



Dow AgroSciences

# Attain™ XC A Herbicide

GROUP	4	HERBICIDE
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Attain XC A Herbicide 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, winter wheat and spring barley. Attain XC A Herbicide will also suppress hemp-nettle, common chickweed and wild buckwheat.

AGRICULTURAL

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

GUARANTEE: fluroxypyr, present as 1-methylheptyl ester  
Emulsifiable concentrate

333 g a.e./L

REGISTRATION NO. 29973 PEST CONTROL PRODUCTS ACT

**DANGER**  **POISON**

**WARNING - EYE AND SKIN IRRITANT  
POTENTIAL SKIN SENSITIZER**

NET CONTENTS: 1 L – bulk

**Dow AgroSciences Canada Inc.**  
Suite 2100, 450 - 1 Street S.W.  
Calgary, Alberta  
T2P 5H1  
1-800-667-3852

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## **PRECAUTIONS**

### **KEEP OUT OF REACH OF CHILDREN**

Causes eye irritation. DO NOT get in eyes. May irritate the skin. Avoid contact with skin. Potential skin sensitizer.

For agricultural scenarios, do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. For non-agricultural scenarios, do not enter or allow entry until residues have dried.

Do not use in residential areas. Residential areas are defined as any use site where bystanders including children could be exposed during or after application. This includes homes, schools, parks, playgrounds, playing fields, public buildings, or any other area where the general public including children could be exposed.

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

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at [www.croplife.ca](http://www.croplife.ca).

### **PROTECTIVE CLOTHING AND EQUIPMENT**

Wear a hat, coveralls over a long-sleeved shirt and long pants, socks, rubber boots or work boots and chemical-resistant gloves during spraying or application. In addition, wear goggles or face shield during mixing, loading, repair and clean-up or when handling the concentrate. Applicators using a closed cab are not required to wear chemical-resistant gloves.

### **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**

**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**

THIS PRODUCT CONTAINS A PETROLEUM DISTILLATE. Vomiting may cause aspiration pneumonia. The decision of whether to induce vomiting or not should be made by the attending physician. If lavage is performed, suggest endotracheal and/or oesophageal control. Danger from lung aspiration of petroleum based solvents must be weighed against toxicity when considering emptying the stomach. No specific antidote. Employ supportive care. Treatment should be based on the judgment of the physician in response to reactions of the patient.

## **AGRICULTURAL CHEMICAL**

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

## **ENVIRONMENTAL HAZARDS**

Toxic to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under APPLICATION DIRECTIONS. This product contains an active ingredient and aromatic petroleum distillates which are toxic to aquatic organisms. 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 strip between the treated area and the edge of the water body.

## **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.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

### **Returnable Containers:**

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

### **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.

## **GENERAL INFORMATION**

Attain XC A Herbicide is a selective postemergent herbicide for the control of annual broadleaved weeds in spring wheat, durum wheat, winter wheat and spring barley, not underseeded with legumes. Attain XC A Herbicide offers a novel mode of action for controlling hard-to-kill annual broadleaved weeds such as kochia (including ALS resistant biotypes) and cleavers. Attain XC A Herbicide will also provide suppression of hempnettle, wild buckwheat and chickweed.

## **MODE OF ACTION**

Attain XC A Herbicide 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 Attain XC A Herbicide 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 Attain XC A Herbicide can be seeded the following year to alfalfa, barley, canola, corn, drybeans, flax, forage grasses, lentils, mustard, oats, peas, potatoes, rye, soybeans, sugarbeets, sunflowers or wheat or fields can be summerfallowed.

### **Tank Mixtures**

In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include, but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact Dow AgroSciences Canada Inc at 1-800-667-3852 or [www.dowagro.ca](http://www.dowagro.ca) for information before mixing any pesticide or fertilizer that is not specifically recommended on this label. The user assumes the risk of losses that result from the use of tank mixes that do not appear on this label or that are not specifically recommended by Dow AgroSciences Canada Inc.

### **Spray Equipment Precaution**

Do not apply through any type of irrigation system.

### **To Reduce Spray Drift:**

- Use nozzles delivering higher volumes and coarser droplets.
- Use low pressures (200 to 275 kPa).
- 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.
- 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.

### **Equipment Clean-Up**

Equipment used to apply Attain XC A Herbicide should not be used to apply other pesticides to sensitive crops without thorough cleaning. Contact your Attain XC A Herbicide 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  
winter wheat  
spring barley

- 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 strip between the treated area and the edge of the water body.
- As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.
- DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

#### Field sprayer application

DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification. Boom height must be 60 cm or less above the crop or ground.

#### Aerial application

DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply when wind speed is greater than 16 km/h at flying height at the site of application. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) 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.

#### ATTAIN XC A HERBICIDE ALONE

Apply Attain XC A Herbicide with ground or aerial application equipment (see Application directions section) for postemergent control of cleavers and kochia, including ALS resistant kochia and other broadleaved weeds infesting spring wheat, durum wheat, winter wheat and spring barley. See following table for weeds controlled/suppressed and applications rates.

#### Weeds Controlled Or Suppressed By Attain XC A Herbicide Alone

Weeds Controlled	Attain XC A Herbicide Rate (L/ha)
chickweed♦ (up to 8 cm)	0.41
cleavers (1-6 whorls)	0.21
cleavers (1-8 whorls)	0.31
kochia♦ (2-8 leaf)	0.31
round-leaved mallow (1-6 leaf)	0.41
volunteer flax (1-12 cm)	0.31
Weeds Suppressed	Attain XC A Herbicide Rate (L/ha)
hempnettle (2-6 leaf)	0.41
stork's-bill (1-8 leaf)	0.31
wild buckwheat (1-8 leaf)	0.21

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

**NOTE:** Attain XC A Herbicide 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 Timing**

Apply to actively growing spring wheat, durum wheat and spring barley from the 2-leaf crop growth stage up to and including initiation of stem elongation. Apply to winter wheat in the spring from the 3 tiller stage to just before the flag leaf stage. 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. Attain XC A Herbicide applications are rainfast within 1 hour after application. Under conditions of low crop and high weed density, control may be reduced.

### **Preharvest/Grazing Intervals (Attain XC A Herbicide applied alone)**

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

## **APPLICATION DIRECTIONS (GROUND AND AERIAL APPLICATIONS)**

### **(1) Ground Application**

Using ground equipment, apply Attain XC A alone or with tank mix partners as a broadcast treatment. Apply Attain XC A alone at the recommended rates in a spray volume of 50-100 L water/ha. When tank mixing refer to the label of the tank mix partner label for additional instructions, water volumes, precautions and weeds controlled.

### **(2) Aerial Application**

#### **Do not use human flaggers.**

Use Attain XC A alone or tank mixed with a product registered for aerial application as a broadcast treatment. Apply the recommended rates of Attain XC A and tank mix partner as indicated elsewhere on this label. Apply in a spray volume of 30-50 L water/ha. Refer to the tank mix partner label for additional instructions, precautions and weeds controlled.

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

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

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

### **Use Precautions**

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

### **Operator Precautions**

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

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

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

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, 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 1-800-667-3852 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

- The interaction of many equipment-and-weather-related factors determine the potential for spray drift. Users are responsible for considering all these factors when making decisions.
- The following drift management requirement must be followed to avoid off-target drift movement from aerial applications: Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

### TANK-MIX COMBINATION - ATTAIN XC A HERBICIDE + 2,4-D ESTER HERBICIDE

For control of a wide spectrum of broadleaved weeds (see following table) apply Attain XC A Herbicide 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. Apply to winter wheat in the spring from the 3 tiller stage to just before the 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 Applications

**I. Low Rate:** To control the following weeds apply a uniform spray containing 0.23 L/ha Attain XC A Herbicide and 420 g a.e./ha 2,4-D ester herbicide (equivalent to 0.64 L/ha of 2,4-D Ester LV700 Herbicide).

Weeds Controlled:

bluebur	hoary cress <sup>♦</sup>	stinkweed
burdock	kochia <sup>♦♦♦</sup>	sunflower (annual)
canola (volunteer)	lamb's-quarters	vetch
cleavers (1-6 whorls)	mustards (except green, dog & tansy)	wild buckwheat (1-6 leaf)
clovers (sweet)	plantain	wild radish
cocklebur	prickly lettuce	wild mustard
flixweed	ragweed	
field horsetail <sup>♦</sup>	shepherd's-purse	
goat's-beard		

**II. High Rate:** To control the above weeds plus the additional weeds listed below, apply a uniform spray containing 0.31 L/ha of Attain XC A Herbicide and 560 g a.e./ha of 2,4-D ester herbicide (equivalent to 0.85 L/ha of 2,4-D Ester LV700 Herbicide).

**Additional Weeds Controlled:**

blue lettuce*	hairy galinsoga	Russian thistle
cleavers (1-8 whorls)	hedge bindweed	smartweed
dandelion**	lady's-thumb	stork's-bill (1-8 leaf)
docks	leafy spurge*	tansy mustard
dog mustard	oak-leaved goosefoot	tartary buckwheat
field bindweed*	redroot pigweed	volunteer flax (1-12 cm)
field peppergrass	round-leaved mallow (1-6 Leaf)	wild buckwheat (1-8 leaf)
gumweed		

**Weeds Suppressed:**

common chickweed*** (up to 8 cm)	hemp-nettle (2-6 leaf stage)	sow-thistle (perennial) *
Canada thistle*	sow-thistle (annual)	

\* Top growth control only

\*\* Spring rosettes

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

**NOTE:** The activity of Attain XC A Herbicide combined with 2,4-D ester herbicide 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.

**Mixing Instructions**

Add the correct amount of Attain XC A Herbicide to spray tank 1/2 filled with water and agitate. Add the correct amount of 2,4-D ester herbicide (e.g. 2,4-D Ester LV700 Herbicide) and continue to agitate.

**Pre-Harvest/Grazing Intervals (Attain XC A Herbicide + 2,4-D ester herbicide)**

- Do not permit lactating dairy animals to graze fields within 7 days after application.
- Do not harvest forage or cut hay within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.
- Do not harvest the treated mature crop within 60 days after application.

**TANK-MIX COMBINATIONS - ATTAIN XC A HERBICIDE + 2,4-D ESTER HERBICIDE + OTHER HERBICIDES**

Tank mixtures of Attain XC A Herbicide + 2,4-D ester herbicide with other herbicides will provide control of additional weeds. For products which may be tank mixed with Attain XC A Herbicide + 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 Attain XC A Herbicide and tank-mix partner labels.

**Tank-Mix Combinations with Attain XC A Herbicide (0.31 L/ha) + 2,4-D ester herbicide (560 g a.e./ha) or Attain XC A Herbicide (0.23 L/ha) + 2,4-D ester herbicide (420 g a.e./ha)**

Herbicide Tank-Mix Partner	Crops Registered	Rate of Tank-Mix Partner	Adjuvant Rate	Additional Weeds
Liquid Achieve SC*	spring wheat, durum wheat, winter wheat, spring barley	0.5 L/ha	Turbocharge 0.5 L/100 L of spray volume (0.5% v/v)	green foxtail, wild oats



Horizon Herbicide Tank-mix	spring wheat, durum wheat	0.23 L/ha	Score: 0.8 L/ha (0.8% v/v)	wild oats** (1-6 leaf main stem)
		0.29 L/ha	Score: 1.0 L/ha (1.0% v/v)	green foxtail (1-5 leaf main stem) & wild oats**
Assert 300 SC	spring wheat, durum wheat, spring barley	1.3 L/ha	Refer to Assert 300 SC label	wild oats (1-3 leaf stage)
		1.6 L/ha		wild oats (4 leaf stage)
Puma 120 Super	spring wheat, durum wheat	385 mL/ha	None required	green foxtail only
		770 mL/ha		green foxtail, plus wild oats & barnyard grass
Everest 70 WDG or Everest Solupak 70 DF	spring wheat, durum wheat	43 g/ha	Refer to Everest label	green foxtail, wild oats
Simplicity™***	spring wheat, durum wheat, winter wheat	0.5 L/ha	None required	barnyard grass (1-5 leaf), common chickweed (up to 10 cm), hemp nettle (1-8 leaf), Japanese brome (1-6 leaf), wild oats (up to 4 leaf, 2 tiller), wild buckwheat (1-4 leaf)

\* 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 alone.

\*\* Wild oat control may be reduced when tank mixed with Attain XC A Herbicide + 2,4-D ester herbicide

\*\*\* Tank mixing with Simplicity only applies to the low rate of Attain XC A Herbicide + 2,4-D ester

**TANK-MIX COMBINATIONS – ATTAIN XC A HERBICIDE + 2,4-D ESTER HERBICIDE + REFINE EXTRA 75 DF HERBICIDE OR REFINE EXTRA 75 TOSS-N-GO HERBICIDE OR REFINE SG HERBICIDE OR REFINE SG TOSS-N-GO HERBICIDE**

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

For control of a wide spectrum of broadleaf weeds, including cleavers, Attain XC A Herbicide may be tank mixed with 2,4-D ester herbicide and Refine Extra 75 DF Herbicide or Refine Extra 75 Toss-N-Go Herbicide or Refine SG Herbicide or Refine SG Toss-N-Go Herbicide. Apply Attain XC A Herbicide at 0.16 L/ha tank mixed with Refine Extra 75 DF Herbicide or Refine Extra 75 Toss-N-Go Herbicide at 20 g/ha, or Refine SG Herbicide or Refine SG Toss-N-Go Herbicide 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

### Weeds Controlled:

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

<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 3-leaf stage. Control may be reduced under environmental stress. Large plants may regrow after treatment

### Weeds Suppressed:

Canada thistle <sup>6</sup>	sow thistle <sup>6</sup>
round leaved mallow (2-6 leaf) <sup>7</sup>	stork's bill (2-6 leaf)
scentless chamomile	toadflax (to 15 cm) <sup>8</sup>

<sup>6</sup> Apply when most of the thistles have emerged and are actively growing. Apply before bud stage, and before crop canopy prevents thorough coverage of thistles, when thistles are no larger than 15 cm in height for best top growth control. A single application will effectively inhibit the ability of emerged thistles to compete with the crop. Later emerging thistles will not be controlled.

<sup>7</sup> Apply to actively growing round leaved mallow. Will keep mallow stunted, but may not be able to reduce overall populations.

<sup>8</sup> 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 Extra 75 DF Herbicide, or Refine Extra 75 Toss-N-Go Herbicide, or Refine SG Herbicide or Refine SG Toss-N-Go Herbicide and continue to agitate for a minimum of 5 minutes to ensure the Refine Extra 75 DF Herbicide, or Refine Extra 75 Toss-N-Go Herbicide, or Refine SG Herbicide or Refine SG Toss-N-Go Herbicide is completely dissolved. After it is fully dissolved add the Attain XC A Herbicide 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 (Attain XC A + Refine Extra + 2,4-D ester)

- 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.

## BUFFER ZONES

Use of the following spray methods or equipment **DO NOT** require a buffer zone: hand-held or backpack sprayer and spot treatment.

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) and estuarine/marine habitats.

Method of application	Crop		Buffer Zones (metres) Required for the Protection of:				Terrestrial habitat
			Freshwater Habitat of Depths:		Estuarine/marine Habitat of Depths:		
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer	spring wheat, durum wheat, winter wheat and spring barley		1	0	1	1	3
Aerial	spring wheat, durum wheat, winter wheat and spring barley	Fixed Wing	5	0	1	1	95
		Rotary Wing	3	0	1	1	80

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) 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 drift buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site.

## RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, Attain XC A Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to Attain XC A Herbicide and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance:

- Where possible, rotate the use of Attain XC A Herbicide 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 Dow AgroSciences Canada Inc. at 1-800-667-3852 or at [www.dowagro.ca](http://www.dowagro.ca).

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012414

Label Code: CN-29973-006-E

Replaces: CN-29973-005-E

Specimen label notes:

Use in Eastern Canada added



Dow AgroSciences

# Attain™ XC B Herbicide

GROUP	4	HERBICIDE
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For the selective control of broadleaved weeds in wheat and barley

COMMERCIAL

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

GUARANTEE: 2,4-D, present as 2-ethylhexyl ester at 660 g a.e./L  
Emulsifiable concentrate

REGISTRATION NO. 29972 PEST CONTROL PRODUCTS ACT

**CAUTION**  **POISON**

**WARNING – SKIN IRRITANT  
POTENTIAL SKIN SENSITIZER**

NET CONTENTS: 8.0 L - bulk

**Dow AgroSciences Canada Inc.**  
2400, 215 - 2 Street S.W.  
Calgary, Alberta  
T2P 1M4  
1-800-667-3852

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## **PRECAUTIONS**

### **KEEP OUT OF REACH OF CHILDREN**

Causes skin irritation. DO NOT get on skin. Harmful if swallowed. Potential skin sensitizer.

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.

## **PROTECTIVE CLOTHING AND EQUIPMENT**

### **Application with Ground and Aerial Equipment or Using Handheld Equipment**

- During mixing, loading, applying, clean-up and repair, wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Rinse gloves before removal.
- Gloves are not required during application when applicator is in an enclosed tractor or an enclosed airplane cockpit.
- No human flaggers are permitted for aerial applications.

### **Transfer System**

- For containers larger than 20 L, use a transfer system that avoids open pouring when transferring the liquid concentrate from such containers into the spray tank.
- When handling more than 400 L of Attain XC B Herbicide per day workers must also use a closed system.

## **OPERATOR USE PRECAUTIONS**

- Wear freshly laundered clothing and clean protective equipment daily.
- Rinse gloves before removal.
- Wash hands before eating, drinking, using tobacco or using the toilet.
- 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.
- After using this product, remove clothing and launder separately, and promptly and thoroughly wash hands and exposed skin with soap and water. Follow manufacturer's instructions for cleaning personal protective clothing and equipment. If no such instructions for washables are provided, use detergent and hot water. Keep and wash personal protective equipment separate from household laundry.
- After work, remove all clothing and shower using soap and water.

## **FIRST AID**

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

**If swallowed:** Call a poison control centre or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

**If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

**If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

**If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

## **TOXICOLOGICAL INFORMATION**

No specific antidote. Employ supportive care. Treatment should be based on judgement of the physician in response to reactions of the patient. This product may cause mild irritation to the eyes. Overexposure to 2,4-D may cause coughing, burning, dizziness or temporary loss of muscle coordination. Other possible effects of overexposure include fatigue, muscle weakness or nausea. Treat symptomatically.

## **AGRICULTURAL CHEMICAL**

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

## **ENVIRONMENTAL HAZARDS**

Toxic to small wild mammals, birds, aquatic organisms and nontarget terrestrial plants. This product will harm other broadleaved plants in the vicinity of the treatment area. The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g. sandy soil) and/or 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 of this product when heavy rain is forecast. Contaminations 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.

Observe buffer zones specified under BUFFER ZONES.

## **STORAGE**

To prevent contamination, store this product away from food or feed. This product must be stored away from fertilizers, seeds, insecticides, fungicides or other herbicides intended for use on 2,4-D sensitive crops.

## **DISPOSAL**

### **Recyclable Containers:**

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

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

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

### **Returnable Containers:**

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

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

**NOTE:** Local conditions may affect the use of herbicides. Provincial agricultural authorities issue recommendations to fit local conditions. Be sure that use of this product conforms to all applicable regulations.

If this product is exposed to temperatures below -20°C, it should be warmed to at least 5°C and mixed thoroughly before using.

## **DIRECTIONS FOR USE – GENERAL PRECAUTIONS**

This pesticide 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 suppliers or aquatic habitats by cleaning of equipment or disposal of wastes.

### **Sensitive Plants**

Vegetables, flowers, grapes, fruit trees and other desirable plants are sensitive to 2,4-D even in minute quantities. Care should be taken to avoid spraying these types of plants or allowing spray mist to drift onto these plants during both their growing and dormant periods. At higher temperatures, vaporization may cause injury to susceptible plants growing nearby. This product may cause damage to lawns or pastures if applied before the grass is well established. In addition, most legumes may be damaged or killed.

If applying this product using a handheld sprayer, do not directly spray or allow the spray to drift onto ornamentals or gardens.

Do not spray roots of trees and ornamentals.

When tank mixing, refer to the labels of the tank mix partners and follow all precautions and directions for use.

### **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) coarse classification. Boom height must be 60 cm or less above the crop or ground.

Observe buffer zones specified under BUFFER ZONES.

### **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) coarse 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 rotor-span.

Do not angle nozzles forward into the air-stream and do not increase the spray volume by increasing nozzle pressure. A spray thickening agent or drift retardant may be used with this product to aid in reducing spray drift. Fixed and rotary-winged aerial applications to field crops should be made in a minimum 30 L/ha total spray mixture.

Do not use human flaggers.

**Avoid Spray Drift:** Apply only when there is little or no hazard from spray drift. Small quantities of the spray, which may not be visible, may seriously injure susceptible crops and damage sensitive non-target habitat. A method must be used to detect air movement, lapse conditions or temperature inversions (stable air) such as the use of balloons or a continuous smoke column at or near the spray site or a smoke generator on the spray equipment. If the smoke develops into layers or indicates a potential for hazardous spray drift, do not spray. Apply only be fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.



Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment. Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Observe buffer zones specified under BUFFER ZONES.

### **Operator Precautions**

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

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

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls over a long sleeved-shirt, long pants, socks plus shoes, and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

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

### **DIRECTIONS FOR USE - CROP USE**

#### **Ground Application**

Apply 50 to 200 L of spray solution per hectare depending on the type of application equipment used. Use sufficient water for even distribution. Apply when the weeds are actively growing. Follow DIRECTIONS FOR USE – GENERAL PRECAUTIONS.

#### **Aerial Application (including fixed and rotary wing aircraft)**

Apply a minimum 30 L of spray solution per hectare depending on the type of application system being used. Use boom pressures of 235 kPa or less. Avoid placing nozzles where spray will enter wing tip vortices. Follow DIRECTIONS FOR USE – GENERAL PRECAUTIONS.

#### **To Prepare a Spray**

Add half the required amount of water to the spray tank, then the Attain XC B Herbicide with agitation, and finally the balance of the water with continued agitation.

**WARNING:** If preparing straight oil mixtures, do not let water get into the product or the finished mixture.

**NOTE:** This product in water forms an emulsion, not a solution, which tends to separate on standing. Agitate to prevent such separation and ensure uniformity of spray mixture.

#### **Spot Treatment**

For knapsack application of Attain XC B Herbicide for spot treatment of weeds such as thistles, mix 0.17 L of product in 10 L of water. Wet all foliage thoroughly.

#### **Selective Weed Control in Small Grains**

Weeds differ in their susceptibility to Attain XC B Herbicide and not all types can be controlled satisfactorily in crops. The amount of Attain XC B Herbicide to use will depend upon the susceptibility and whether the crops will tolerate this amount. See Table 1.

#### **Wheat and Barley**

Spray from the 3-leaf expanded stage (15 cm tall) to just before the flag-leaf (shot-blade) stage. To avoid crop injury, do not treat during boot and flowering stages. Winter wheat should be treated in early spring, as soon as weeds appear and before the crop reaches the shot-blade stage.

**Suggested Amounts of Attain XC B Herbicide for Weed Control in Cereals (not underseeded to legumes)**

Mixed Weedy Growth	Stage of Weed Kind of Weather	Amount L/ha	Hectares Treated/20L
Susceptible weeds such as: mustard (except dog and green tansy), flixweed, bluebur, burdock, cocklebur, field horsetail*, stinkweed, goatsbeard, prickly lettuce, hoary cress*, kochia, lamb's-quarters, plantain, ragweeds, Russian knapweed, Russian thistle, shepherd's purse, annual sunflower, sweet clover, vetch, wild radish	Seedling (2-4 leaves) Growing rapidly	0.51 L	33
	Weeds in bud Dry, cool weather Heavy infestation	0.77 L	22
Harder to kill weeds such as: biennial wormwood, docks, dandelion, dog mustard, field peppergrass, hairy galinsoga, gumweed, hedge bindweed, lady's thumb, oak leaf goosefoot, redroot pigweed, Russian thistle, smartweed, annual sow-thistle, tansy, Tartary buckwheat, tumbleweed, blue lettuce*, Canada thistle*, field bindweed*, leafy spurge*, perennial sow-thistle*, wild buckwheat* <sup>†††</sup>	Seedling (2-4 leaves) Growing rapidly	0.85 L <sup>††††</sup>	20
	Weeds in bud Dry or cool weather Heavy infestation	1.28 L <sup>††††</sup>	13

\*Top growth control only.

†††Better control will result from 2 treatments applied one week apart at 0.51 L/ha Attain XC B Herbicide.

††††The higher rates may cause deformities and delayed maturity which will be offset by a higher relative yield from a less weedy crop.

**BUFFER ZONES**

Use of the following spray methods or equipment **DO NOT** require a buffer zone: hand-held or backpack sprayer and spot treatment.

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

**Table 2 Buffer Zones required to protect sensitive terrestrial and aquatic habitats**

Method of application	Crop		Buffer Zones (metres) Required for the Protection of:				Terrestrial habitat
			Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer*	Field crops (wheat, barley)		1	0	1	0	1
Aerial	Field crops (wheat, barley)	Fixed wing	1	0	1	0	45
		Rotary wing	1	0	1	0	40

\*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, 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, the labelled buffer zone can be reduced by 30%.

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) 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.

#### **RESISTANCE MANAGEMENT RECOMMENDATIONS**

For resistance management, Attain XC B Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to Attain XC B Herbicide and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance:

- Where possible, rotate the use of Attain XC B Herbicide 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 Dow AgroSciences Canada Inc. at 1-800-667-3852 or at [www.dowagro.ca](http://www.dowagro.ca).

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Label Code: CN-29972-004-E  
Replaces: CN-29972-003

Specimen label notes  
PPE statements updated