

# Sightline™ A Herbicide

GROUP	4	HERBICIDE
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GROUP	2	HERBICIDE

Sightline A Herbicide is a selective herbicide for post-emergent control of annual and perennial broadleaf weeds, invasive plants and shrubs on rangeland, permanent pasture, rights-of way, industrial and other non-crop areas of Canada.

**COMMERCIAL** 

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

ACTIVE INGREDIENT:Aminopyralid, present as potassium salt
Metsulfuron – methyl
9.45%
Warning, contains the allergen sulphites
Wettable Granules

REGISTRATION NO. 30409 PEST CONTROL PRODUCTS ACT

**CAUTION - EYE IRRITANT** 

NET CONTENTS: 0.1 kg - Bulk

**Dow AgroSciences Canada Inc.** 2400, 215 – 2<sup>nd</sup> Street S.W. Calgary, Alberta

T2P 1M4 1-800-667-3852

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### **PRECAUTIONS**

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

May irritate eyes. Avoid contact with eyes

### PERSONAL PROTECTIVE EQUIPMENT

**Applicators** must wear coveralls and chemical resistant gloves.

**Mixers and Loaders handling concentrated product**, as an extra precaution, should wear coveralls, chemical resistant gloves, goggles, and rubber boots.

**Restricted Entry Interval** - Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours following application on agricultural areas. For non-crop areas, do not enter or allow worker entry into treated areas until sprays have dried.

# **SPRAY DRIFT PRECAUTIONS**

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 inversion, application equipment and sprayer settings.

### **OPERATOR USE PRECAUTIONS**

- Wash hands before eating, drinking, using tobacco or using the washroom.
- Avoid breathing spray mist.
- If herbicide penetrates clothing remove immediately; then wash thoroughly and put on clean clothing.
- Remove personal protective equipment immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. 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.

### **FIRST AID**

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

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

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

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

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

### **TOXICOLOGICAL INFORMATION**

No specific antidote. Employ supportive care. Treatment should be based on judgment of the physician in response to reactions of the patient.

# **ENVIRONMENTAL HAZARDS**

TOXIC to terrestrial and aquatic plants. Observe terrestrial and aquatic 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. To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay. Avoid application when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

### **STORAGE**

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

### **DISPOSAL**

# Recyclable containers:

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

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

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

### Returnable containers:

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

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

### **GENERAL INFORMATION**

Sightline A Herbicide, applied as a post emergent, controls annual and perennial broadleaf weeds, invasive plants and shrubs in rangeland, permanent pasture, rights-of-way, industrial and other non-crop areas. Applications should be avoided under cold or dry conditions or other environmental stresses.

Read all precaution statements before using this product. For more information contact your local Dow AgroSciences Canada Inc. representative (1-800-667-3852).

For best results, apply Sightline A Herbicide to plants that are actively growing at time of application. Do not apply when temperatures exceed 28° C.

### **GENERAL USE PRECAUTIONS**

Sightline A Herbicide is selective and highly active against annual and perennial broadleaf weeds, invasive plants and shrubs. This product is recommended for use on areas where loss of broadleaf forage plants, including legumes, can be tolerated. Injury to or loss of desirable plants may result unless the following precautions are observed. Do not apply or drain or flush equipment on or near desirable vegetation or on areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots. Do not apply on walks, driveways, tennis courts or other similar areas.

- Do not apply more than 230 grams per hectare of Sightline A Herbicide per annual growing season in rangeland, pasture, industrial and other non-crop areas.
- Only one application per growing season is permitted.
- Areas treated for 24 months of control should be treated no more than every second year.
- Apply Sightline A Herbicide with a recommended surfactant.
- Sightline A Herbicide cannot be applied on domestic or commercial turf grass.
- Hay cut from treated grass, in the year of application, should only be used on-farm to feed livestock.
   The manure or compost from animals fed the treated hay should only be used on registered use sites where the loss of broadleaf forage plants, including legumes, can be tolerated. Contact Dow AgroSciences Canada Inc. for additional information on sensitive broadleaf plant species.

### **Tank Mixtures**

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

### **DIRECTIONS FOR USE**

READ ALL DIRECTIONS CAREFULLY BEFORE APPLYING. FAILURE TO FOLLOW LABEL INSTRUCTIONS MAY RESULT IN ERRATIC WEED CONTROL.

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) 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.

# INDUSTRIAL AREAS (INCLUDING RIGHTS-OF-WAY), OTHER NON-CROP AREAS, RANGELAND AND PERMANENT PASTURE

## SIGHTLINE A HERBICIDE ALONE

Apply Sightline A Herbicide at a rate of 135 – 230 g/ha. Apply when targeted undesirable vegetation is actively growing. Only weeds and brush present at the time of application will be controlled. Removal of competing vegetation may result in new Canada thistle shoots emerging. Apply using aerial equipment with a minimum of 30 litres spray volume/ha or ground equipment with a minimum of 110 L spray volume/ha, that will assure uniform coverage. For better coverage use 50 litres/ha for aerial application and 200 litres/ha for ground application. Follow all instructions under Mixing Methods for surfactant requirements and order of mixing.

Weeds Controlled or Suppressed with Sightline A Herbicide Alone - Seasonal Control

Rate of Sightline A Herbicide	Controlled Season Long	Suppression
135 g/ha	Ball mustard, bluebur, bull	Canada goldenrod, lamb's
_	thistle, Canada fleabane,	quarters, wild buckwheat
	Canada thistle, chickweed,	
	clover, common groundsel,	
	common ragweed, common	
	tansy, corn spurry, cow cockle,	
	dandelion, field scabious,	
	flixweed, green smartweed,	
	hempnettle, horsenettle, kochia+,	
	lady's thumb, musk or nodding	
	thistle, narrow-leaved	
	hawksbeard, oxeye daisy (pre-	

	bud), perennial sow thistle, plumeless thistle, prostrate pigweed, Russian thistle, scentless chamomile, shepherd's purse, spotted knapweed, stinkweed, stork's bill, sweet clover, tall buttercup, tartary buckwheat, volunteer canola**, western snowberry (buckbrush), wild mustard, yellow starthistle	
170 g/ha	Plants listed above plus Cudweed, curly dock, fireweed, perennial pepperweed, hoary alyssum, pussy toes, Scotch thistle, volunteer alfalfa, western ragweed, wild carrot, Prairie wild rose, wild strawberry	Absinth wormwood
200 g/ha	Plants listed above plus Babysbreath, black henbane, cleavers, rush skeletonweed, wild caraway, wild parsnip	
230 g/ha	Plants listed above plus Absinth wormwood, brown knapweed, diffuse knapweed***, hound's tongue, Japanese knotweed, mullein, orange hawkweed****, prickly lettuce, purple loosestrife, whitetop (hoary cress), yellow hawkweed****	Yarrow

<sup>\*</sup>Non ALS resistant biotypes

# Weeds Controlled or Suppressed up to 12 Months After Application with Sightline A Herbicide Alone

Rate of Sightline A Herbicide	Controlled up to 12 Months	Suppression up to 12 Months
135 g/ha	Scentless chamomile	Canada thistle, dandelion
170 g/ha	Plants listed above plus Canada thistle*, dandelion, wild strawberry	Pasture sage (fringed sage), prairie sage, western snowberry (buckbrush), prairie wild rose
200 g/ha	Plants listed above plus Prairie wild rose	
230 g/ha	Orange hawkweed**, pasture sage (fringed sage)	Silverberry

<sup>\*</sup>Removal of competing vegetation may result in new Canada thistle shoots emerging.

<sup>\*\*</sup>All varieties except ALS resistant canola

<sup>\*\*\*</sup>Apply Sightline A at 230 g/ha when plants are actively growing with the optimum time of application occurring from rosette to the bolting stages of development or in the fall. Plants will be controlled by midsummer and fall application even though plants may not show any changes in form or stature the year of application.

<sup>\*\*\*\*</sup>Apply Sightline A at 230 g/ha to plants in the bolting stage of development.

<sup>\*\*</sup>Apply Sightline A Herbicide at 230 g/ha to plants in the bolting stage of development.

# Weeds Controlled or Suppressed up to 24 Months After Application with Sightline A Herbicide Alone

Rate of Sightline A Herbicide	Controlled up to 24 Months	Suppression up to 24 Months
170 g/ha	Wild strawberry	Canada thistle*, dandelion, pasture sage (fringed sage), prairie wild rose
200 g/ha	Plants listed above	Western snowberry (buckbrush)
230 g/ha	Plants listed above plus	
	Dandelion, pasture sage	
	(fringed sage), prairie wild rose,	
	Canada thistle	

<sup>\*</sup>Removal of competing vegetation may result in new Canada thistle shoots emerging.

# **Preharvest/Grazing Intervals**

- There is no restriction on livestock or lactating dairy animals grazing in treated areas.
- Allow 3 days of grazing on an untreated pasture (or feed untreated hay) before transferring livestock to areas where sensitive broadleaf crops may be grown.

### TANK-MIX COMBINATIONS WITH SIGHTLINE A HERBICIDE

Sightline A Herbicide can be tank mixed with 2,4-D Amine Herbicide to broaden the spectrum of weeds controlled. When a tank mixture is used, follow the most stringent precautions, directions for use, and limitations on the labels of the tank-mix products. Follow all instructions under Mixing Methods for surfactant requirements and mixing order.

Tank-Mix Combination - Sightline A Herbicide plus 2,4-D Amine Herbicide - Season Long Control

Components	Rate	Season Long Control
Sightline A Herbicide	135 g/ha	Broadleaf Weeds Absinth wormwood, annual sowthistle, blue lettuce (top
2,4-D Amine	840-1440 g ae/ha (equivalent to 1.5- 2.6 L/ha of 2,4-D Amine 600)	growth), bull thistle (top growth), burdock < 4 leaf, cocklebur, Canada goldenrod, common plantain, goat's beard, gum weed (topgrowth), hawkweed, hoary cress (top growth), lamb's quarters, pasture sage (fringed sage), stinging nettle, wild buckwheat, prickly lettuce
		Shrubs silverberry (wolf willow)
		Plus all the weeds on the 2,4-D Amine label at 840-1440 g ae/ha (equivalent to 1.5 - 2.6 L/ha of 2,4-D Amine 600)

Tank-Mix Combination – Sightline A Herbicide plus 2,4-D Amine Herbicide – Season Long Control or Suppression

Components	Rate	Season long Plants Controlled
-	170 g/ha	Plants listed above plus
Sightline A Herbicide		·
J		Broadleaf Weeds
2,4-D Amine	840-1440 g ae/ha	Prairie sage
	(equivalent to 1.5 -	Shrubs
	2.6 L/ha of 2,4-D Amine 600)	Shrubby cinquefoil
	,	Plus all the weeds on the 2,4-D Amine label at 840-1440
		g ae/ha (equivalent to 1.5 - 2.6 L/ha of 2,4-D Amine 600)

Tank-Mix Combination - Sightline A Herbicide plus 2,4-D Amine Herbicide - Controlled up to 12 Months After Application

Components	Rate	Controlled up to 12 Months After Application
Sightline A Herbicide	135 g/ha	Canada thistle*, dandelion, wild strawberry
2,4-D Amine	1.1 kg ae/ha	
	(equivalent to 2.0 L/ha of 2,4-D Amine 600)	

<sup>\*</sup>Removal of competing vegetation may result in new Canada thistle shoots emerging.

Components	Rate	Controlled up to 12 Months After Application
Sightline A Herbicide	170 g/ha	Plants listed above plus
2,4-D Amine	1.1 kg ae/ha	Shrubby cinquefoil, western snowberry (buckbrush), prairie wild rose
	(equivalent to 2.0 L/ha of 2,4-D Amine 600)	Weeds suppressed at this rate Pasture sage

Components	Rate	Controlled up to 12 Months After Application
Sightline A Herbicide	200 g/ha	Plants listed above plus
2,4-D Amine	1.1 kg ae/ha	Prairie sage, pasture sage (fringed sage), silverberry (wolf willow),
	(equivalent to	
	2.0 L/ha of	
	2,4-D Amine	
	600)	

# Tank-Mix Combination - Sightline A Herbicide plus 2,4-D Amine Herbicide - Controlled up to 24 Months After Application

Components	Rate	Controlled up to 24 Months After Application
Sightline A Herbicide	135 g/ha	Dandelion, wild strawberry
2,4-D Amine	1.1 kg ae/ha (equivalent to 2.0 L/ha of 2,4-D Amine 600)	

Components	Rate	Controlled up to 24 Months After Application
Sightline A Herbicide	170 g/ha	Plants listed above plus
2,4-D Amine	1.1 kg ae/ha	Pasture sage (fringed sage)
	(equivalent to	Weeds suppressed at this rate
	2.0 L/ha of	Canada thistle, prairie wild rose
	2,4-D Amine	
	600)	

Components	Rate	Controlled up to 24 Months After Application
Sightline A Herbicide	200 g/ha	Plants listed above plus
2,4-D Amine	1.1 kg ae/ha (equivalent to 2.0 L/ha of 2,4-D Amine 600)	Canada thistle*, silverberry (wolf willow), western snowberry (buckbrush), prairie wild rose

<sup>\*</sup>Removal of competing vegetation may result in new Canada thistle shoots emerging.

Components	Rate	Controlled up to 24 Months After Application
Sightline A Herbicide	230 g/ha	Plants listed above plus
2,4-D Amine	1.1 kg ae/ha	Prairie sage, shrubby cinquefoil
	(equivalent to 2.0 L/ha of	
	2,4-D Amine	
	600)	

## Preharvest/Grazing Intervals for Sightline A Herbicide tank mixed with 2,4-D Amine 600.

- There is no restriction on livestock (except lactating dairy animals) grazing in treated areas
- 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.
- Allow 3 days of grazing on an untreated pasture (or feed untreated hay) before transferring livestock to areas where sensitive broadleaf crops may be grown.

### TANK-MIX COMBINATION WITH SIGHTLINE A HERBICIDE - Non-cropland Uses

Sightline A Herbicide can be tank mixed with glyphosate to broaden the spectrum of weeds controlled on rights-of-way, industrial and other non-crop areas (where bare ground is desirable). When a tank mixture is used, follow the most stringent precautions, directions for use, and limitations on the labels of the tank-mix products.

# Tank-Mix Combination - Sightline A Herbicide plus Glyphosate Herbicide

Use 135 – 230 g/ha Sightline A Herbicide tank mixed with 0.8 – 4.3 kg ai/ha glyphosate herbicide (Equivalent to 2.25 – 12.0 L/ha Vantage™ Herbicide Solution or 1.69 – 9.0 L/ha of Vantage™ Plus MAX Herbicide Solution). A surfactant is required. Follow mixing instructions.

### **MIXING METHODS**

# Mixing with Water

- 1. Fill the spray tank 3/4 full of clean water
- 2. Add the required amount of Sightline A Herbicide with the agitation running. Pre-slurrying with water may be necessary where there is little or no agitation or an injection system is being used or where herbicide is first added to a tank other than the spray tank.
- 3. If tank mixing, add the required amount of 2,4-D Amine Herbicide or glyphosate with the agitation running.
- 4. Add the recommended surfactant (such as Gateway™ Adjuvant, AG-SURF, AGRAL 90 or CITOWETT PLUS) at 0.2% v/v or 2 litres per 1000 litres of spray solution.
- 5. Add antifoaming agent, if required.

### **APPLICATION METHODS**

# Individual Plant Treatments (or Spot/Strip applications)

Mix Sightline A Herbicide with enough water, surfactant and tank-mix partner (if necessary) to make the correct amount of spray solution. Follow the directions provided above for Mixing with Water. Use equipment designed for individual plant or spot/strip application, backpack sprayers or hose and handgun, to spray weeds. Thoroughly and uniformly wet the foliage of all target plants but not to the point of runoff. No aquatic or terrestrial buffer zones are required for individual plant or spot/strip applications. Direct spray away from aquatic habitats and non-target sensitive terrestrial plants. Do NOT apply this product directly to fresh water habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), estuaries or marine habitats.

### **Invasive Plant Management**

Early detection and control is a key strategy to prevent the spread of invasive plants. Individual plant treatments or spot/strip applications with Sightline A Herbicide on invasive species (susceptible species listed under Application Rates) can be effective in an integrated pest management (IPM) plan. To maximize and extend the benefits of weed/brush control by Sightline A Herbicide, other vegetation management practices, such as grazing management, fertilization, prescribed fire, mechanical mowing, hand-pulling, biocontrol and other methods, can be used in appropriate sequences and combinations. Consult local agriculture and land management specialists and invasive plant councils for guidance on best management practices for IPM.

# **Aerial Application**

Use Sightline A Herbicide alone, or tank mixed with 2,4-D amine herbicide or glyphosate herbicide, as a broadcast treatment by air to control listed broadleaf weeds and woody plants. Apply Sightline A Herbicide at the recommended rates in a minimum spray volume of 30 L/ha by air. For better coverage use 50 litres/ha. Follow all instructions under Mixing Methods for surfactant requirements and order of mixing. Refer to the tank-mix partner label for additional instructions, directions for aerial application and precautions.

Consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

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

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

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

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

### **Operator Precautions**

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

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

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

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing should be laundered regularly.

# **Product Specific Precautions**

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-800-667-3852 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

Avoid spray drift at the application site. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. Users are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications:

- 1. The distance of the outer most operating nozzles on the boom must not exceed 75% of the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

## **Sprayer Clean-Out Instructions**

To avoid injury to desirable plants, thoroughly clean equipment used to apply this product before re-use or using it to apply other chemicals.

- 1. Immediately after spraying, completely drain the sprayer tank. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.
- 2. First rinse:
  - Spray the inside of tank with clean water and fill the sprayer with at least one tenth of the spray tank volume.
  - Agitate and circulate for 15 minutes, and flush through booms and hoses.
  - Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles.
  - Drain tank completely.
- 3. Second rinse:
  - Fill the tank with clean water.
  - Add All Clear Spray Tank Decontaminator, or Clean-Out Spray Tank Cleaner, or 1 L of household ammonia (containing a minimum of 3 % ammonia) per 100 L of water, or similar tank cleaning agent as per manufacturer's recommendations while filling the tank with clean water.
  - Agitate and then flush the boom and hoses with the cleaning solution. Top up with water making sure the tank is completely full. Allow to stand for 15 minutes with agitation. Flush the solution out of the spray tank through the spray booms. Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles.
  - If possible, let the solution stand in the sprayer tank and booms for an extended period of time, overnight if possible.
  - After flushing the boom and hoses, drain tank completely.
  - Remove nozzles and screens and clean separately with a cleaning agent or an ammonia solution (100 mL in 10 L water).
- 4. Third rinse:
  - Rinse the tank with clean water and flush through the boom and hoses using at least one tenth of the spray tank volume.

- Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles.
- Drain tank completely.

**Do not** use ammonia with chlorine bleach. Using ammonia with chlorine bleach will release a gas with a musty odour which may cause eye, nose, throat and lung irritation. Do not clean equipment in an enclosed area.

### **BUFFER ZONES**

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

For application to rights-of-way, buffer zones for protection of sensitive terrestrial habitats are not required; however, the best available application strategies which 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.

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		S.Op	Freshwater Habitat	Terrestrial habitat*
Field sprayer	Permanent pasture, rangeland, industrial and other non-crop areas		10	15
Aerial Permanent pasture, rangeland, industrial and other non-crop areas	Fixed wing (coarse)	175	750	
	industrial	Rotary wing (coarse)	150	650
	Fixed wing (coarse to very coarse)	125	475	
	Rotary wing (coarse to very coarse)	100	325	
	Fixed wing (very coarse)	100	375	
	Rotary wing (very coarse)	90	225	
		Fixed wing (very coarse to extremely coarse)	80	250

coarse to extremely coarse)
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<sup>\*</sup>Buffer zones for the protection of terrestrial habitats are not required for use on rights-of-way including railroad ballast, rail and hydro rights-of-way, utility easements, roads, and training grounds and firing ranges on military bases.

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.

NOTE: The spray drift buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site.

### RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, Sightline A Herbicide is a Group 2 and Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to Sightline A Herbicide and other Group 2 and 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 Sightline A Herbicide or other Group 2 and Group 4 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 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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Label Code: CN-30409-006-E Replaces: CN-30409-005-E

Specimen Label Notes

Add weeds bull thistle, scotch thistle, rush skeletonweed, hound's tongue, mullein, whitetop (hoary cress)



GROUP 4 HERBICIDE

Sightline B Herbicide is a selective herbicide for postemergent control of ALS-resistant broadleaved weeds such as kochia in rangeland, permanent pasture, rights-of-way, industrial and other non-crop areas of Canada.

### **COMMERCIAL**

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

GUARANTEE: fluroxypyr, present as 1-methylheptyl ester

333 g a.e./L

Emulsifiable concentrate

REGISTRATION NO. 30795 PEST CONTROL PRODUCTS ACT

WARNING EYE AND SKIN IRRITANT POTENTIAL SKIN SENSITIZER

NET CONTENTS: 1 L - bulk

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

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

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

Do not enter or allow entry into restricted areas until residues have dried.

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

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

# PROTECTIVE CLOTHING AND EQUIPMENT

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

### **OPERATOR USE PRECAUTIONS**

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

### PHYSICAL OR CHEMICAL HAZARDS

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

### **FIRST AID**

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

**If swallowed:** Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.

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

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

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

### **TOXICOLOGICAL INFORMATION**

THIS PRODUCT CONTAINS A PETROLEUM DISTILLATE. Vomiting may cause aspiration pneumonia. The decision of whether to induce vomiting or not should be made by the attending physician. If lavage is performed, suggest endotracheal and/or oesophageal control. Danger from lung aspiration of petroleum

based solvents must be weighed against toxicity when considering emptying the stomach. No specific antidote. Employ supportive care. Treatment should be based on the judgment of the physician in response to reactions of the patient.

### AGRICULTURAL CHEMICAL

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

### **ENVIRONMENTAL HAZARDS**

This product contains an active ingredient and aromatic petroleum distillates which are toxic to aquatic organisms. TOXIC to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning of equipment. To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay. Avoid application when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

### **STORAGE**

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

### **DISPOSAL**

### **Recyclable Containers:**

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

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

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

### **Returnable Containers:**

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

### **Refillable Containers:**

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

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

### **GENERAL INFORMATION**

Sightline B is a selective postemergent herbicide for the control of annual broadleaved weeds in rangeland, permanent pasture, rights-of-way, industrial and other non-crop areas of Canada. Sightline B offers a novel mode of action for controlling hard-to-kill annual broadleaved weeds such as kochia (including ALS resistant biotypes).

### MODE OF ACTION

Sightline B 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 Sightline B 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.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay. Avoid application when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

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

Field sprayer application: DO NOT apply during period 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.

### **Tank Mixtures**

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

# **Spray Equipment Precaution**

Do not apply through any type of irrigation system.

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

# **Equipment Clean-Up**

Equipment used to apply Sightline B should not be used to apply other pesticides to sensitive crops without thorough cleaning. Contact your Sightline B 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.

# RANGELAND, PERMANENT PASTURE, INDUSTRIAL AND OTHER NON-CROP AREAS OF CANADA

# Sightline B Herbicide Alone

Apply Sightline B Herbicide for post emergent control of kochia, including ALS resistant biotypes in non-cropland areas including roadsides, rights of way, permanent perennial grass cover areas, and industrial vegetation management areas. See Table for weed controlled and application rates.

### Kochia Control by Sightline B Herbicide Alone

Weeds	Sightline B Herbicide Rate (L/ha)
Kochia* (2-8 leaf) Control	0.84
Kochia* (2-8 leaf) Suppression	0.42

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

**NOTE:** Sightline B Herbicide activity is influenced by weather conditions. Optimum activity requires active 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. 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 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. Foliage that is wet at the time of application may decrease control. Sightline B Herbicide applications are rainfast within 1 hour after application.

### **Individual Plant or Spot/Strip Applications**

Use the following mixing chart to mix Sightline B Herbicide with enough water to make the correct amount of spray solution. Use equipment designed for individual plant or spot/strip application, such as a backpack sprayer or hose and handgun, to spray weeds. Thoroughly and uniformly wet the foliage of all target plants but not to the point of runoff. Direct spray away from aquatic habitats and non-target terrestrial plants. DO NOT apply this product directly to fresh water habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), estuaries or marine habitats.

# **Mixing Chart**

Sightline B Herbicide	Spray Solution (water and herbicide)
4.2 – 8.4 mL	10 L
42 – 84 mL	100 L
420 – 840 mL	1000 L

Use the higher rate in the rate range for kochia control or when growing conditions are less than favourable. The maximum annual application rate is 840 mL/ha.

### Restrictions

- Grazing intervals: Livestock may be grazed on treated pasture 3 days following application.
- **Legumes:** Do not apply if the injury to legumes cannot be tolerated. Legumes may be less sensitive to herbicide injury after plant growth is mature and seed has set.
- Do not harvest grass for hay from treated areas within 7 days of application.

# Tank Mix Combination − Sightline B Herbicide + Milestone TM Herbicide

Sightline B Herbicide can be tank mixed with Milestone Herbicide to broaden the spectrum of weeds and invasive plants controlled. Use 0.42 – 0.84 L/ha Sightline B Herbicide with 0.25 – 0.5 L/ha Milestone Herbicide. For mixing order see mixing instructions. When a tank mixture is used, follow all precautions, directions for use, and limitations on the tank-mix partner label.

# **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 Milestone Herbicide. If more than one container of Milestone Herbicide is to be used, add all Milestone Herbicide containers prior to adding any other tank-mix partners.
- 3. Add Sightline B Herbicide next. Continue to fill tank to desired level with water.

### **BUFFER ZONES**

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

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

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).

	Buffer Zones (metres) Required for the			
Method of Application	Crop	Crop Freshwater Habitat of Depths		Terrestrial
		Less than 1 m	Greater than 1 m	Habitat <mark>*</mark>
Field sprayer	Rangeland and permanent pasture land, non-cropland including rights of way	1	1	5

<sup>\*</sup>Buffer zones for the protection of terrestrial habitats are not required for use on rights-of-way including railroad ballast, rail and hydro rights-of-way, utility easements, roads, and training grounds and firing ranges on military bases.

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

### RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, Sightline B is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to Sightline B 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 Sightline B 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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Label Code: CN-30795-001-E

Specimen label notes: Address update