

Container Label

GROUP	2	HERBICIDE
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AC 299,263 120 AS

Herbicide Solution

FOR SALE FOR USE IN THE PRAIRIE PROVINCES AND PEACE RIVER AREA
OF BRITISH COLUMBIA ONLY ON **Clearfield®** WHEAT¹
(WHEAT VARIETIES WITH THE **Clearfield** TRAIT)

AGRICULTURAL

ACTIVE INGREDIENT: Imazamox120 g/L (present as ammonium salt)

Contains 1,2 benzisothiazolin-3-one at 0.019% as a preservative

REGISTRATION NO. 26705 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 1.34 L

IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY
INVOLVING THIS PRODUCT, CALL DAY OR NIGHT
1-800-454-2673

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

BASF Canada Inc.
100 Milverton Drive
5th Floor
Mississauga, Ontario
L5R 4H1
1-877-371-2273

Clearfield is a registered trade-mark of BASF Agrochemical Products B.V., used with permission by BASF Canada Inc.

(Back Panel of the Jug)

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN.

DO NOT APPLY BY AIR.

Harmful if absorbed through skin or inhaled. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing.

Wear a long-sleeved shirt and long pants during all activities and wear goggles or face shield and chemical resistant gloves for mixing/loading, cleanup and repair activities.

Do not enter or allow workers 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.

ENVIRONMENTAL HAZARDS

TOXIC to non-target terrestrial plants. Observe buffer zones specified under Directions for Use.

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

FIRST AID

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have 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.

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

TOXICOLOGICAL INFORMATION

Treat symptomatically.

STORAGE

Store above 5°C.

Store in a cool, dry place away from children, animals, food, feed or fertilizers.

Keep from freezing.

DISPOSAL

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

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

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

¹ *Methods of growing plants which are resistant to certain acetohydroxyacid synthase (AHAS) herbicides are protected by Canadian Patent No. 1341465. Other applicable patents include Canadian Patent Nos. 2226455, 2456314, 2455512, 2456311 and 2492167 and Canadian Patent Application No. 2790951. The use of this product in the practice of patented methods could constitute patent infringement. Further information can be obtained by contacting BASF Canada at 1-877-371-2273.*

Booklet Label

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AC 299,263 120 AS

Herbicide Solution

FOR SALE FOR USE IN THE PRAIRIE PROVINCES AND PEACE RIVER AREA OF
BRITISH COLUMBIA ONLY ON **Clearfield®** WHEAT¹
(WHEAT VARIETIES WITH THE **Clearfield** TRAIT)

AGRICULTURAL

ACTIVE INGREDIENT: Imazamox120 g/L (present as ammonium salt)

Contains 1,2 benzisothiazolin-3-one at 0.019% as a preservative

REGISTRATION NO. 26705

PEST CONTROL PRODUCTS ACT

NET CONTENTS: 1.34 L – 100 L

IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY
INVOLVING THIS PRODUCT, CALL DAY OR NIGHT
1-800-454-2673

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

BASF Canada Inc.
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5th Floor
Mississauga, Ontario
L5R 4H1
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PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN.

DO NOT APPLY BY AIR.

Harmful if absorbed through skin or inhaled. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing.

Wear a long-sleeved shirt and long pants during all activities and wear goggles or face shield and chemical resistant gloves for mixing/loading, cleanup and repair activities.

Do not enter or allow workers 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.

ENVIRONMENTAL HAZARDS

TOXIC to non-target terrestrial plants. 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.

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.

FIRST AID

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have 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.

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

TOXICOLOGICAL INFORMATION

Treat symptomatically.

STORAGE

Store above 5°C.

Store in a cool, dry place away from children, animals, food, feed or fertilizers.

Keep from freezing.

DISPOSAL

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

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

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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.

FOR Clearfield® WHEAT¹
(Wheat varieties with the Clearfield trait)

DIRECTIONS FOR USE (Prairie Provinces and Peace River Area of British Columbia)

AC 299,263 120 AS Herbicide Solution is a selective herbicide that can be applied as an early post-emergent treatment in **Clearfield** Wheat¹ varieties. **Clearfield** Wheat¹ varieties are tolerant of imazamox, the active ingredient in AC 299,263 120 AS Herbicide Solution. Wheat varieties that are not designated as having the **Clearfield** trait may be damaged or destroyed by this treatment. When AC 299,263 120 AS Herbicide Solution is applied early post-emergence, absorption may occur through both the roots and foliage. Susceptible weeds stop growing and eventually die.

Apply using ground equipment only. DO NOT apply by air.

Do not apply more than once per year.

DO NOT apply directly to aquatic habitats (such as lakes, rivers, sloughs, ponds, coulees, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands) and estuarine/marine habitats.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

DO NOT apply during periods of dead calm or when winds are gusty.

DO NOT graze the treated crop within 14 days of application or cut for hay within 42 days of application.

Pre-harvest Interval: Wheat grain and straw can be harvested 79 days after treatment.

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.

Buffer Zones

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands).

Method of Application	Crop	Buffer zones (metres) Required for the Protection of Terrestrial Habitat
Field sprayer	Wheat	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 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 Pesticides and Pest Management portion of the Health Canada website.

BROADLEAF WEED AND GRASS CONTROL

Application should be made from the 2 to the 6 leaf stage of wheat crop and after the weeds have emerged. To control broadleaf weeds apply AC 299,263 120 AS Herbicide Solution from the cotyledon up to the 4 leaf stage. To control grasses apply AC 299,263 120 AS Herbicide Solution from the 1-4 true leaf stage up until early tillering. Initial crop injury may be observed after application but this is outgrown and should not affect yield. Severe crop injury will occur as a result of spray overlap. AVOID SPRAYER OVERLAP.

AC 299,263 120 AS Herbicide Solution at 125 mL product/ha (15 g a.e./ha) will control:	
Lamb's-quarters* Stinkweed Wild mustard	Volunteer spring wheat (non- Clearfield wheat)
AC 299,263 120 AS Herbicide Solution at 167 mL product/ha (20 g a.e./ha) will control:	
Barnyard grass Cleavers* Cow cockle Green foxtail Green smartweed Japanese Brome Grass* Lamb's-quarters* Persian dandelion Redroot pigweed Round-leaved mallow* Russian thistle* Shepherd's purse Stinkweed	Volunteer barley Volunteer canary seed Volunteer canola (non- Clearfield canola only) Volunteer durum wheat Volunteer spring wheat (non- Clearfield wheat) Volunteer tame oats Wild buckwheat* Wild mustard Wild oats Yellow foxtail

* = suppression only

Apply in 50-100 L/ha of water with a NON-IONIC SURFACTANT (e.g., AGRAL® 90, AG-SURF® or SURF® 92) at the rate of 0.25% v/v.

MIXING INSTRUCTIONS

Use 50-100 L/ha of water. Use a 50-mesh (or coarser) filter screen. Fill the spray tank with three-quarters of the required amount of clean water, start agitation and continue agitation throughout the entire mixing and spraying procedure. Add the required amount of AC 299,263 120 AS Herbicide Solution into the sprayer through the tank opening and continue agitating. After the herbicide is thoroughly mixed, continue agitation and add the required amount of non-ionic surfactant. If excess foaming occurs, a silicone anti-foaming agent may be added (e.g. HALT®). Complete filling the tank to the desired level with water. If agitation is stopped for more than 5 minutes, re-suspend spray solution by full agitation prior to commencing spraying again. Between loads of AC 299,263 120 AS Herbicide Solution, check in-line and nozzle screens and rinse and clean if necessary. Upon completion of spraying AC 299,263 120 AS Herbicide Solution, thoroughly flush tank, boom, hoses and in-line and nozzle screens with clean water to avoid possible injury to other crops.

TANK-MIXING

To provide broad-spectrum weed control, AC 299,263 120 AS Herbicide Solution may be tank-mixed with the following tank-mix partners. Follow all recommendations, precautions and restrictions on the tank-mix partner label.

AC 299,263 120 AS Herbicide Solution + 2,4-D Ethylhexyl Ester		
Location	Prairie provinces and Peace River area of British Columbia	
Crops	Clearfield Wheat¹	
Timing	Post-emergent application from the 2 to 6-leaf stage of crop	
Tank Mix Components	AC 299,263 120 AS Herbicide Solution	15 g ae/ha (125 mL pdt/ha) or 20 g ae/ha (167 mL pdt/ha)
	2,4-D Ester	560 g ai/ha
Adjuvant	Non-ionic surfactant (e.g. AGRAL 90, AGSURF or SURF 92)	0.25 % v/v
Spray Volume	50-100 L/ha water	
Weeds Controlled	This tank-mix combination controls all weeds as listed on the AC 299,263 120 AS Herbicide Solution and 2,4-D Ester herbicide labels.	

AC 299,263 120 AS Herbicide Solution + CURTAIL® M Herbicide		
Location	Prairie provinces and Peace River area of British Columbia	
Crops	Clearfield Wheat¹	
Timing	Post-emergent application from the 3 to 6-leaf stage of crop	
Tank Mix Components	AC 299,263 120 AS Herbicide Solution	15 g ae/ha (125 mL pdt/ha) or 20 g ae/ha (167 mL pdt/ha)
	CURTAIL M	A maximum rate of 660 g ai/ha (2.0 L pdt/ha)
Adjuvant	Non-ionic surfactant (e.g. AGRAL 90, AGSURF or SURF 92)	0.25 % v/v
Spray Volume	50-100 L/ha water	
Weeds Controlled	This tank-mix combination controls all weeds as listed on the AC 299,263 120 AS Herbicide Solution and Curtail M Herbicide labels.	

AC 299,263 120 AS Herbicide Solution + FRONTLINE® Herbicide		
Location	Prairie provinces and Peace River area of British Columbia	
Crops	Clearfield Wheat¹	
Timing	Post-emergent application from the extended 3 to 6 leaf stage of crop.	
Tank Mix Components	AC 299,263 120 AS Herbicide Solution	15 g ae/ha (125 mL pdt/ha) or 20 g ae/ha (167 mL pdt/ha)
	FRONTLINE A	5 g ai/ha (0.10 L pdt/ha)
	FRONTLINE B	420 g ai/ha (0.840 L pdt/ha)
Adjuvant	Non-ionic surfactant (e.g. AGRAL 90, AGSURF or SURF 92)	0.25 % v/v
Spray Volume	50-100 L/ha water	
Weeds Controlled	This tank-mix combination controls all weeds as listed on the AC 299,263 120 AS Herbicide Solution and Frontline Herbicide labels.	

AC 299,263 120 AS Herbicide Solution + Starane™ or Starane II Herbicide		
Location	Prairie provinces and Peace River area of British Columbia	
Crops	Clearfield Wheat¹	
Timing	Post-emergent application from the 2 to 6 true leaf stage of crop	
Tank Mix Components	AC 299,263 120 AS Herbicide Solution	20 g ae/ha (167 mL pdt/ha)
	Starane or Starane II Herbicide	0.6 L/ha Starane or 0.31 L/ha Starane II
Adjuvant	Non-ionic surfactant (e.g. AGRAL 90, AGSURF or SURF 92)	0.25 % v/v
Spray Volume	50-100 L/ha water	
Weeds Controlled	<p>In addition to the control of weeds as listed on the AC 299,263 120 AS Herbicide Solution label, this tank-mix combination controls kochia (including Group 2 resistant), volunteer flax and cleavers (including Group 2 resistant), and provides suppression of stork's bill.</p> <p>Initial crop injury may be observed after application but this is outgrown and should not affect yield. Severe crop injury and a delay in maturity may occur as a result of over spray. AVOID SPRAYER OVERLAP.</p>	

AC 299,263 120 AS Herbicide Solution + Starane™ or Starane II Herbicide + MCPA Ester		
Location	Prairie provinces and Peace River area of British Columbia	
Crops	Clearfield Wheat¹	
Timing	Post-emergent application from the 3 to 6 true leaf stage of crop	
Tank Mix Components	AC 299,263 120 AS Herbicide Solution	20 g ae/ha (167 mL pdt/ha)
	Starane or Starane II Herbicide	0.6 L/ha Starane or 0.31 L/ha Starane II
	MCPA Ester	560 g ai/ha (500 g/L formulation: 1.12 L pdt/ha) (600 g/L formulation: 0.93 L pdt/ha)
Adjuvant	Non-ionic surfactant (e.g. AGRAL 90, AGSURF or SURF 92)	0.25 % v/v
Spray Volume	50-100 L/ha water	
Weeds Controlled	<p>This tank-mix combination controls cow cockle, wild buckwheat and common chickweed (non-Group 2 resistant biotypes) in addition to all weeds as listed on the AC 299,263 120 AS Herbicide Solution label plus weeds as listed on the Starane Herbicide label for the tank-mix of Starane Herbicide plus MCPA Ester.</p> <p>Initial crop injury may be observed after application but this is outgrown and should not affect yield. Severe crop injury and a delay in maturity may occur as a result of over spray. AVOID SPRAYER OVERLAP.</p>	

AC 299,263 120 AS Herbicide Solution + MCPA Ester		
Location	Prairie provinces and Peace River area of British Columbia	
Crops	Clearfield Wheat¹	
Timing	Post-emergent application from the 3 to 6 true leaf stage of crop	
Tank Mix Components	AC 299,263 120 AS Herbicide Solution	20 g ae/ha (167 mL pdt/ha)
	MCPA Ester	560 g ai/ha – 630 g ai/ha (500 g/L formulation: 1.12 – 1.26 L pdt/ha) (600 g/L formulation: 0.93 – 1.05 L pdt/ha)
Adjuvant	Non-ionic surfactant (e.g. AGRAL 90, AGSURF or SURF 92)	0.25 % v/v
Spray Volume	50-100 L/ha water	
Weeds Controlled	<p>This tank-mix combination controls all weeds as listed on the AC 299,263 120 AS Herbicide Solution label plus weeds as listed on the MCPA Ester label.</p> <p>Initial crop injury may be observed after application but this is outgrown and should not affect yield. Severe crop injury and a delay in maturity may occur as a result of over spray. AVOID SPRAYER OVERLAP.</p>	

TANK-MIXING INSTRUCTIONS

Use 50-100 L/ha of water. Use a 50-mesh (or coarser) filter screen. Fill the spray tank with three-quarters of the required amount of clean water, start agitation and continue agitation throughout the entire mixing and spraying procedure. Add the required amount of AC 299,263 120 AS Herbicide Solution and tank-mix partner into the sprayer through the tank opening and make sure it is thoroughly mixed. Continue agitation and add the required amount of non-ionic surfactant. If excess foaming occurs, a silicone anti-foaming agent may be added (e.g. HALT). Complete filling the tank to the desired level with water. If agitation is stopped for more than 5 minutes, re-suspend spray solution by full agitation prior to commencing spraying again. Between loads of AC 299,263 120 AS Herbicide Solution and its tank-mix partner, check in-line and nozzle screens and rinse and clean if necessary. Upon completion of spraying AC 299,263 120 AS Herbicide Solution and its tank-mix partner, thoroughly flush tank, boom, hoses and in-line and nozzle screens with clean water to avoid possible injury to other crops.

FOLLOW CROPPING

Winter wheat can be planted 3 months after treatment (3 MAT) as a rotational crop.

Initial crop injury to non-**Clearfield** canola may be observed. Avoid spray overlap as yield reduction may result. The following crops may be grown safely the year following an application:

Field peas

Field corn

Canary seed

Clearfield Canola¹ (canola varieties with the **Clearfield** trait)

Non-**Clearfield** canola

Lentils

Spring wheat

Durum wheat

Spring barley

Sunflower

Tame oats

Flax

Chickpea

The following crop may be grown safely two years following an application:

Mustard (condiment type only)

There are insufficient data for other follow crops. Conduct a field bioassay (a test strip grown to maturity) the year before growing any crop other than those listed above.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, AC 299,263 120 AS Herbicide Solution is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to AC 299,263 120 AS Herbicide Solution and other Group 2 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 AC 299,263 120 AS Herbicide Solution or other Group 2 herbicides within a growing season (sequence) or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as the more resistance-prone partner.
- Herbicide use should be based on an integrated weed management program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical control methods), cultural (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Monitor weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact BASF at 1-877-371-2273 or at www.agsolutions.ca.

® All other products listed are registered trademarks of their respective companies.

¹ *Methods of growing plants which are resistant to certain acetohydroxyacid synthase (AHAS) herbicides are protected by Canadian Patent No. 1341465. Other applicable patents include Canadian Patent Nos. 2226455, 2456314, 2455512, 2456311 and 2492167 and Canadian Patent Application No. 2790951. The use of this product in the practice of patented methods could constitute patent infringement. Further information can be obtained by contacting BASF Canada at 1-877-371-2273.*

(Container)

 **Dow AgroSciences**
Starane™
Herbicide

GROUP	4	HERBICIDE
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FOR SALE FOR USE ONLY IN THE PRAIRIE PROVINCES AND PEACE RIVER REGION OF BRITISH COLUMBIA

Starane 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. Starane 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

GUARANTEE: fluroxypyr 180 g/L
(present as 1-methylheptyl ester)
Emulsifiable Concentrate

REGISTRATION NO. 24815 PEST CONTROL PRODUCTS ACT

DANGER  **POISON**

WARNING - EYE IRRITANT
CAUTION - SKIN IRRITANT

NET CONTENTS: 4.8 L- Bulk

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

™ Trademark of Dow AgroSciences LLC

PRECAUTIONS**KEEP OUT OF REACH OF CHILDREN****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****DO NOT APPLY BY AIR**

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

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.

PROTECTIVE CLOTHING AND EQUIPMENT

At all times: Wear clean, body-covering coveralls.

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

OPERATOR USE PRECAUTIONS

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

PHYSICAL OR CHEMICAL HAZARDS

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

FIRST AID

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 HAZARDS

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

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

STORAGE

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

DISPOSAL**Recyclable Containers:**

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

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

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.

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. The user assumes the risk to persons or property that arises from any such use of this product.

(Booklet)

 **Dow AgroSciences**
Starane™
Herbicide

GROUP	4	HERBICIDE
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FOR SALE FOR USE ONLY IN THE PRAIRIE PROVINCES AND PEACE RIVER REGION OF BRITISH COLUMBIA

Starane 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. Starane 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 180 g/L
(present as 1-methylheptyl ester)
Emulsifiable Concentrate

REGISTRATION NO. 24815 PEST CONTROL PRODUCTS ACT

DANGER  **POISON**

WARNING - EYE IRRITANT
CAUTION - SKIN IRRITANT

NET CONTENTS: 4.8 L- Bulk

Dow AgroSciences Canada Inc.
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Calgary, Alberta
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™ Trademark of Dow AgroSciences LLC

PRECAUTIONS**KEEP OUT OF REACH OF CHILDREN****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****DO NOT APPLY BY AIR**

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

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.

PROTECTIVE CLOTHING AND EQUIPMENT

At all times: Wear clean, body-covering coveralls.

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

OPERATOR USE PRECAUTIONS

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

PHYSICAL OR CHEMICAL HAZARDS

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

FIRST AID

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 HAZARDS

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

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

STORAGE

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

DISPOSAL**Recyclable Containers:**

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

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

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

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

MODE OF ACTION

Starane 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 Starane 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 Starane 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 BY AIR.**To Reduce Spray Drift:**

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

To Reduce Runoff from Treated Areas:

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

Equipment Clean-Up

Equipment used to apply Starane Herbicide should not be used to apply other pesticides to sensitive crops without thorough cleaning. Contact your Starane 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
spring barley

STARANE HERBICIDE ALONE

Apply Starane 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 Starane Herbicide Alone

Weeds Controlled	Starane 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	Starane 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

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

NOTE: Starane 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. Starane 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 (Starane 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 - STARANE 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 Starane Herbicide. Refer to the above table for rates and broadleaved weeds controlled or suppressed with Starane 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 Starane Herbicide.
3. Add Starane Herbicide next. If more than one container of Starane Herbicide is to be used, add all Starane 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.
5. Lastly, add the required amount of Turbocharge and then continue to fill tank to desired level with water.

TANK-MIX COMBINATIONS - STARANE 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 Starane 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 Starane 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 or Suppressed by Starane Herbicide + Curtail M Herbicide Tank-Mix**Weeds Controlled:**

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

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

Suppression

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

Pre-Harvest/Grazing Intervals (Starane 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 STARANE HERBICIDE + CURTAIL M HERBICIDE FOR ANNUAL GRASS CONTROL

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

Tank-Mix Combinations with Starane 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 ¹ 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 ² 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 ³ 300 SC	spring wheat, durum wheat, spring barley	1.3 L/ha	Refer to Assert 300 SC label	wild oats (1-3 leaf)
		1.6 L/ha		wild oats (4 leaf)
Puma ⁴ 120 Super	spring wheat, durum wheat, spring barley	385 mL/ha	None required	green foxtail only
		770 mL/ha		green foxtail, wild oats & barnyard grass

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

TANK-MIX COMBINATION - STARANE HERBICIDE + 2,4-D ESTER HERBICIDE

For control of a wide spectrum of broadleaved weeds (see following tables) apply Starane 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 Starane 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	hoary cress [♦]	stinkweed
burdock	kochia	sunflower (annual)
canola (volunteer)	lamb's-quarters	vetch
cleavers (1-4 whorls)	mustards (except green, dog & tansy)	wild radish
clovers (sweet)	plantain	wild buckwheat (1-4 leaf)
cocklebur	prickly lettuce	wild mustard
flixweed	ragweed	
field horsetail [♦]	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 0.6 L/ha of Starane 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 (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 Starane 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 Starane 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 (Starane 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 - STARANE HERBICIDE + 2,4-D ESTER HERBICIDE + OTHER HERBICIDES

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

Tank-Mix Combinations with Starane Herbicide (0.6 L/ha) + 2,4-D Ester Herbicide (560 g a.e./ha) or Starane 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 ^{†, †††}	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)	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 [‡] 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 ^{†, †††}	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

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.

Wild oat control may be reduced when tank mixed with Starane Herbicide+2,4-D Ester Herbicide.

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

TANK-MIX COMBINATIONS – STARANE HERBICIDE + REFINE⁷ SG HERBICIDE + 2,4-D ESTER HERBICIDE

Spring Wheat (excluding durum) and spring barley

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

Weeds Controlled or Suppressed

Weeds Controlled:

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

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

² Excluding Group 2 resistant cleavers

³ Excluding Group 2 resistant kochia

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

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

Weeds Suppressed:

Canada thistle ⁶	sow thistle ⁶
round leaved mallow (2-6 leaf) ⁷	stork's Bill
scentless chamomile	toadflax (to 15 cm) ⁸

⁶ Apply when most of the thistles have emerged and are actively growing. For best top growth control, apply before bud stage when thistles are no larger than 15 cm in height and before crop canopy prevents thorough coverage of weeds. Top growth of later emerging thistles will not be controlled.

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

⁸ A control program for this weed includes chemical application and frequent tillage.

Mixing Instructions

Fill the tank to 1/3 full of clean water. With agitator running, add required amount of Refine SG and continue to agitate for a minimum of 5 minutes to ensure the Refine SG is completely dissolved. After it is fully dissolved add the Starane 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 - STARANE HERBICIDE + MCPA LV500 HERBICIDE OR MCPA ESTER 600 HERBICIDE

For control of a wide spectrum of broadleaved weeds (see following table) apply Starane 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 Starane 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 Starane 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 tansy)	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
stork's-bill (1-8 leaf)	leaf)

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

Pre-Harvest/Grazing Intervals (Starane 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 - STARANE HERBICIDE + MCPA LV500 HERBICIDE or MCPA ESTER 600 HERBICIDE + OTHER HERBICIDES

Tank mixtures of Starane 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 Starane 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 Starane Herbicide and tank-mix partner labels.

Tank-Mix Combinations with Starane 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	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 1.6 L	Refer to Assert 300 SC label	wild oats (1-3 leaf) wild oats (4 leaf)
Puma 120 Super	spring wheat, durum wheat, spring barley	0.77 L	None required	wild oats

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 – STARANE HERBICIDE + REFINE SG HERBICIDE

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

Rates of Application

To control the following weeds apply a uniform spray containing 0.4 to 0.8 L/ha of Starane Herbicide with 30 g/ha Refine SG 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 or Suppressed

Weeds Controlled at 0.4 L/ha of Starane Herbicide and 30 g/ha Refine SG Herbicide:

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

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

² Excluding Group 2 resistant kochia

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

⁴ Apply to actively growing wild buckwheat at the cotyledon to 5-leaf stage. Control may be reduced under environmental stress. Large plants may regrow after treatment.

Weeds suppressed at 0.4 L/ha Starane Herbicide and 30 g/ha Refine SG Herbicide:

Canada thistle⁵ sow thistle⁵
 round leaved mallow (2-6 leaf)⁶ stork's bill
 scentless chamomile toadflax (up to 15 cm)⁷

⁵ Apply when most of the thistles have emerged and are actively growing. For best top growth control, apply before bud stage when thistles are no larger than 15 cm in height and before crop canopy prevents thorough coverage of weeds. Top growth of later emerging thistles will not be controlled.

⁶ Apply to actively growing round leaved mallow. Will keep mallow stunted, but may not be able to reduce overall populations

⁷ A control program for this weed includes chemical application and frequent tillage.

Additional Weeds Controlled at 0.6 L/ha of Starane Herbicide and 30 g/ha Refine SG Herbicide

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

Additional Weeds Controlled and Suppressed at 0.8 L/ha Starane Herbicide and 30 g/ha Refine SG Herbicide

Weeds Controlled	Weeds Suppressed
round leaved mallow (1-6 leaf)	chickweed (including group 2 resistant biotypes)

Mixing Instructions

Fill the tank to 1/3 full of clean water, and with the agitator running, add the required amount of Refine SG Herbicide and continue to agitate for a minimum of 5 minutes to ensure that Refine SG Herbicide is completely dissolved. Add the required amount of Starane 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 this product for the use(s) described below were developed by persons other than Dow AgroSciences Canada Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Dow AgroSciences Canada Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed below.

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

DIRECTIONS FOR USE

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

Application rates (Apply as a tank-mix only): Starane 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
Intermediate Wheat Grass
Crested Wheat Grass
Meadow Brome Grass
Smooth Brome Grass
Timothy

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

Application rates (Apply as a tank-mix only): Starane 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 application.

Refer to the main Starane 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, Starane Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to Starane 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 Starane 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.

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. The user assumes the risk to persons or property that arises from any such use of this product.

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¹Achieve is a registered trademark of a Syngenta Co.

²Horizon is a registered trademark of a Syngenta Co.

³Assert is a registered trademark of BASF.

⁴Puma is a registered trademark of Bayer

⁵Everest is a trademark of Bayer Corp., used under license by Bayer

⁶Solupak is a trademark of Bayer.

⁷Refine is a trademark of E.I. DuPont de Nemours & Co.

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