE. FAILURE TO FOLLOW LABEL INSTRUCTIONS MAY RESULT IN ERRATIC WEED CONTROL OR CROP DAMAGE. DO NOT APPLY TO CROPS UNDERSEEDDED WITH LEGUMES.

**Crops Registered**

spring wheat  
durum wheat  
spring barley

Fluroxypyr 180 EC alone

Apply Fluroxypyr 180 EC for postemergent control of cleavers and kochia, including ALS resistant kochia and other broadleaved weeds infesting spring wheat, durum wheat and spring barley. See following table for weeds controlled/suppressed and applications rates.

**Weeds Controlled or Suppressed by Fluroxypyr 180 EC Alone**

<b>Weeds Controlled</b>	<b>Fluroxypyr 180 EC Rate (L/ha)</b>
cleavers (1-4 whorls)	0.4
kochia♦ (2-8 leaf)	0.6
round-leaved mallow (1-6 leaf)	0.8
volunteer flax (1-12 cm)	0.6
<b>Weeds Suppressed</b>	<b>Fluroxypyr 180 EC Rate (L/ha)</b>
Chickweed♦ (up to 8 cm)	0.8
Hempnettle (2-6 leaf)	0.8
stork's-bill (1-8 leaf)	0.6
wild buckwheat (1-8 leaf)	0.4

◆Including biotypes resistant to Group 2 herbicides that inhibit the ALS enzyme.

**NOTE:** Fluroxypyr 180 EC activity is influenced by weather conditions. Optimum activity requires active crop and weed growth. The temperature range for optimum activity is 12°C to 24°C. Reduced activity will occur when temperatures are below 8°C or above 27°C. Frost before application (3 days) or shortly after (3 days) may reduce weed control and crop tolerance. Weed control may be reduced during stress conditions, e.g. drought, heat or cold stress, or if weeds have initiated flowering, or if heavy infestations exist.

## APPLICATION DIRECTIONS

### Application Timing

Apply to actively growing wheat and barley from the 2-leaf crop growth stage up to and including initiation of stem elongation. Apply when weeds are actively growing. Best results are obtained from applications made to seedling weeds. Only weeds emerged at the time of treatment will be controlled. Extreme growing conditions such as drought or near freezing temperature prior to, at and following time of application may reduce weed control and increase the risk of crop injury at all stages of growth. Foliage that is wet at the time of application may decrease control. Fluroxypyr 180 EC applications are rainfast within 1 hour after application. Under conditions of low crop and high weed density, control may be reduced.

Preharvest/Grazing Intervals (Fluroxypyr 180 EC applied alone)

- Livestock may be grazed on treated crops 3 days following application.
- Do not harvest the treated crop within 60 days after application.

### TANK-MIX COMBINATIONS - FLUROXYPYR 180 EC + BISON 400 L LIQUID HERBICIDE (or Achieve Liquid)

For control of wild oats and green foxtail in spring wheat and spring barley apply 0.5 L/ha of Bison 400 L with Fluroxypyr 180 EC. Refer to the above table for rates and broadleaved weeds controlled or suppressed with Fluroxypyr 180 EC. Read both product labels thoroughly for more information on precautions and additional directions for use. To control additional broadleaved weeds tank-mix with either 2,4-D Ester or MCPA Ester up to a maximum of 560 g a.e./ha (equivalent to 1.0 L/ha of 2,4-D LV600 or 1.12 L/ha of MCPA LV500 or 0.93 L/ha of MCPA Ester 600) or 1.5 to 2.0 L/ha Curtail M Herbicide. Refer to the 2,4-D Ester or MCPA Ester tank mix partner label for rates less than 560 g a.e./ha and weeds controlled.

### Mixing Instructions

1. Begin to fill sprayer tank with clean water, and engage agitator. **Agitation must be continued throughout the entire mixing and spraying procedure.**
2. When the sprayer is three quarters full of water, add Bison 400 L. If more than one container of Bison 400 L is to be used, add all Bison 400 L containers prior to adding Fluroxypyr 180 EC.
3. Add Fluroxypyr 180 EC next. If more than one container of Fluroxypyr 180 EC is to be used, add all Fluroxypyr 180 EC containers prior to adding any other tank-mix partners.
4. If 2,4-D Ester, MCPA Ester or Curtail M are also being added, add these next. If more than one container of 2,4-D Ester, MCPA Ester or Curtail M is to be used, add all 2,4-D Ester, MCPA Ester or Curtail M containers prior to adding Addit Adjuvant (or Turbocharge)
5. Lastly, add the required amount of Addit Adjuvant (or Turbocharge) and then continue to fill tank to desired level with water.

### TANK-MIX COMBINATIONS - FLUROXYPYR 180 EC + CURTAIL™ M HERBICIDE

For control of a wide spectrum of broadleaved weeds (see following table) in spring wheat, durum wheat and spring barley, apply Fluroxypyr 180 EC at 0.8 L/ha tank mixed with Curtail M Herbicide at 2.0 L/ha. Refer to Curtail M Herbicide label for additional precautions and directions for use, particularly crop rotation restrictions.

### Mixing Instructions

Add the correct amount of Fluroxypyr 180 EC to spray tank 1/2 filled with water and agitate. Add the correct amount of Curtail M Herbicide and continue to agitate.

### Timing of Application

Apply postemergence when weeds are in the seedling stage (2-4 leaf) and when spring wheat, durum wheat and spring barley are in the 3-leaf to just before the flag leaf emergence stage. Do not apply later than the flag-leaf stage.



## Weeds Controlled or Suppressed by Fluroxypyr 180 EC + Curtail M Herbicide Tank-Mix

### Weeds Controlled:

Canada thistle*	lamb's-quarters	sow-thistle (perennial)*
canola (volunteer)	redroot pigweed	stinkweed
cleavers (1-4 whorls)	round-leaved mallow (1-6 leaf)	stork's-bill (1-8 leaf)
common groundsel	Russian pigweed	sunflower (volunteer)
dandelion**	scentless chamomile	tartary buckwheat
flixweed**	shepherd's-purse	volunteer flax (1-12 cm)
hemp-nettle**** (2-6 leaf stage)	smartweed	wild buckwheat (1-8 leaf)
kochia***	sow-thistle (annual)	wild mustard

### Weeds Suppressed:

common chickweed\*

\*Season long control, with some regrowth in the fall (top growth control).

\*\*Spring rosettes only.

\*\*\*Including biotypes resistant to Group 2 herbicides that inhibit the ALS enzyme.

\*\*\*\*Suppression

The active ingredients in this tank mixture will only control chickweed that is emerged at TIME OF application. Chickweed plants which emerge after application will not be controlled. To improve the reduction in chickweed population at the end of season, delay the timing of application as late as possible to when the majority of chickweed plants have emerged. The reduction in chickweed population will also be improved in crops which are more competitive and which allow limited light penetration.

### Pre-Harvest/Grazing Intervals (Fluroxypyr 180 EC + Curtail M Herbicide)

Do not cut or graze treated fields within 7 days after application.

- Do not harvest the treated mature crop within 60 days after application.

When tank mixing with Curtail M Herbicide, wear goggles or face shield, coveralls and chemically resistant gloves, apron and boots when mixing, loading and during clean-up and repair.

Curtail M Herbicide contains an ingredient that is rapidly absorbed through the skin and respiratory tract.

### TANK MIXES WITH FLUROXYPYR 180 EC + CURTAIL M HERBICIDE FOR ANNUAL GRASS CONTROL

Tank mixtures of Fluroxypyr 180 EC + Curtail M Herbicide with other herbicides will provide control of additional weeds. See following table for tank mixes with Fluroxypyr 180 EC + Curtail M Herbicide. Follow all precautions, minimal interval to harvest and directions for use on the Fluroxypyr 180 EC and tank-mix partner labels.

#### Tank-Mix Combinations with Fluroxypyr 180 EC (0.8 L/ha) + Curtail M Herbicide (2.0 L/ha)

Herbicide Tank-Mix Partner	Crop Registered	Rate of Tank-Mix Partner	Adjuvant Rate	Additional Weeds
Bison 400 L* or Achieve Liquid	Spring wheat, drum wheat, and spring barley	0.5 L/ha	Addit or Turbocharge: 0.5 L/100 L of spray volume (0.5% v/v)	Green foxtail and wild oats
Ladder 240EC or Horizon	Spring wheat and durum wheat	0.23 L/ha	XA Oil Concentrate or Score: 0.8 L/ha	Green foxtail and wild oats

240EC			(0.8% v/v)	
Assert 300 SC	Spring wheat, durum wheat, and spring barley	1.3 L/ha  1.6 L/ha	Refer to Assert 300 SC label	Wild oats (1-3 leaf)  Wild oats (4 leaf)
Bengal 120 EC (PUMA 120 EC)	Spring wheat and durum wheat	385 mL/ha	None required	Green foxtail only
<b>Herbicide Tank-Mix Partner</b>	<b>Crop Registered</b>	<b>Rate of Tank-Mix Partner</b>	<b>Adjuvant Rate</b>	<b>Additional Weeds</b>
		770 mL/ha		green foxtail, wild oats & barnyard grass

\*Curtail M Herbicide can be used at a rate of 1.5 to 2.0 L/ha with this tank-mix combination.

#### **TANK-MIX COMBINATION - FLUROXYPYR 180 EC + 2,4-D ESTER HERBICIDE**

For control of a wide spectrum of broadleaved weeds (see following tables) apply Fluroxypyr 180 EC tank mixed with 2,4-D Ester Herbicide. Apply postemergence when weeds are in the seedling stage (2-4 leaf) and when spring wheat, durum wheat and spring barley are in the 4-leaf to flag-leaf stage. Application before the 4-leaf stage of wheat and barley may cause severe twisting of leaves and stem, and head deformities which may reduce yield up to 10%. Do not apply later than the flag-leaf stage.

#### **Rates of Application**

**Low Rate:** To control the following weeds apply a uniform spray containing 0.45 L/ha Fluroxypyr 180 EC and 420 g a.e./ha 2,4-D Ester Herbicide in a minimum of 100 L of water per hectare to thoroughly cover the weeds.

Weeds Controlled:

Bluebur	Hoary cress*	Stinkweed
Burdock	Kochia*	Sunflower (annual)
Canola (volumteer)	Lamb's-quarters	Vetch
Cleavers (1-4 whorls)	Mustards (except green, dog & tansy)	Wild radish
Clovers (sweet)	Plantain	Wild buckwheat (1-6 leaf)
Cocklebur	Prickly lettuce	Wild mustard
Flixweed	Ragweed	
Field horsetail*	Shepard's-purse	
Goat's-beard		

**II. High Rate:** To control the above weeds plus the additional weeds listed below, apply a uniform spray containing 0.6 L/ha of Fluroxypyr 180 EC and 560 g a.e./ha of 2,4-D Ester Herbicide in a minimum of 100 L of water per hectare to thoroughly cover the weeds.



## TANK-MIX COMBINATIONS - FLUROXYPYR 180 EC + 2,4-D ESTER HERBICIDE + OTHER HERBICIDES

Tank mixtures of Fluroxypyr 180 EC + 2,4-D Ester Herbicide with other herbicides will provide control of additional weeds. For products which may be tank mixed with Fluroxypyr 180 EC + 2,4-D Ester Herbicide and the additional weeds controlled see following table. Follow all precautions, minimal interval to harvest and directions for use on the Fluroxypyr 180 EC and tank-mix partner labels.

Tank-Mix Combinations with Fluroxypyr 180 EC (0.6 L/ha) + 2,4-D Ester Herbicide (560 g a.e./ha) or Fluroxypyr 180 EC (0.45 L/ha + 2,4-D Ester Herbicide (420 g a.e./ha) <b>Herbicide Tank-Mix Partner</b>	Crop Registered	Rate of Tank-Mix Partner	Adjuvant Rate	Additional Weeds
Bison 400 L†, ††† or Achieve Liquid	Spring wheat, durum wheat, and spring barley	0.5 L/ha	Addit or Turbocharge: 0.5 L/100 L of spray volume (0.5% v/v)	Green foxtail and wild oats
Ladder 240EC or Horizon 240EC	Spring wheat and durum wheat	0.23 L/ha  0.29 L/ha	XA Oil Concentrate or Score: 0.8 L/ha (0.8% v/v)  XA Oil Concentrate or Score: 1.0 L/ha (1.0% v/v)	Wild oats†† (1-6 leaf main stem)  Green foxtail (1-5 leaf main stem) and wild oats††
Assert 300 SC	Spring wheat, durum wheat, and spring barley	1.3 L/ha  1.6 L/ha	Refer to Assert 300 SC label	Wild oats (1-3 leaf)  Wild oats (4 leaf)
Bengal 120 EC	Spring wheat and durum wheat	385 mL/ha  770 mL/ha	None required	Green foxtail only  Green foxtail, wild oats, and barnyard grass
Everest Solupak 70DF	Spring wheat and durum wheat	43 g/L	Refer to Everest Solupak 70DF label	Green foxtail and wild oats

†Do not apply this tank-mix prior t the 4 leaf stage of the cereal crop as temporary crop injury could occur. This tank-mix may cause temporary crop injury. However, yield will not normally be affected. This tank-mix may reduce control of wild oats compared to Liquid Achieve SC Herbicide or Bison 400 L Herbicides alone.

†† Wild oat control may be reduced when tank mixed with Fluroxypyr 180 EC + 2,4-D Ester Herbicide.

††† 2,4-D Ester can be tank mixed at rates up to a maximum of 560 g ae/ha with this tank-mix combination.

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**TANK-MIX COMBINATIONS – FLUROXYPYR 180 EC + REFINE SG HERBICIDE + 2,4-D ESTER HERBICIDE**

**Spring Wheat (excluding durum) and spring barley**

For control of a wide spectrum of broadleaf weeds, including cleavers, Fluroxypyr 180 EC may be tank mixed with Refine SG Herbicide and 2,4-D Ester Herbicide. Apply Fluroxypyr 180 EC at 0.3 L/ha tank mixed with Refine SG at 30 g/ha, 2,4-D Ester Herbicide at 280 g a.e./ha (equal to 0.5 L/ha of 2,4-D Ester LV 600 or 0.42 L/ha of 2,4-D Ester LV 700) and a non-ionic surfactant (Agral 90, Ag-Surf or Citowett Plus) at 2 L per 1000 L of spray solution. A spray volume of 100 L/ha should be utilized. Apply postemergence when weeds are in the seedling up to 4-leaf/whorls stage, and when spring wheat (excluding durum) and spring barley are in the 4-leaf to flag-leaf stage. **Do not apply to crops underseeded to legumes.**

### Weeds Controlled or Suppressed

annual smartweed (green smartweed, lady's thumb)	groundsel (common)	shepherd's purse
ball mustard	hemp-nettle	stinkweed
chickweed (1-6 leaf) <sup>1</sup>	stinkweed	tartary buckwheat
cleavers <sup>2</sup>	Kochia <sup>3</sup>	volunteer rapeseed <sup>4</sup>
corn spurry	lamb'-quarters	volunteer sunflower
cow Cockle	narrow-leaved hawk's beard	wild buckwheats <sup>5</sup>
flixweed	redroot pigweed	wild mustard
	Russian thistle	

<sup>1</sup> Spray before crop canopy prevents thorough coverage of weeds. Chickweed emerging after application will not be controlled.

<sup>2</sup> Excluding Group 2 resistant cleavers

<sup>3</sup> Excluding Group 2 resistant kochia

<sup>4</sup> The tank-mix will not control imazethapyr tolerant canola varieties (e.g. Clearfield varieties or other varieties with the Pursuit Smart trait)

<sup>5</sup> Apply to actively growing wild buckwheat from the cotyledon to 8-leaf stage. Control may be reduced under environmental stress. Large plants may regrow after treatment

### Weeds Suppressed:

Canada thistle<sup>6</sup>

round leaved mallow (2-6 leaf)<sup>7</sup>

scentsless chamomile

sow thistle<sup>6</sup>

stork's Bill

toadflax (to 15 cm)<sup>8</sup>

6

Apply when most of the thistles have emerged and are actively growing. For best top growth control, apply before bud stage when thistles are no larger than 15 cm in height and before crop canopy prevents thorough coverage of weeds. Top growth of later emerging thistles will not be controlled.

7

Apply to actively growing round leaved mallow. Will keep mallow stunted, but may not be able to reduce overall populations

8

A control program for this weed includes chemical application and frequent tillage.

**Mixing Instructions**

Fill the tank to 1/3 full of clean water. With agitator running, add required amount of Refine SG and continue to agitate for a minimum of 5 minutes to ensure the Refine SG is completely dissolved. After it is fully dissolved add the Fluroxypyr 180 EC with continuous agitation. Add the 2,4-D Ester herbicide and the rest of the water. Then add adjuvant. Use a spray volume of 100 L/ha. Consult the 2,4-D label for additional application instructions and use precautions.

**Preharvest/Grazing Intervals**

- Allow 7 days between application and grazing of lactating dairy animals.
- Do not harvest forage or cut hay within 30 days after application.
- Remove meat animals from treated fields at least 3 days prior to slaughter.
- Do not harvest the treated mature crop within 60 days after application.

**TANK-MIX COMBINATION - FLUROXYPYR 180 EC + MCPA LV500 HERBICIDE OR MCPA ESTER 600 HERBICIDE**

For control of a wide spectrum of broadleaved weeds (see following table) apply Fluroxypyr 180 EC at 0.6 L/ha tank mixed with MCPA LV500 Herbicide at 1.12 L/ha or MCPA Ester 600 Herbicide at 0.93 L/ha. Apply postemergence when weeds are in the seedling stage (2-4 leaf) and when spring wheat, durum wheat and spring barley are in the 3-leaf to flag-leaf stage. Application before the 3-leaf stage of wheat and barley may cause severe twisting of leaves and stem, and head deformities which may reduce yield up to 10%. Do not apply later than the flag-leaf stage. Do not apply to cereals underseeded with a legume.

**Mixing Instructions**

Add the correct amount of Fluroxypyr 180 EC to spray tank 1/2 filled with water and agitate. Add the correct amount of MCPA LV500 Herbicide or MCPA Ester 600 Herbicide and continue to agitate.

**Weeds Controlled or Suppressed by Fluroxypyr 180 EC + MCPA LV500 Herbicide or MCPA Ester 600 Herbicide Tank-Mix**

Weeds Controlled

Burdock	Hempnettle (2-6 leaf)	Common ragweed
common canola	Kochia*	Spepard's purse
Volunteer cleavers (1-4 whorls)	Lambs-quarters	Stinkweed
cocklebur	Mustard (except dog & green tansy)	Annual sunflower
flax,	Redroot pigweed (1-4 leaf)	Vetch
volunteer flax	Prickly lettuce	Wild radish
flixweed		

Weeds Suppressed:

green smartweed                      wild buckwheat(1-8 leaf)  
stork's-bill (1-8 leaf) leaf)

\*Including biotypes resistant to Group 2 herbicides that inhibit the ALS enzyme.

**Pre-Harvest/Grazing Intervals (Fluroxypyr 180 EC + MCPA LV500 Herbicide or MCPA Ester 600 Herbicide**

- Allow 7 days between application and grazing/cutting for hay.
- Do not harvest the treated mature crop within 60 days after application.

**TANK-MIX COMBINATIONS - FLUROXYPYR 180 EC + MCPA LV500 HERBICIDE or MCPA ESTER 600 HERBICIDE + OTHER HERBICIDES**

Tank mixtures of Fluroxypyr 180 EC + MCPA LV500 Herbicide or MCPA Ester 600 Herbicide with other herbicides will provide control of additional weeds. For products which may be tank mixed with Fluroxypyr 180 EC + MCPA LV500 Herbicide or MCPA Ester 600 Herbicide and the additional weeds controlled see following table. Follow all precautions, minimal interval to harvest and directions for use (including timing of application) on the

Fluroxypyr 180 EC and tank-mix partner labels.

**Tank-Mix Combinations with Fluroxypyr 180 EC (0.6 L/ha) + MCPA LV500 Herbicide (1.12 L/ha) or MCPA Ester 600 Herbicide (0.93 L/ha)**

Herbicide Tank-Mix Partner	Crop Registered	Rate of Tank-Mix Partner	Adjuvant Rate	Additional Weeds
Bison 400 L <sup>†</sup> or Achieve Liquid	Spring wheat, durum wheat, and spring barley	0.5 L/ha	Addit or Turbocharge: 0.5 L/100 L of spray volume (0.5% v/v)	Green foxtail and wild oats
Ladder 240EC or Horizon 240EC	Spring wheat and durum wheat	0.23 L/ha	XA Oil Concentrate or Score: 0.8 L/ha (0.8% v/v)	Wild oats
Assert 300 SC	Spring wheat, durum wheat, and spring barley	1.3 L/ha  1.6 L/ha	Refer to Assert 300 SC label	Wild oats (1-3 leaf)  Wild oats (4 leaf)
Bengal 120 EC	Spring wheat and durum wheat	770 mL/ha	None required	Wild oats

<sup>†</sup> MCPA Ester can be tank mixed at rates up to a maximum of 560 g ae/ha with this tank-mix combination.

**TANK-MIX COMBINATIONS – FLUROXYPYR 180 EC + REFINE SG HERBICIDE**

For control of a wide spectrum of broadleaved weeds (see following table) Fluroxypyr 180 EC can be tank mixed with Refine SG Herbicide. Apply post-emergence when weeds are actively growing, with best results on seedling weeds that are less than 10 cm in height. Only weeds emerged at the time of treatment will be controlled. Thorough covering of the target weeds is essential. The tank-mix can be applied to actively growing spring wheat, including durum, and spring barley from the crop 2-leaf to flag leaf stage prior to head emergence. The tank-mix of Refine SG Herbicide with Fluroxypyr 180 EC allows for the control of Group 2 resistant cleavers at 0.4 L/ha and kochia at 0.6 L/ha. **Do not apply to crops underseeded to legumes or grasses.**

**Rates of Application**

To control the following weeds apply a uniform spray containing 0.4 to 0.8 L/ha of Fluroxypyr 180 EC with 30 g/ha Refine SG Herbicide and 2 litres per 1000 L spray solution of non-ionic surfactant (Agral 90, Agsurf or Citowett Plus) with a spray volume of 100 L/ha.

**Weeds Controlled or Suppressed Weeds Controlled at 0.4 L/ha of Fluroxypyr 180 EC and 30 g/ha Refine SG Herbicide:**

annual smartweed (green smartweed, lady's thumb) ball mustard chickweed (1-6 leaf) <sup>1</sup> cleavers <sup>2</sup> corn spurry cow Cockle flixweed	groundsel (common) hemp-nettle stinkweed Kochia <sup>3</sup> lamb'-quarters narrow-leaved hawk's beard redroot pigweed Russian thistle	shepherd's purse stinkweed tartary buckwheat volunteer rapeseed <sup>4</sup> volunteer sunflower wild buckwheat <sup>5</sup> wild mustard
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<sup>1</sup> Spray before canopy prevents thorough coverage of weeds. Chickweed emerging after application will not be controlled.

<sup>2</sup> Excluding Group 2 resistant kochia

<sup>3</sup> The tank-mix will not control imazethapyr tolerant canola varieties (e.g. Clearfield varieties or other varieties with the Pursuit Smart trait)

<sup>4</sup> Apply to actively growing wild buckwheat at the cotyledon to 8-leaf stage. Control may be reduced under environmental stress. Large plants may regrow after treatment.



**Weeds suppressed at 0.4 L/ha Fluroxypyr 180 EC and 30 g/ha Refine SG Herbicide:**

Canada thistle <sup>5</sup>	sow thistle <sup>5</sup>
round leaved mallow (2-6 leaf) <sup>6</sup>	stork's bill
scentless chamomile <sup>5</sup>	toadflax (up to 15 cm) <sup>7</sup>

Apply when most of the thistles have emerged and are actively growing. For best top growth control, apply before bud stage when thistles are no larger than 15 cm in height and before crop canopy prevents thorough coverage of weeds. Top growth of later emerging thistles will not be controlled.

6

Apply to actively growing round leaved mallow. Will keep mallow stunted, but may not be able to reduce overall populations

7

A control program for this weed includes chemical application and frequent tillage.

### **Additional Weeds Controlled at 0.6 L/ha of Fluroxypyr 180 EC and 30 g/ha Refine SG Herbicide**

kochia (including group 2 resistant biotypes) volunteer flax (1-12 cm)

### **Additional Weeds Controlled and Suppressed at 0.8 L/ha Fluroxypyr 180 EC and 30 g/ha Refine SG Herbicide**

#### **Weeds Controlled**

round leaf mallow (1-6 leaf)

#### **Weeds Suppressed**

chickweed (up to 8 cm; including group 2 resistant biotypes)

### **Mixing Instructions**

Fill the tank to 1/3 full of clean water, and with the agitator running, add the required amount of Refine SG Herbicide and continue to agitate for a minimum of 5 minutes to ensure that Refine SG Herbicide is completely dissolved. Add the required amount of Fluroxypyr 180 EC at a reduced agitation. Add the rest of the water and then add adjuvant. Use a spray volume of 100 L/ha.

### **Pre-Harvest/Grazing Intervals**

- Livestock may not be grazed or fed crops within 7 days of application
- Do not harvest the treated crop within 60 days of application

**NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS:** The DIRECTIONS FOR USE for this product for the use(s) described below were developed by persons other than Dow AgroSciences Canada Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Dow AgroSciences Canada Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed below.

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Dow AgroSciences Canada Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the use(s) described below.

### **DIRECTIONS FOR USE**

**SEEDLING AND ESTABLISHED TALL FESCUE GROWN FOR SEED:** Make one application per year, as a ground application only, for control of labelled weeds. Apply from the 4 leaf stage to flag leaf stage in a minimum of 100L water/ha. Do not harvest for forage or do not cut hay for forage.

**Application rates (Apply as a tank-mix only):** Fluroxypyr 180 EC: 0.6 L/ha; 2,4-D Ester Herbicide: 560 g a.e./ha

**CONTROL OF LABELLED WEEDS IN SEEDLING AND ESTABLISHED FORAGE GRASSES GROWN FOR SEED IN THE PRAIRIE PROVINCES AND PEACE RIVER REGION OF BRITISH COLUMBIA ONLY:**

Creeping Red Fescue., Intermediate Wheat Grass, Crested Wheat Grass, Meadow Brome Grass, Smooth Brome Grass, Timothy

Apply one application per year in a spray volume of 100-200 L/ha to control labelled weeds in seedling (4 leaf to flag leaf) or established forage grasses. Application should be made postemergence when weeds are in the 2-4 leaf stage. Apply in a broadcast spray using a hydraulic boom ground sprayer.

**Application rates (Apply as a tank-mix only):** Fluroxypyr 180 EC: 0.6 L/ha; 2,4-D Ester Herbicide: 560 g a.e./ha

Do not harvest for forage or do not cut hay for forage.

Do not harvest treated crop within 60 days after application.

Refer to the main Fluroxypyr 180 EC and 2,4-D Ester Herbicide labels for additional details and instructions, including preharvest intervals, before using.

**READ THE ROTATIONAL CROPPING RESTRICTIONS ON THE FULL LABELS BEFORE USING THIS PRODUCT.**

**RESISTANCE MANAGEMENT RECOMMENDATIONS**

For resistance management, Fluroxypyr 180 EC is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to Fluroxypyr 180 EC 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:
- Where possible, rotate the use of Fluroxypyr 180 EC or other Group 4 herbicides 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.
- Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- 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 Adama Agricultural Solutions Canada Ltd. 855-264-6262

**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.

1. Assert is a registered trademark of BASF.
2. Everest is a trademark of Bayer Corp., used under license by Bayer
3. Refine is a trademark of E.I. DuPont de Nemours & Co.