## Fluro Star® D

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Fluro Star® and ) '-

### Fluro Star®

For label, see pages

Registration Number:

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For label, see pages 18-37.

Registration Number:

### Manufacturer:

Albaugh, LLC. 1525 NE 36th St. Ankeny, IA 50021, USA

### (Container)

## Fluro Star™ Herbicide

GROUP 4 HERBICIDE

## FOR SALE FOR USE IN THE PRAIRIE PROVINCES AND INTERIOR OF BRITISH COLUMBIA (INCLUDING THE PEACE RIVER REGION) ONLY

Fluro Star 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, and spring barley. Fluro Star Herbicide 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 (present as 1-methylheptyl ester) ... 180 g/L

**Emulsifiable Concentrate** 

REGISTRATION NO. 33280 PEST CONTROL PRODUCTS ACT



WARNING - EYE IRRITANT CAUTION - SKIN IRRITANT

NET CONTENTS: 4.8 L - bulk

Albaugh, LLC 1525 NE 36th St. Ankeny, IA 50021, USA 1-800-247-8013 PRECAUTIONS
WARNING - EYE IRRITANT
CAUTION - SKIN IRRITANT
DANGER - CAUSES SUBSTANTIAL BUT TEMPORARY EYE INJURY
HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN
MAY CAUSE SKIN IRRITATION. KEEP OUT OF REACH OF CHILDREN
DO NOT APPLY USING AERIAL APPLICATION EQUIPMENT

DO NOT get in eyes. Avoid contact with skin and clothing. Avoid breathing spray mist.

For agricultural/crop scenarios: DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12-hours.

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 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

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.

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 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 PRECAUTIONS**

TOXIC to non-target terrestrial plants and aquatic organisms. Observe buffer zones specified under DIRECTIONS FOR USE. 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. This product contains an active ingredient and aromatic petroleum distillates which are toxic to aquatic organisms.

#### **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. If containers are damaged or spill occurs, use the product immediately or contain the spill with absorbent materials and dispose of waste. To prevent contamination, store this product away from food or feed.

#### **DISPOSAL**

### **Recyclable Containers:**

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

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

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

### **Returnable Containers:**

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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)

## Fluro Star™ Herbicide

GROUP 4 HERBICIDE

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**AGRICULTURAL** 

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

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Albaugh, LLC 1525 NE 36th St. Ankeny, IA 50021, USA 1-800-247-8013 9-5799 Page 5

PRECAUTIONS
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### **ENVIRONMENTAL PRECAUTIONS**

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#### **STORAGE**

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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**

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

#### MODE OF ACTION

Fluro Star 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 Fluro Star 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 PRECAUTIONS section of the label.

### **Crop Rotation**

Fields previously treated with Fluro Star Herbicide 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 using aerial application equipment.

### **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.

### **Equipment Clean-Up**

Equipment used to apply Fluro Star Herbicide should not be used to apply other pesticides to sensitive crops without thorough cleaning. Contact your Fluro Star 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 underseeded with legumes.

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 S572.1) coarse classification. Boom height must be 60 cm or less above the crop or ground.

### **Buffer zones:**

Spot treatments using hand-held equipment do not require a buffer zone.

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.

		Buffer Zones (metres) Required for the Protection of:					
Method of Application	Crop	Freshwater Habitat of Depths:		Estuarine Marine Habitats of Depths:		Terrestrial	
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	habitat	
Field Sprayer	Spring wheat, durum wheat, spring barley, oats, seedling and established fescue and forage grasses for seed,	1	0	1	1	1	

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 buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

### **Crops Registered**

spring wheat, durum wheat, spring barley

### FLURO STAR HERBICIDE ALONE

Apply Fluro Star Herbicide 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 Fluro Star Herbicide Alone Weeds Controlled Fluro Star Herbicide Rate (L/ha)

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

Weeds Suppressed	Fluro Star Herbicide Rate (L/ha)
chickweed* (up to 8 cm)	0.8
hempnettle (2-6 leaf)	0.8
stork's-bill (1-8 leaf)	0.6
wild buckwheat (1-4 leaf)	0.8

<sup>\*</sup>Including biotypes resistant to Group 2 herbicides that inhibit the ALS enzyme.

**NOTE:** Fluro Star 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 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. Fluro Star 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 (Fluro Star 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.

#### TANK-MIX COMBINATIONS - FLURO STAR HERBICIDE + ACHIEVE LIQUID HERBICIDE

For control of wild oats and green foxtail in spring wheat and spring barley apply 0.5 L/ha of Achieve Liquid with Fluro Star Herbicide. Refer to the above table for rates and broadleaved weeds controlled or suppressed with Fluro Star Herbicide. 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 Achieve Liquid. If more than one container of Achieve Liquid is to be used, add all Achieve Liquid containers prior to adding Fluro Star Herbicide.
- 3. Add Fluro Star Herbicide next. If more than one container of Fluro Star Herbicide is to be used, add all Fluro Star Herbicide 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 Turbocharge.
- Lastly, add the required amount of Turbocharge and then continue to fill tank to desired level with water.

#### TANK-MIX COMBINATIONS - FLURO STAR HERBICIDE + CURTAIL™ M HERBICIDE

For control of a wide spectrum of broadleaved weeds (see following table) in spring wheat, durum wheat and spring barley, apply Fluro Star Herbicide 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 Fluro Star Herbicide 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:**

Canada thistle\*
canola (volunteer)
cleavers (1-4 whorls)
common groundsel
dandelion\*\*
flixweed\*\*
hemp-nettle (2-6 leaf stage) \*\*\*\*
kochia\*\*\*

lamb's-quarters redroot pigweed round-leaved mallow (1-6 leaf) Russian pigweed scentless chamomile shepherd's-purse smartweed sow-thistle (annual)

sow-thistle (perennial) \* stinkweed stork's-bill (1-8 leaf) sunflower (volunteer) tartary buckwheat volunteer flax (1-12 cm) wild buckwheat (1-4 leaf) wild mustard

### **Weeds Suppressed:**

common chickweed\*

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

\*\* Spring rosettes only

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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 (Fluro Star Herbicide + 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 FLURO STAR HERBICIDE + CURTAIL M HERBICIDE FOR ANNUAL GRASS CONTROL

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

Tank-Mix Combinations with Fluro Star Herbicide (0.8 L/ha) + Curtail M Herbicide (2.0 L/ha)

Herbicide Tank-Mix Partner	Crops Registered	Rate of Tank-Mix Partner	Adjuvant Rate	Additional Weeds
Achieve Liquid*	spring wheat, durum 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)	green foxtail wild oats
Assert 300 SC	spring wheat, durum wheat, 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)
Puma 120 Super	spring wheat, durum wheat, spring barley	385 mL/ha	None required	green foxtail only green foxtail, wild oats
		770 mL/ha		& barnyard grass

<sup>\*</sup>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 - FLURO STAR HERBICIDE + 2,4-D ESTER HERBICIDE

For control of a wide spectrum of broadleaved weeds (see following tables) apply Fluro Star 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. 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**

**I. Low Rate:** To control the following weeds apply a uniform spray containing 0.45 L/ha Fluro Star Herbicide 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 goat's-beard shepherd's-purse burdock hoary cress\* stinkweed canola (volunteer) kochia† sunflower (annual) cleavers (1-4 whorls) lamb's-guarters vetch

cleavers (1-4 whorls) lamb's-quarters vetch clovers (sweet) mustards (except green, dog & tansy) wild radish

cocklebur plantain wild buckwheat (1-4 leaf) flixweed prickly lettuce wild mustard

<sup>\*\*\*</sup> including biotypes resistant to Group 2 herbicides that inhibit the ALS enzyme \*\*\*\* Suppression

field horsetail\* ragweed

**II. High Rate:** To control the above weeds plus the additional weeds listed below, apply a uniform spray containing 0.6 L/ha of Fluro Star Herbicide 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.

### **Additional Weeds Controlled:**

blue lettuce\* hairy galinsoga Russian thistle dandelion\* hedge bindweed smartweed

docks lady's-thumb stork's-bill (1-8 leaf)

dog mustard leafy spurge\* tansy

field bindweed\* oak-leaved goosefoot tartary buckwheat field peppergrass redroot pigweed volunteer flax (1-12 cm) gumweed round-leaved mallow (1-6 Leaf) wild buckwheat (1-4 leaf)

### Weeds Suppressed:

common chickweed<sup>†</sup> (up to 8 cm) hemp-nettle (2-6 leaf stage) sow-thistle (perennial)\*

Canada thistle\* sow-thistle (annual)

**NOTE:** The activity of Fluro Star 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 Fluro Star Herbicide to spray tank 1/2 filled with water and agitate. Add the correct amount of 2,4-D Ester Herbicide and continue to agitate.

### Pre-Harvest/Grazing Intervals (Fluro Star 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 hav 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 - FLURO STAR HERBICIDE + 2,4-D ESTER HERBICIDE + OTHER HERBICIDES

Tank mixtures of Fluro Star Herbicide + 2,4-D Ester Herbicide with other herbicides will provide control of additional weeds. For products which may be tank mixed with Fluro Star 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 Fluro Star Herbicide and tank-mix partner labels.

Tank-Mix Combinations with Fluro Star Herbicide (0.6 L/ha) + 2,4-D Ester Herbicide (560 g a.e./ha) or Fluro Star Herbicide (0.45 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
Achieve Liquid <sup>†, †††</sup>	spring wheat, durum 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 0.29 L/ha	Score: 0.8 L/ha (0.8% v/v) Score: 1.0 L/ha (1.0% v/v)	wild oats <sup>††</sup> (1-6 leaf main stem) green foxtail (1-5 leaf main stem) & wild oats <sup>††</sup>
Assert 300 SC	spring wheat, durum	1.3 L/ha	Refer to Assert 300	wild oats (1-3 leaf stage)

<sup>•</sup> Top growth control only.

Spring rosettes.

<sup>†</sup> Including biotypes resistant to Group 2 herbicides that inhibit the ALS enzyme.

	wheat, spring barley		SC label	
		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 Solupak 70 DF	spring wheat, durum wheat	43 g/ha	Refer to Everest Solupak 70 DF label	green foxtail wild oats
Liquid Achieve SC Herbicide <sup>†, †††</sup>	spring wheat, durum wheat, spring barley	0.5 L/ha	Turbocharge 0.5 L/100 L of spray volume (0.5% v/v)	green foxtail, wild oats

<sup>&</sup>lt;sup>†</sup>Do not apply this tank-mix prior to 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 Achieve Liquid Herbicides alone.

# TANK-MIX COMBINATIONS – FLURO STAR 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

In The Prairie Provinces and Peace River Region of British Columbia Only.

For control of a wide spectrum of broadleaf weeds, including cleavers, Fluro Star 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 Fluro Star Herbicide at 0.3 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:**

annual smartweed (green groundsel (common) shepherd's purse hemp-nettle smartweed, lady's thumb) stinkweed ball mustard Kochia<sup>3</sup> tartary buckwheat chickweed (1-6 leaf)1 lamb'-quarters volunteer rapeseed4 cleavers<sup>2</sup> narrow-leaved hawk's beard volunteer sunflower redroot piaweed wild buckwheat5 corn spurry cow Cockle Russian thistle wild mustard

#### flixweed

### **Weeds Suppressed:**

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

### **Mixing Instructions**

Fill the tank to 1/3 full of clean water. With agitator running, add required amount of Refine Extra 75 DF Herbicide, Refine Extra 75 Toss-N-Go Herbicide, Refine SG Herbicide or Refine SG Toss-N-Go Herbicide

<sup>&</sup>lt;sup>††</sup> Wild oat control may be reduced when tank mixed with Fluro Star Herbicide+2,4-D Ester Herbicide.

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

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

<sup>&</sup>lt;sup>2</sup> Excluding Group 2 resistant cleavers

<sup>&</sup>lt;sup>3</sup> Excluding Group 2 resistant kochia

<sup>&</sup>lt;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)

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

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

<sup>&</sup>lt;sup>8</sup> A control program for this weed includes chemical application and frequent tillage.

and continue to agitate for a minimum of 5 minutes to ensure the Refine Extra 75 DF Herbicide, Refine Extra 75 Toss-N-Go Herbicide, Refine SG Herbicide or Refine SG Toss-N-Go Herbicide is completely dissolved. After it is fully dissolved add the Fluro Star 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**

- 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 - FLURO STAR HERBICIDE + MCPA LV500 HERBICIDE OR MCPA ESTER 600 HERBICIDE

For control of a wide spectrum of broadleaved weeds (see following table) apply Fluro Star Herbicide 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 Fluro Star Herbicide 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 Fluro Star Herbicide + MCPA LV500 Herbicide or MCPA Ester 600 Herbicide Tank-Mix

### **Weeds Controlled:**

burdock, common hempnettle (2-6 leaf) ragweed, common canola, volunteer kochia† shepherd's-purse cleavers (1-4 whorls) lamb's-quarters stinkweed

cocklebur mustard (except dog & green tansv) sunflower, annual

flax, volunteer (1-12 cm) pigweed, redroot (1-4 leaf) vetch flixweed prickly lettuce wild radish

### Weeds Suppressed:

green smartweed wild buckwheat (1-4 leaf) stork's-bill (1-8 leaf)

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

### Pre-Harvest/Grazing Intervals (Fluro Star Herbicide + 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 - FLURO STAR HERBICIDE + MCPA LV500 HERBICIDE or MCPA ESTER 600 HERBICIDE + OTHER HERBICIDES

Tank mixtures of Fluro Star Herbicide + 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 Fluro Star Herbicide + 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 Fluro Star Herbicide and tank-mix partner labels.

Tank-Mix Combinations with Fluro Star Herbicide (0.6 L/ha) + MCPA LV500 Herbicide (1.12 L/ha) or MCPA Ester 600 Herbicide (0.93 L/ha)

Herbicide Tank-Mix Partner	Crops Registered	Rate/ha	Adjuvant Rate	Additional Weeds
Achieve Liquid <sup>†</sup>	spring wheat, durum wheat, spring barley	0.5 L/ha	Turbocharge 0.5 L/ha (0.5% v/v)	green foxtail wild oats
Horizon Herbicide Tank-mix	spring wheat, durum wheat	0.23 L	Score 0.8 L/ha (0.8% v/v)	wild oats
Assert 300 SC	spring wheat, durum wheat, spring barley	1.3 L	Refer to Assert 300 SC label	wild oats (1-3 leaf)
		1.6 L		wild oats (4 leaf)
Puma 120 Super	spring wheat, durum wheat, spring barley	0.77 L	None required	wild oats

<sup>&</sup>lt;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 – FLURO STAR 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

For control of a wide spectrum of broadleaved weeds (see following table) Fluro Star Herbicide can be tank mixed with 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 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 2-leaf crop growth stage up to and including initiation of stem elongation. The tank-mix 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 with Fluro Star Herbicide allows for the control of Group 2 resistant cleavers at 0.4 L/ha and kochia 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 litres of Fluro Star Herbicide with 20 g/ha Refine Extra 75 DF Herbicide or Refine Extra 75 Toss-N-Go Herbicide, or 30 g/ha of Refine SG Herbicide or Refine SG Toss-N-Go Herbicide and 2 litres per 1000 L spray solution of non-ionic surfactant (Agral 90, Ag-surf or Citowett Plus) with a spray volume of 100 L/ha.

# Weeds Controlled at 0.4 L/ha of Fluro Star Herbicide and 20 g/ha Refine Extra 75 DF Herbicide or Refine Extra 75 Toss-N-Go Herbicide, or 30 g/ha of Refine SG Herbicide or Refine SG Toss-N-Go Herbicide:

annual smartweed (green groundsel (common) shepherd's purse smartweed, lady's thumb) hemp-nettle stinkweed

ball mustard kochia<sup>2</sup> tartary buckwheat chickweed (1-6 leaf)<sup>1</sup> lamb's-quarters volunteer rapeseed<sup>3</sup> cleavers (1-4 whorls) narrow-leaved hawk's beard volunteer sunflower corn spurry redroot pigweed wild buckwheat<sup>4</sup> cow cockle Russian thistle wild mustard

#### flixweed

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

# Weeds suppressed at 0.4 L/ha Fluro Star Herbicide and 20 g/ha Refine Extra 75 DF Herbicide or Refine Extra 75 Toss-N-Go Herbicide, or 30 g/ha of Refine SG Herbicide or Refine SG Toss-N-Go Herbicide:

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

<sup>&</sup>lt;sup>2</sup> Excluding Group 2 resistant kochia

<sup>&</sup>lt;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>&</sup>lt;sup>4</sup> Apply to actively growing wild buckwheat at the cotyledon to 3-leaf stage. Control may be reduced under environmental stress. Large plants may regrow after treatment.

<sup>&</sup>lt;sup>5</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>&</sup>lt;sup>6</sup> Apply to actively growing round leaved mallow. Will keep mallow stunted, but may not be able to reduce overall populations

Additional Weeds Controlled at 0.6 L/ha of Fluro Star Herbicide and 20 g/ha Refine Extra 75 DF Herbicide or Refine Extra 75 Toss-N-Go Herbicide, or 30 g/ha of Refine SG Herbicide or Refine SG Toss-N-Go Herbicide:

kochia (2-8 leaf; including group 2 resistant biotypes) volunteer flax (1-12 cm)

Additional Weeds Controlled and Suppressed at 0.8 L/ha Fluro Star Herbicide and 20 g/ha Refine Extra 75 DF Herbicide or Refine Extra 75 Toss-N-Go Herbicide, or 30 g/ha of Refine SG Herbicide or Refine SG Toss-N-Go Herbicide:

Weeds Controlled Weeds Suppressed

round leaved mallow (1-6 leaf) 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 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 that Refine Extra 75 DF Herbicide or Refine Extra 75 Toss-N-Go Herbicide or Refine SG Toss-N-Go Herbicide is completely dissolved. Add the required amount of Fluro Star Herbicide 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 the uses described in this section of the label were developed by persons other than Albaugh, LLC under the User Requested Minor Use Label Expansion program. For these uses, Albaugh, LLC 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.

### **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):** Fluro Star Herbicide: 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 Crested Wheat Grass Smooth Brome Grass

Intermediate Wheat Grass Meadow 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):** Fluro Star Herbicide: 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

<sup>&</sup>lt;sup>7</sup> A control program for this weed includes chemical application and frequent tillage.

application. Refer to the main Fluro Star Herbicide 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, Fluro Star Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to Fluro Star 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 Fluro Star 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 Albaugh, LLC at 1-800-247-8013.

#### **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.

FLURO STAR is a trademark of Albaugh, LLC. All other products listed are registered trademarks of their respective companies.

Container label

GROUP 4 HERBICIDE

## **2,4-D Ester 700**

### Emulsifiable Concentrate Herbicide

**AGRICULTURAL** 

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

ACTIVE INGREDIENT: 2,4-D, Present as 2-ethylhexyl ester: 660 g a.e./L

REGISTRATION NO: 29979 PEST CONTROL PRODUCTS ACT

Net Contents: 4-1050 Litres



**DANGER** 

**POISON** 

POTENTIAL SKIN SENSITIZER WARNING SKIN IRRITANT

> Albaugh LLC 1525 NE 36th Street Ankeny, IA 50021 USA 1-800-247-8013

**PRECAUTIONS: Handling precautions: KEEP OUT OF REACH OF CHILDREN.** Avoid contact with eyes, skin and clothing. Avoid inhaling vapours or mist. Fatal or poisonous if swallowed. Potential skin sensitizer. Causes skin irritation. DO NOT get on skin.

**Protective Clothing and Equipment: Handling the concentrate (mixing and loading):** wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Rinse gloves before removal. When handling more than 265 kg a.e (402 L) per day, workers must also use a closed system.

Handling the dilute spray solution (during application or repairing or cleaning equipment): 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.

Application Using mechanically-pressurized handgun: Mixers/loaders/applicators using mechanically pressurized handguns must wear a respirator if they will be handling more than 5 kg acid equivalents of 2,4-D per day. DO NOT handle more than 8 kg a.e. of 2, 4-D per day.

**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.

**GENERAL PRECAUTIONS:** When tank-mixing, observe the most stringent precautionary measures for handling and mixing stated on both product labels. Handle with care and mix only in a closed container. Use only in a well ventilated area. Keep in original container during storage. Do not re-use container unless otherwise specified. Store the container tightly closed away from seeds, fertilizers, plants and foodstuffs. May be stored at any temperature. SHAKE WELL BEFORE USING. Clean spray equipment thoroughly after use.

**Re-entry Interval:** Do not enter treated areas within 12-hours after application.

### **ENVIRONMENTAL PRECAUTIONS:**

This product contains a petroleum distillate, which is moderately to highly toxic to aquatic organisms. Toxic to small mammals, birds, aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

This product will harm other broadleaved plants in the vicinity of the treatment area. If applying this product using a mechanically-pressurized handgun, do not directly spray or allow the spray to drift onto ornamentals or gardens. Do not spray exposed roots of trees and ornamentals.

### Leaching

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

### Run-off

To reduce runoff from treated areas into aquatic habitats, avoid application to areas with moderate to steep slope, compacted soil or 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 strip of untreated vegetation between the treated area and the edge of the water body. To prevent run-off, avoid spraying on driveways, sidewalks or other hard surfaces. Do not irrigate within 24 hours after application.

**FIRST AID:** In case of poisoning, call a physician or poison control centre IMMEDIATELY. **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 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.

**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 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. Take the container, label or product name and Pest Control Product registration number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:** No specific antidote. Treatment of any systemic intoxication should be primarily symptomatic and supportive. Contains petroleum distillates. Do not induce vomiting. Vomiting may cause aspiration pneumonia. 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

### RINSING AND DISPOSAL INFORMATION:

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.

**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 Returnable/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.

# 2,4-D Ester 700

### Emulsifiable Concentrate Herbicide

### **AGRICULTURAL**

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

ACTIVE INGREDIENT: 2,4-D, Present as 2-ethylhexyl ester: 660 g a.e./L

REGISTRATION NO: 29979 PEST CONTROL PRODUCTS ACT

Net Contents: 4-1050 Litres



**DANGER** 

**POISON** 

POTENTIAL SKIN SENSITIZER WARNING SKIN IRRITANT

> Albaugh LLC 1525 NE 36th Street Ankeny, IA 50021 USA 1-800-247-8013

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### **DIRECTIONS FOR USE:**

### SECTION 1 - SPRING WHEAT, BARLEY, RYE

Treatment Stage: Ground or aerial application. Treat from the 4th leaf expanded stage to the early flag leaf (shot blade) stage. (Do not treat crop underseeded to legumes.)

### GO TO SECTION 4

### SECTION 2 - WINTER WHEAT, FALL RYE

Treatment Stage: Ground or aerial application. Treat in the spring from full tillering until the early flag leaf (shot blade) stage. Do not apply to seedling winter cereals in the fall.

### GO TO SECTION 4

### **SECTION 3 -FIELD CORN**

Treatment Stage: Ground application only. As an overall spray, before the corn is 15 c m tall (leaf extended) and/or before the 6-leaf stage. Application as an overall spray at later stages will damage the corn. For later applications (corn 15-75 cm, leaf extended), use a shielded spray or a directed spray with drop pipes. Keep spray off corn foliage. Do not apply within 2 weeks of silking and tasselling. Avoid cultivation for 2 weeks following spraying. Use at least 100L/ha water. Do not add oil or surfactant.

### GO TO SECTION 4

### SECTION 4 - WEEDS CONTROLLED AND RATES OF APPLICATION

Apply in warm weather when the crop and weeds are growing well, and the weeds are at a susceptible stage. Avoid application during drought conditions or during exceptionally hot weather.

Susceptible Weeds: Annual sow-thistle, Bluebur (up to 4 leaf stage), Burdock (before the 4-leaf stage), Cocklebur, Common Ragweed, Daisy fleabane, False flax, False ragweed, Flixweed, Goafs-beard, Giant ragweed, Kochia, Lamb's-quarters, Mustards (except Dog and Tansy), Narrow-leaved hawk's-beard (susceptible in the fall and at 1-2 leaf stage in the spring), Plantain, Prickly lettuce, Redroot pigweed, Russian pigweed, Russian thistle, Shepherd's-purse, Stinging nettle, Stinkweed, Sweet clover (seedling), Thyme-leaved spurge, Volunteer canola, Wild radish, Wild (prairie) sunflower.

Optimum Stage of Weed Growth: 2 to 4 leaf, growing actively.\*

Rates to Use on Susceptible Weeds:

Small seedlings, good growing conditions: 500 mL/ha
Weeds in bud, dry/cold conditions, or heavy infestation: 800 mL/ha
\*Weed control may be reduced when applied beyond optimum stage of weed growth.

Harder to Control Weeds: Curled Dock (up to 4 leaf), Dog mustard, Field pepper-grass, Flixweed (spring prior to bolting), Groundsel, Hairy galinsoga, Hawkweed, Heal-all, Knotweed(up to 4 leaf), Narrow-leaved hawk's-beard(spring prior to bolting), Oak-leaved goosefoot, Pineappleweed, Prostrate pigweed, Purslane, Sheep sorrel, Tansy mustard, Tumble pigweed, Velvet leaf.

Optimum Stage of Weed Growth: 2-4 leaf, growing actively.\*

Rates to Use on Harder to Control Weeds:

Small seedlings, good growing conditions: 900 mL/ha

Weeds in bud, dry/cold conditions, or heavy infestations: 1.3 L/ha

NOTE: These high rates may result in deformities in the crop, but improved weed control should result in higher yields.

\* Weed control may be reduced when applied beyond optimum stage of weed growth.

### TOP GROWTH CONTROL ONLY:

Biennial wormwood, Blue lettuce, Bull thistle, Burdock, Buttercup, Canada thistle, Chicory, Curled dock, Dandelion, Field bindweed, Field chickweed\*, Field horsetail\*, Gumweed, Hedge bindweed, Hemp-nettle\*(treated before the 4-leaf stage), Hoary cress, Lady's-thumb\*, Leafy spurge, Mouse-eared chickweed\*, Perennial sow-thistle, Russian knapweed, Scentless mayweed, Smartweed\*, Tartary buckwheat, Teasel, Volunteer sunflower, Wild buckwheat\*, Yellow rocket (controlled with applications before the 4-leaf stage)

\* Use highest rate listed below for suppression only.

Rates of Application Top Growth Control Only:

Small seedlings, good growing conditions: 1.1 L/ha

Large weeds, dry/cold conditions, or heavy infestations: 1.3 L/ha

NOTE: For use in-crop. These rates may result in significant injury on some crops and should only be used where some crop injury can be tolerated.

Maximum Safe Rates of Application For Crops:

Spring wheat, barley, rye: 1.1 L/ha
Winter wheat, fall rye: 800 mL/ha
Field corn: 800 mL/ha

Do not exceed the maximum rates in the weed control tables in any crop. Do not apply more than once per year.

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### SECTION 5 – ESTABLISHED PASTURES, RANGELAND (WITHOUT LEGUMES)

Treatment Stage: Ground or aerial application. Apply at a time of rapid growth, usually May, June and/or September. Apply after pasture has been grazed or cut and weed growth has resumed. A second treatment may be required. Do not apply in freshly seeded grasses and pastures until well established. Under conditions of good growth and adequate soil moisture, sprays can be applied up to 2 weeks before normal frost time.

Weeds Controlled: As listed in Section 4

Rates to Use: Up to 3.4 L/ha in 100-300 litres of water per hectare. Use the higher rate for perennial weeds.

Do not apply more than twice per year.

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## SECTION 6 - GRASS CROPS FOR FORAGE AND SEED PRODUCTION (EST ABLISHED STANDS ONLY)

Treatment Stage: Ground or aerial application only. Apply in the spring up to the shotblade stage of the grasses or in the fall after harvest to control annual and Biannual weed species.

Weeds Controlled: As listed in Section 4

Rates to Use: 0.8-1.6 L/ha in 100-300 L/ha of water.

Do not apply more than twice per year.

NOTES: Do not exceed 800 mL/ha on seed crops. Do not apply during pollen development or flowering stage of grass seed crops as seed yields could be reduced. Late germinating weeds, such as red bartsias, may be controlled at .8 L/ha rate after the forage crop has been removed if weeds are actively growing.

**GO TO SECTION 7** 

# SECTION 7 - PRE-HARVEST/GRAZING INTERVALS (cereal crops, field corn, forages, pastures and rangeland)

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

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### **SECTION 8 - TANK MIXES**

Use tank mixes only when they are recommended for use. Read and follow the directions, aerial application directions, warnings, precautions, and grazing limitations on both products used in tank-mix. See appropriate tank-mix product labels for full details of use patterns, rates and timings of applications and limits on application.

**GO TO SECTION 14** 

# SECTION 9 - TURF USES - SOD FARMS, GOLF COURSES (roughs and fairways only). Use adequate buffer zones to protect sensitive non-target vegetation.

**Treatment Stage:** DO NOT apply using aerial application equipment. Apply at a time of rapid growth, usually May, June, and/or September. Application during drought or when weeds are under stress such as heat or cold will result in poorer control.

**Weeds Controlled:** See Section 4 for a complete listing.

**Rates of application:** Up to 1.9 litres /ha at each application, maximum of 3.8 litres per year. Apply in 100 to 300 litres of water per hectare.

**Maximum Applications:** DO NOT apply more than two broadcast applications per season. This does not include spot treatments.

**Application notes:** Do not apply to bentgrass or newly seeded lawns/turf as injury may occur. DO NOT water or apply when rainfall is expected within 24 hours. Avoid application if weather is hot (above 27 deg. C) and/or dry. Avoid mowing within 4 days before and several

days after application. This product is only effective when applied to the leaves of actively growing weeds. The product will not prevent new weeds - apply only when weeds are present. DO NOT apply to the exposed roots of trees and ornamentals. If weeds do not warrant a broadcast application (e.g. entire lawn), consider spot treatments that target only weedy areas. Do not allow people (other than the applicator) or pets onto the treated area until the spray has thoroughly dried. Use caution when applying around sensitive plants.

### **GO TO SECTION 14**

## SECTION 10 - STUBBLE FIELDS, ROADSIDES, UNCROPPED LAND AND AIRPORTS.

**Treatment Stage:** Ground or aerial application for stubble fields and uncropped land. DO NOT APPLY USING AERIAL APPLICATION EQUIPMENT TO ROADSIDES OR AIRPORTS. Treat established pastures only in spring (May and early June) or early September.

**Susceptible Weeds:** As listed in Section 4.

**Rates of Use on Susceptible Weeds:** 

Young Weeds: 1.50L/ha
Older Weeds: 2.35 L/ha

**Harder to Control Weeds:** As listed in Section 4.

Rate to Use on Harder to Control Weeds: 2.35 L/ha

NOTES: Spray thoroughly using 100 to 200 litres of water per hectare.

Use the higher rate for perennial weeds, a second treatment may be required. Cultivating grain stubble and spraying after regrowth may aid in control. Under conditions of good growth and adequate soil moisture, sprays can be applied up to 2 weeks before normal frost time

### **GO TO SECTION 14**

SECTION 11 - WEEDS & BRUSH ON NON-CROP / NON-GRAZED LAND Susceptible Species: Consult provincial spray calendars for a list of susceptible species. Ground or aerial application.

Rates to Use: 3.25 - 6.80 L/ha

Use the lower rate for species that are more susceptible such as chokecherry, western snowberry, and willow.

Rate of Carrier: Use sufficient water to wet foliage thoroughly, 800 - 1600 L/ha for ground application. Depending on the density of the brush, 1000 to 3000 L of spray solution may be required per hectare if applying by ground. For aerial applications use 55 to 165 litres of spray solution per hectare. For oil/water carrier, use 15 litres of oil mixed in 40 litres

of water with continuous agitation.

Maximum Rates: Annual and Perennial weed control: 3.4 L/ha

Do not apply more than twice per year.

For mechanically-pressurized handgun, do not apply more than 4.1 L per person per day.

Woody Plant Control 6.80 L/ha Do not apply more than twice per year.

For mechanically-pressurized handgun, do not apply more than 7.6 L per person per day without a respirator or 12.1 L per person per day with a respirator.

Notes: Spray brush species up to 3 metres tall after foliage is well developed.

Applications soon after leaves are fully open usually

Applications soon after leaves are fully open usually give the best results. Apply sufficient spray volume to thoroughly wet all plant parts to the ground line. Brush or trees above 3 m tall should be cut close to the ground and sprayed when the re-growth is over 0.6 m tall. With good growing conditions and adequate soil moisture, sprays may be applied up to 2 to 3 weeks before normal frost time.

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### SECTION 12 - BASAL BARK AND STUMP TREATMENT - BRUSH/TREES

**Susceptible Species:** Hard to kill woody brush and young tree species.

**Rates to Use:** 2.5 Litres in 100 Litres of diesel fuel. Spray to run-off.

For mechanically-pressurized handgun, do not apply more than

4.1 L per person per day.

**Notes:** Apply to the basal stems of standing brush and young trees any

time of the year prior to formation of corky bark. To prevent regrowth of stumps, treat immediately after cutting by spraying or painting on exposed bark, roots and cut surfaces. Thorough drenching

is essential.

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### **SECTION 13 - RESTRICTED USES**

#### 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..

RESTRICTED USE: FOREST AND WOODLAND MANAGEMENT NATURE OF RESTRICTION:

This product is to be used only in the manner authorized. Consult local pesticide regulatory authorities about use permits that may be required.

### **CONIFER RELEASE - AERIAL APPLICATION:**

To control hardwood species in stands of fir, hemlock, spruce and pine regeneration, apply 2,4-D Ester 700 at 3.63 to 4.7 L/ha in 30 to 80 L/ha of total spray mixture. Use water or an "oil-water"\* mixture. Never allow any water or mixture containing water to get into the 2,4-D Ester 700 or the oil spray premix. Note: 2,4-D Ester

700 in water or oil-water sprays form an emulsion, not a solution, and separation may take place unless sprays are agitated continuously until used up. Mechanical agitation is recommended.

To prevent conifer damage, delay spraying until all new conifer growth has hardened off, when the terminal buds feel sharp to touch.

Caution should be taken to ensure that the conifer is not in a second phase of active or "lammas" growth in late summer. Hardwoods should not have commenced fall coloration. Control of heavy suckering species such as maple, trembling aspen and balsam poplar may only be partial. Raspberries will not be controlled and may, if present, proliferate following removal of the hardwood overstory.

### FOREST SITE PREPARATION - AERIAL APPLICATION:

To control mixed hardwood species on sites to be planted to conifers, use 4.7 to 6.78 litres of 2,4-D Ester 700 in 30 to 100 litres of total spray mixture per hectare. Apply as a uniform spray when the foliage is well developed and the brush is actively growing. Under conditions of good growth and high soil moisture, sprays can be used 2 to 3 weeks before normal frost time. For best results use a 10% oil-water\* mixture. NOTE: When preparing sites for planting do not plant conifers before spraying as the conifers present at the time of spraying may be injured or killed. To reduce potential drift hazard on non-crop locations, a drift control agent may be added. Follow all directions on the drift control agent label for the correct mixing sequence.

Do not apply more than twice per year.

\*To prepare the "oil-water" mixture add the 2,4-D Ester 700 to the oil in a separate container. With vigorous agitation 1 litre of 2,4-D Ester 700 will emulsify up to 10 litres of oil in 100 litres of spray mixture. Start running the water into the empty spray tank, then slowly add the premix with continuous agitation. All the premix should be in the tank by the time 1/3 of the

water is in. If the premix is put in the tank without any water, the first water added may form a thick "invert" (water in oil) emulsion, which will be hard to break.

### **USE PRECAUTIONS:**

With aircraft, uniform coverage can be obtained and drift minimized by using 235 kPa spray pressure or less at the nozzle, using nozzles directed straight back, using a spray boom no larger than <sup>3</sup>/<sub>4</sub> the wing span of the aircraft and by spraying when wind velocity is less than 8 km/h.

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### **SECTION 14 - PRECAUTIONS**

HANDLING PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN. Avoid contact with eyes, skin and clothing. Avoid inhaling vapours or mist. Fatal or poisonous if swallowed. Potential skin sensitizer. Causes skin irritation. DO NOT get on skin.

**Protective Clothing and Equipment: Handling the concentrate (mixing and loading):** wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Rinse gloves before removal. When handling more than 265 kg a.e. (402 L) per day, workers must also use a closed system.

**Application Using Handheld Equipment:** Mixers/loaders/applicators using mechanically-pressurized handgun must wear a respirator if they will be handling more than 5 kg acid equivalents of 2,4-D per day. DO NOT handle more than 8 kg 2, 4-D per day

Handling the dilute spray solution (during application or repairing or cleaning equipment): 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.

**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.

**GENERAL PRECAUTIONS:** When tank-mixing, observe the most stringent precautionary measures for handling and mixing stated on both product labels. Handle with care and mix only in a closed container. Use only in a well ventilated area.

Keep in original container during storage. Do not re-use container unless otherwise specified. Store the container tightly closed away from seeds, fertilizers, plants and foodstuffs. May be stored at any temperature. SHAKE WELL BEFORE USING. Clean spray equipment thoroughly after use.

**Re-entry Interval:** Do not enter treated areas within 12-hours after application.

### **ENVIRONMENTAL PRECAUTIONS:**

This product contains a petroleum distillate, which is moderately to highly toxic to aquatic organisms. Toxic to small mammals, birds, aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

This product will harm other broadleaved plants in the vicinity of the treatment area. If applying this product using a mechanically-pressurized handgun, do not directly spray or allow the spray to drift onto ornamentals or gardens. Do not spray exposed roots of trees and ornamentals.

### Leaching

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

### Run-off

To reduce runoff from treated areas into aquatic habitats, avoid application to areas with moderate to steep slope, compacted soil or 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 strip of untreated vegetation between the treated area and the edge of the water body. To prevent run-off, avoid spraying on driveways, sidewalks or other hard surfaces. Do not irrigate within 24 hours after application.

**RESISTANCE MANAGEMENT RECOMMENDATIONS:** For resistance management, 2,4-D Ester 700 is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to 2,4-D Ester 700 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 2,4-D Ester 700 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. Albaugh LLC at 1-800-247-8013

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### **SECTION 15 - MIXING AND APPLICATION**

- 1. Fill tank 1/2 full with water. Start agitation.
- 2. Add 2.4-D Ester 700.
- 3. When tank-mixes are used, consult the tank-mix product label for full mixing instructions.
- 4. Complete filling of tank.
- 5. Use 50-200 litres of water per hectare for ground application unless otherwise specified or on tank-mix product labels.
- 6. Do not exceed 275 kPa pressure for ground application.
- 7. 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.

DO NOT apply this product directly to freshwater habitats such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands, estuaries or marine habitats.

DO NOT contaminate irrigation/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) coarse classification. Boom height must be 60 cm or less above the crop or ground.

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

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 marking devices. No human flaggers are permitted. Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application, as outlined in the National Aerial Pesticide Application Manual, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides. Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelterbelt) or aquatic habitat.

**Operator Precautions:** Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of pre-mixed chemicals with a closed system is permitted. It is desirable that the pilot has communication capabilities at each treatment site at the time of application. The field crew and the mixer/loaders must wear coveralls over a long sleeved shirt, long pants, chemical resistant gloves, 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.

For application to rights-of-way, buffer zones for protection of sensitive terrestrial habitats are not required; however, the best available application strategies that minimize off-site drift, including meteorological conditions (e.g. wind direction, low wind speed) and spray equipment (e.g. coarse droplet sizes, minimizing height above canopy), should be used. Applicators must, however, observe the specified buffer zones for protection of sensitive aquatic habitats. For the use of the herbicide in site preparation and conifer release in forestry, terrestrial buffer zones are not required.

### **Buffer Zones to Protect Sensitive Aquatic and Terrestrial Habitat**

Use of the following spray methods or equipment DO NOT require a buffer zone: mechanically-pressurized handgun or backpack sprayer and spot treatment. Seasonal water bodies require buffer zones if there is water in them during application. Water bodies which do not fill on an annual basis need not be buffered.

**BEFORE AERIAL APPLICATION TO FORESTS** consult the most recent provincially approved topographic maps of the area to be treated (1:50 000) or more upto-date information (e.g. GPS systems) to identify sensitive aquatic habitats.

### Sensitive aquatic habitats include:

- (a) All running and standing water bodies, including impoundments, beaver ponds and bog ponds, that appear on the map or GPS system;
- (b) Running and standing water bodies that do not appear on the map or GPS system, but are visible from the air.

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.

Method of	Crop			Buffer Zones (Metres) Required for the Protection of:				
Application				Freshwate	r Habitat of			Terrestrial
				Depths		Estuarine/Marine		Habitat
					Habitats of Depths:			
				Less	Greater	Less than	Greater	
					than 1 m	1 m	than 1 m	
Field Sprayer	Turf Uses-Soc	d Farms, Go	lf Courses	1	0	1	0	1
*	(roughs and fa		7)					
	Field crops**			1	1	1	1	1
	Fallow land a			1	1	1	1	2
	rangeland, no							
	and brush con		ts-of-way***,					
Aerial	Field Crops *	*	Fixed Wing	10	0	1	0	45
	1		Rotary Wing	10	0	1	0	40
	Fallow land and crop stubble, pastures, rangeland		Fixed Wing	15	0	1	0	60
			Rotary Wing	15	0	1	0	50
	Non-	3.4 L/ha	Fixed Wing	70	0	1	0	150
	cropland (including	(2.24 kg a.e./ ha)	Rotary Wing	35	0	1	0	80
	rights-of-	6.8 L/ha	Fixed Wing	125	1	15	1	225
	way***,	(4.48 kg	Rotary Wing	50	1	5	1	100
	and brush control)	a.e./ ha)	Troumy wing					100
	Forestry	3.6 L/ha	Fixed Wing	175	0	1	0	NR
	(Conifer	(2.4 kg	Rotary Wing	95	0	1	0	NR
	release and	a.e./ ha)						
	forest site	4.7 L/ha	Fixed Wing	225	1	1	0	NR
	preparation)	(3.1  kg)	Rotary Wing	125	1	1	0	NR
		a.e./ ha)						
		6.8 L/ha	Fixed Wing	350	1	20	1	NR
		(4.48 kg	Rotary Wing	175	1	10	1	NR
		a.e./ ha)						

<sup>\*</sup> For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, 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%. \*\* Field crops include: cereal grains (spring wheat, barley, rye, winter wheat, fall rye), field corn, and grass crops for forage and seed production.

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.

<sup>\*\*\*</sup> For application to rights-of-way, buffer zones for protection of sensitive terrestrial habitats are not required.

### **SECTION 16 - FIRST AID**

- 1. In case of poisoning, call a physician or poison control centre IMMEDIATELY.
- 2. **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.
- 3. **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.
- 4. **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.
- 5. **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.
- 6. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

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### **SECTION 17 - TOXICOLOGICAL INFORMATION**

No specific antidote. Treatment of any systemic intoxication should be primarily symptomatic and supportive. Contains petroleum distillates. Do not induce vomiting. Vomiting may cause aspiration pneumonia. This product may cause mild irritation to the eyes. Overexposure to 2,4-D may cause coughing, burning, dizziness or temporary loss of muscle co-ordination. Other possible effects of overexposure include fatigue, muscle weakness or nausea.

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### **SECTION 18 - RINSING AND DISPOSAL INFORMATION**

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.

**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 Returnable/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.