2026-2812
2026-07-23

GROUP	10	HERBICIDE

Surmise 150

COMMERCIAL

SOLUTION

DANGER POISON



CORROSIVE TO EYES AND SKIN

REGISTRATION NUMBER 36064

PEST CONTROL PRODUCTS ACT

ACTIVE INGREDIENT: glufosinate ammonium 150 g/L

NET CONTENTS:
[1L – Bulk]

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

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

For medical or treatment information from exposure to this product, call 1-888-347-6732 (7 days/week, 24-hr).
For 24-hour chemical spill, leak, fire, exposure, or accident response information, call CHEMTREC toll free at 1-800-424-9300.

PRECAUTIONS:
KEEP OUT OF REACH OF CHILDREN. Fatal if absorbed through the skin. CORROSIVE to the eyes and to skin. DO NOT get in eyes, on skin or on clothing. Avoid breathing spray mist. DO NOT eat, drink or smoke/vape while using this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum/tobacco, smoking/vaping, using the toilet or handling mobile devices. Aircraft cockpit and vehicle cabs MUST be decontaminated regularly.

Protective Clothing and Equipment: Wear coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, socks and chemical-resistant footwear during mixing, loading, application, clean-up and repair. In addition, wear protective eyewear (goggles or face shield) during mixing, loading, clean-up and repair. Gloves are not required during application within a closed cab and/or cockpit.

If the product comes in contact with clothing/PPE, remove all contaminated clothing/PPE, wash the outside of gloves with soap and water before removing, wash contaminated skin with soap and water, and then dress in clean clothing. Launder contaminated clothing/PPE regularly and separately from other laundry. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Heavily contaminated or drenched clothing and other absorbent materials contaminated with this product should be discarded. DO NOT reuse them.

Restricted-Entry Interval: DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

Apply only when the potential for drift beyond the area to be treated is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.

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

TOXICOLOGICAL INFORMATION: Note to Physician: If this product is ingested, gastric lavage is not routinely recommended. If considered, consult your local poison control center or medical/clinical toxicologist prior to performing.

ENVIRONMENTAL PRECAUTIONS:
TOXIC to aquatic organisms and non-target terrestrial plants. Observe spray buffer zones specified under DIRECTIONS FOR USE. Avoid spray drift to susceptible plants and USE ONLY FOR RECOMMENDED PURPOSES AND AT RECOMMENDED RATES.
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 filter strip between the treated area and the edge of the water body. Additional guidance can be found on the Runoff Mitigation portion of the Canada.ca website.

STORAGE:
- CANNOT be stored below freezing.
- If stored for 1 year or longer, shake well before using.
- Store this product away from food or feed.
- Store the tightly closed container away from seeds, fertilizers and plants.
- DO NOT store in or around the home.
- Keep in original container during storage.

DISPOSAL:
Recyclable Container Disposal (less than 23 litres):
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 or territorial requirements.

Returnable Container Disposal:
DO NOT reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

Refillable Container Disposal:
For disposal, this empty 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.

Disposal of Unused, Unwanted Product:
For information on disposal of unused, unwanted product, contact the registrant or the provincial or territorial regulatory agency. Contact the registrant and the provincial or territorial regulatory agency in case of a spill, and for cleanup of spills.

Disposal of Unused Spray Solution:
If any spray solution remains in the tank after spraying is finished, it should be sprayed on the perimeter of the area just sprayed, away from water supplies, ditches, and irrigation canals.

NOTICE TO USER: This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

Booklet

GROUP	10	HERBICIDE

Surmise 150

COMMERCIAL

SOLUTION

DANGER POISON



CORROSIVE TO EYES AND SKIN

REGISTRATION NUMBER 36064
PEST CONTROL PRODUCTS ACT

ACTIVE INGREDIENT: glufosinate ammonium 150 g/L

NET CONTENTS:
[1L – Bulk]

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

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

For medical or treatment information from exposure to this product, call 1-888-347-6732 (7 days/week, 24-hr).
For 24-hour chemical spill, leak, fire, exposure, or accident response information, call CHEMTREC toll free at 1-800-424-9300.

SURMISE 150

Table of Contents: ***Section Number:***

GENERAL INFORMATION	The Product	1
SAFETY AND HANDLING	Precautions, Protective Clothing and Equipment	2
	First Aid and Toxicological Information	3
	Environmental Precautions	4
	Storage	5
	Disposal	6
DIRECTIONS FOR USE	**POST EMERGENT USE**	
	Crops, Weeds, Timing and Rates	7
	Tank Mixes	8
	Primocane Control in Raspberry	9
	DESICCATION USE	
	Crops, Instructions and Rates	10
	GENERAL INSTRUCTIONS	
	Herbicide Resistance Management Recommendations	11
	Application Instructions and Precautions	12
	Mixing Instructions	13
	Sprayer Cleanup	14
	Livestock Feeding and Preharvest Intervals	15
	Notices	16

GENERAL INFORMATION

Section 1: The Product

- Surmise 150 provides control of a broad spectrum of grassy and broadleaf weeds in canola and soybean varieties or hybrids that are specially developed to be tolerant to glufosinate ammonium.
- Surmise 150 is registered for use on glufosinate ammonium tolerant canola and soybean varieties or hybrids.
- Surmise 150 may also be applied to glufosinate ammonium tolerant lines or varieties grown for seed production.
- For hybrid seed production in canola, Surmise 150 may be used to remove segregating wild type plants within the female population. Two applications are required to do this. A third application may be necessary if it is determined that the segregating wild type plants are not fully removed from the field.
- Glufosinate ammonium tolerant corn can be used as separator rows in hybrid canola seed production, but must be destroyed and not used for food or feed.
- Surmise 150 may be used as a harvest aid (desiccant) on alfalfa grown for seed.
- Surmise 150 will desiccate weeds that are present in the field at time of application when used as a harvest aid.
- Surmise 150 may also be used for primocane control in established raspberries.

SAFETY AND HANDLING

Section 2: Precautions and Protective Clothing and Equipment

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. Fatal if absorbed through the skin. CORROSIVE to the eye and to skin. DO NOT get in eyes, on skin or on clothing. Avoid breathing spray mist. DO NOT eat, drink or smoke/vape while using this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum/tobacco, smoking/vaping, using the toilet or handling mobile devices. Aircraft cockpit and vehicle cabs MUST be decontaminated regularly.

Protective Clothing and Equipment

- Wear coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, socks and chemical-resistant footwear during mixing, loading, application, clean-up and repair. In addition, wear protective eyewear (goggles or face shield) during mixing, loading, clean-up and repair. Gloves are not required during application within a closed cab and/or cockpit.
- If the product comes in contact with clothing/PPE, remove all contaminated clothing/PPE, wash the outside of gloves with soap and water before removing, wash contaminated skin with soap and water, and then dress in clean clothing. Launder contaminated clothing/PPE regularly and separately from other laundry. Follow manufacturer’s instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Heavily contaminated or drenched clothing and other absorbent materials contaminated with this product should be discarded. DO NOT reuse them.

Restricted-Entry Interval

- DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

Apply only when the potential for drift beyond the area to be treated is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and spray settings.

Section 3: First Aid and Toxicological Information

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

TOXICOLOGICAL INFORMATION:
Note to Physician: If this product is ingested, gastric lavage is not routinely recommended. If considered, consult your local poison control center or medical/clinical toxicologist prior to performing.

Section 4: Environmental Precautions

- TOXIC to aquatic organisms and non-target terrestrial plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.
- Avoid spray drift to susceptible plants and USE ONLY FOR RECOMMENDED PURPOSES AND AT RECOMMENDED RATES.
- 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 filter strip between the treated area and the edge of the water body. Additional guidance can be found on the Runoff Mitigation portion of the Canada.ca website.

Section 5: Storage

- CANNOT be stored below freezing.
- If stored for 1 year or longer, shake well before using.
- Store this product away from food or feed.
- Store the tightly closed container away from seeds, fertilizers and plants.

- DO NOT store in or around the home.
- Keep in original container during storage.

Section 6: Disposal

Recyclable Container Disposal (less than 23 litres):
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 or territorial requirements.

Returnable Container Disposal:
DO NOT reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

Refillable Container Disposal:
For disposal, this empty 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.

Disposal of Unused, Unwanted Product:
For information on disposal of unused, unwanted product, contact the registrant or the provincial or territorial regulatory agency. Contact the registrant and the provincial or territorial regulatory agency in case of a spill, and for cleanup of spills.

Disposal of Unused Spray Solution:
If any spray solution remains in the tank after spraying is finished, it should be sprayed on the perimeter of the area just sprayed, away from water supplies, ditches, and irrigation canals.

DIRECTIONS FOR USE

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.

POST EMERGENT USE
Section 7: Crops, Weeds, Timing and Rates

CANOLA – EASTERN CANADA AND COASTAL BRITISH COLUMBIA ONLY

- Surmise 150 is registered for aerial and ground application to glufosinate ammonium tolerant canola varieties or hybrids.
- **To assure crop safety and optimal herbicide performance, only use Surmise 150 on glufosinate ammonium tolerant (e.g., LibertyLink) canola grown from certified seed.**

- **Application of Surmise 150 to non-tolerant canola varieties or hybrids or other non-tolerant crops will result in severe crop injury or death of the crop.**
- Apply Surmise 150 from the cotyledon stage up until, but prior to, the early bolting stage of canola.
- Refer to weed/rate chart in this label for application rates and weeds controlled.
- For control/suppression of late emerging weeds or if new weed germination or growth is present re-apply Surmise 150.
- Up to two applications of Surmise 150, each at a maximum of 3.33 L/ha may be made. The second application must occur prior to the early bolting stage of canola.
- Apply when the new weed growth is in the correct leaf stage and up until, but prior to, the bolting stage of canola.
- For best results, apply to emerged, young, actively growing weeds. Weeds that emerge after application will not be controlled.
- Surmise 150 will have an effect on weeds that are larger than the recommended leaf stage, however speed of activity and control may be reduced.
- Slight discoloration of the canola may be visible after application. This effect is temporary and will not influence crop growth, maturity or yield.
- **For application to glufosinate ammonium and glyphosate tolerant canola varieties or hybrids (example: canola varieties or hybrids labelled with *LibertyLink* and *Roundup Ready or TruFlex* or *Optimum Gly*):** Surmise 150 should be applied in a sequential program with glyphosate for effective weed control. Tank-mixing Surmise 150 with glyphosate may result in reduced control on certain weed species.
- Surmise 150 may also be applied to glufosinate ammonium tolerant canola lines or varieties grown for seed production.
- **For hybrid seed production** - Two applications are required to remove the segregating wild type plants. The first application should occur when the canola is in the 2-4 leaf stage, the second application when the canola plants are in the 4-6 leaf stage and the third application, if necessary, may be applied to the canola up until, but prior to, the bolting stage. All applications of Surmise 150 for hybrid seed production should be made at 3.33 L/ha.

Use of corn separator rows in hybrid canola seed production

- Surmise 150 is registered for use on glufosinate ammonium tolerant corn varieties or hybrids when used as separator rows.
- Corn should be seeded at 20,000 – 30,000 plants/ha.
- Row spacing for glufosinate ammonium tolerant corn should be 18 – 23 cm.
- **Note:** Corn must be destroyed and not used for food or feed.
- Follow use instructions for canola and general instructions in this label.

CANOLA - PRAIRIE PROVINCES AND INTERIOR OF BRITISH COLUMBIA ONLY

Surmise 150 is registered for aerial and ground application to glufosinate ammonium tolerant canola varieties or hybrids grown in the Prairie Provinces and Interior of British Columbia only.

- **To assure crop safety and optimal herbicide performance, only use Surmise 150 on glufosinate ammonium tolerant (i.e., LibertyLink) canola grown from certified seed.**

- **Application of Surmise 150 to non-tolerant canola varieties or hybrids or other non-tolerant crops will result in severe crop injury or death of the crop.**
- Apply Surmise 150 from the cotyledon stage up until, but prior to, the early bolting stage of canola.
- Refer to weed/rate chart in this label for application rates and weeds controlled.
- For control/suppression of late emerging weeds or if new weed germination or growth is present re-apply Surmise 150.
- Up to two applications of Surmise 150, each at a maximum of 3.33 L/ha may be made. The second application must occur prior to the early bolting stage of canola.
- Apply when the new weed growth is in the correct leaf stage and up until, but prior to, the bolting stage of canola.
- For best results, apply to emerged, young, actively growing weeds. Weeds that emerge after application will not be controlled.
- Surmise 150 will have an effect on weeds that are larger than the recommended leaf stage, however speed of activity and control may be reduced.
- Slight discoloration of the canola may be visible after application. This effect is temporary and will not influence crop growth, maturity or yield.
- **For application to glufosinate ammonium and glyphosate tolerant canola varieties or hybrids (example: canola varieties or hybrids labelled with *LibertyLink* and *Roundup Ready or TruFlex* or *Optimum Gly*):** Surmise 150 should be applied in a sequential program with glyphosate for effective weed control. Tankmixing Surmise 150 with glyphosate may result in reduced control on certain weed species.
- Surmise 150 may also be applied to glufosinate ammonium tolerant canola lines or varieties grown for seed production.
- **For hybrid seed production** - Two applications are required to remove the segregating wild type plants. The first application should occur when the canola is in the 2-4 leaf stage, the second application when the canola plants are in the 4-6 leaf stage and the third application, if necessary, may be applied to the canola up until, but prior to, the bolting stage. All applications of Surmise 150 for hybrid seed production should be made at 3.33 L/ha.

Use of corn separator rows in hybrid canola seed production

- Surmise 150 is registered for use on glufosinate ammonium tolerant corn varieties or hybrids when used as separator rows.
- Corn should be seeded at 20,000 – 30,000 plants/ha.
- Row spacing for glufosinate ammonium tolerant corn should be 18 – 23 cm.
- **Note:** Corn must be destroyed and not used for food or feed.
- Follow use instructions for canola and general instructions in this label.

SOYBEAN

- Surmise 150 is registered for aerial and ground application to glufosinate ammonium tolerant soybean varieties.
- **Application of Surmise 150 to non-tolerant soybean varieties or other non-tolerant crops will result in severe crop injury or death of the crop.**
- Apply Surmise 150 at 2 L to 3.33 L/ha from the cotyledon to the flowering stage of the crop.

- A second application of Surmise 150 can be made to soybeans treated initially with up to 3.33 L/ha if new weed germination or growth is present. Apply when the new weed growth is in the correct leaf stage and up to the maximum leaf stage of the crop.
- Do not apply beyond the flowering stage of Soybeans.
- Do not apply more than a total of 6.67 L/ha in one season.

SUSCEPTIBLE WEEDS: Surmise 150 has an effect on all weeds and crops except for those crops which are developed to be tolerant to applications of Surmise 150. The following weeds are susceptible to application of Surmise 150. Best control will be obtained when Surmise 150 is applied in the recommended leaf stages.

WEED	RECOMMENDED WEED LEAF STAGE 1 2 3 4 5 6 7 8	RATE 1.33 L/ha
Cow Cockle	----------|	
Green Foxtail	----------|	Maximum 3 tillers

WEED	RECOMMENDED WEED LEAF STAGE 1 2 3 4 5 6 7 8	RATE 2 L/ha
Barnyard Grass	----------|	
Lady's-thumb	----------|	
Lamb's-quarters	----------|	
Russian Thistle	Up to 8 cm height	
Smartweed	----------|	
Stinkweed	----------|	
Volunteer Flax	Up to 6 cm height	
Wild Mustard	----------|	

WEED	RECOMMENDED WEED LEAF STAGE 1 2 3 4 5 6 7 8	RATE 2.67 L/ha
Canada Thistle[1]	Up to 10 cm height	
Common Chickweed	----------|	Leaf Pairs
Hemp-nettle	----------|	Leaf Pairs
Kochia	Up to 8 cm height	
Perennial Sow Thistle	----------|	
Quackgrass[1]	----------|	
Redroot Pigweed	----------|	
Round-leaved Mallow	----------|	
Scentless Chamomile	Up to 10 cm height	
Shepherd's-purse	----------|	

Volunteer Barley[2] ----------| Maximum 2 tillers
Volunteer Wheat ----------| Maximum 2 tillers
Wild Buckwheat ----------|

WEED	RECOMMENDED WEED LEAF STAGE 1 2 3 4 5 6 7 8	RATE 3.33 L/ha
Cleavers	----------|Whorls	
Dandelion	1-15 cm rosette	
Flixweed	Up to 10 cm height	
Hemp-nettle	----------|	Leaf Pairs
Quackgrass[3]	----------|	
Stork's-bill	----------|	
Wild Oats	----------|	Maximum 2 tillers

WEED	RECOMMENDED WEED LEAF STAGE 1 2 3 4 5 6 7 8	RATE 3.33 L/ha
Heavy Populations		
Canada Thistle[1]	Up to 10 cm height	
Quackgrass[1]	----------|	
Volunteer Barley[2]	----------|	Maximum 2 tillers
Volunteer Wheat	----------|	Maximum 2 tillers
Wild Buckwheat	----------|	

[1]Top growth suppression only
[2]Suppression only
[3]More consistent top growth control

Section 8: Tank Mixes

This product may be tank mixed with (a fertilizer, a supplement, or with) registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions for Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Albaugh, LLC at 1-800-247-8013 for information before applying any tank mix that is not specifically recommended on this label.

- Tank mix partners may have additional restrictions for leaf staging.
- For enhanced activity Surmise 150 may be tank mixed with the following products:

CANOLA

TANK MIX PRODUCT	RATE	DIRECTIONS
Centurion® Emulsifiable Concentrate Post-Emergence Herbicide/ Select® Emulsifiable Concentrate Post-Emergence Herbicide **or** Centurion® ADV	63 mL/ha **or** 126 mL/ha	For control of volunteer barley and wild oats, apply Surmise 150 at a rate of 2.67 – L 4.0 L/ha plus Centurion Emulsifiable Concentrate Post-Emergence Herbicide or Select Emulsifiable Concentrate Post-Emergence Herbicide at 63 mL/ha with adjuvant as recommended on the Centurion Emulsifiable Concentrate Post-Emergence Herbicide or Select Emulsifiable Concentrate Post-Emergence Herbicide label. Apply when the weeds are in the 1-4 leaf stage with a maximum of 2 tillers. Centurion Emulsifiable Concentrate Post-Emergence Herbicide or Select Emulsifiable Concentrate Post-Emergence Herbicide at 63 mL/ha may be substituted with Centurion ADV at a rate of 126 mL/ha. **An adjuvant is not required when tank mixing with Centurion ADV.**

Section 9: Primocane Control in Raspberry

- Apply Surmise 150 in a minimum of 330 L/ha of water. Use a combination of spray pressures and nozzles, which will provide small droplet sizes and thorough coverage.

CROP	RECOMMENDATIONS	RATE
RASPBERRY (established raspberries only)	Surmise 150 is recommended for the control of primocanes in established Raspberries. Apply when shoots are about 10-20 cm in height. DO NOT apply to immature or weak plantings.	**BROADCAST RATE** 6.67 L/ha **BANDED RATE** Adjust the broadcast application rate per hectare proportional to the width of the band applied. Use the formula to calculate the banded rate per hectare:
	FORMULA TO CALCULATE THE BANDED RATE PER HECTARE: Banded rate per hectare = (Band width ÷ Row width) x Broadcast Rate Example: 3.05 metre row spacing and 0.61 metre band width (0.61 M ÷ 3.05 M) x 6.67 L/ha = 1.33 L/ha band rate	

Caution: Avoid contact of the spray with desirable canes, plants and vegetation.

DESICCATION USE

Section 10: Crops, Instructions and Rate

- Surmise 150 may be applied for desiccation, by ground or air, to alfalfa (grown for seed).
- Surmise 150 will also desiccate weeds, which are present in the field at time of application (wild buckwheat may not be completely desiccated).
- Desiccation of crops and weeds will be best when environmental conditions are favourable (warm temperatures, good moisture conditions, high humidity)

CROP	INSTRUCTIONS	RATE
ALFALFA (grown for seed)	Apply Surmise 150 at 50-75% pod turn (brown) stage. Do NOT apply more than once per year.	2.7 L/ha

GENERAL INSTRUCTIONS

Section 11: Herbicide Resistance Management Recommendations

For resistance management, Surmise 150 is a Group 10 herbicide. Any weed population may contain or develop plants naturally resistant to Surmise 150 and other Group 10 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 Surmise 150 or other Group 10 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 Albaugh, LLC at 1-800-247-8013.

Section 12: Application Instructions and Precautions

APPLICATION INSTRUCTIONS

- The speed of action of Surmise 150 is influenced by environmental factors. At cool temperatures (below 10° C), poor moisture and low humidity, the speed of action may be reduced. Generally, visual symptoms appear 2-4 days after application.
- For best results, apply to emerged, young, actively growing weeds. Weeds that emerge after application will not be controlled.
- Surmise 150 will have an effect on weeds that are larger than the recommended leaf stage; however speed of activity and control may be reduced.
- Surmise 150 works primarily as a contact herbicide. Thorough coverage of the weeds to be controlled, or the crop to be desiccated, is essential.
- When a rate range is given the higher rate should be utilized:
    1. when the weed or crop growth is dense;
    2. when the weeds are large and/or mature - i.e., advanced leaf stages and plant height;
    3. when the environmental conditions are cool and dry.
- Refer to Section 7 for weeds controlled.

Ground Application Instructions

- Ensure that all circuits (pipes, booms etc.) have the correct Surmise 150 /water concentration before application is started.
- Apply Surmise 150 in a minimum of 110 L/ha of water, at a pressure of 275 kPa and at a ground speed of 6-8 kph. If check valves are used, apply at 310 kpa. The use of 80° or 110° flat fan nozzles is highly recommended for optimum spray coverage and canopy penetration.
- Application of the spray at a 45° angle forward will result in better spray coverage. Refer to Sections 7, 8 (Post-emergent) and 10 (Desiccation) for the correct rate and timing of application.
- **For desiccation uses only**, where the crop canopy is dense or weed growth is heavy, achieve better spray coverage with higher spray volumes. Under these conditions, apply Surmise 150 in a minimum of 170-220 L/ha of water. Refer to Aerial Application for appropriate aerial water volumes.

Aerial Application Instructions

- Apply only by aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.
- Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.
- Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices or a Global Positioning System (GPS).
- Exercise extreme caution during the aerial application of any insecticide, herbicide or fungicide. Drift of pesticides is not always visible with the human eye. Small droplets may

drift into sensitive areas without obvious signs of danger. Follow these directions precisely.

- Applicators are required to use the correct combination of spray nozzle tips, nozzle placement and spray pressures which will provide a coarse droplet size distribution with a volume mean diameter greater than 350 microns. Do not use raindrop nozzles.

Use Precautions

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

Operator Precautions

- Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.
- It is desirable that the pilot have communication capabilities at each treatment site at the time of application.
- The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.
- All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

Product Specific Precautions

- Read and understand the entire label before opening this product. If you have questions, call the registrant at 1-800-247-8013 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:
- **Post-emergent Use in glufosinate ammonium tolerant canola and soybean water volume:** Apply Surmise 150 at the specified rate in a minimum spray volume of 55 litres per hectare (L/ha) of water only for conventionally piloted aircraft.
- **Desiccation use only water volume range:** If the crop canopy is dense or weed growth is heavy, achieve better spray coverage with higher spray volumes. Under these conditions, if using aerial application, apply Surmise 150 in a minimum of 33-55 L/ha of water.

APPLICATION PRECAUTIONS

- Weed control may be reduced when heavy dew, fog or mist is present at the time of application.
- Uniform, thorough spray coverage is important to achieve consistent weed control.
- Crop injury may result if Surmise 150 is applied to a crop stressed by severe weather conditions, frost, drought, water-saturated soil, low fertility, disease or insect damage.
- Surmise 150 is a non-selective herbicide and has the potential to desiccate, defoliate or kill all green plants. Avoid contact with other desirable plants or crops by direct application or from spray drifts as severe damage may occur.

- **Application of Surmise 150 to non-tolerant canola or soybean varieties, hybrids or other non-tolerant crops will result in severe crop injury or death of the crops.**
- **To assure crop safety and optimal herbicide performance, only use Surmise 150 on glufosinate ammonium tolerant (i.e., LibertyLink) canola or soybean grown from certified seed.**

Plant-back Intervals

- No plant-back interval is required for field corn, canola and soybeans, dry common beans (not grown for seed), alfalfa, carrot, lettuce, onion and potato.
- 70 days for buckwheat, barley, millet, oats, rye, sorghum, triticale and wheat.
- 120 days for all other crops.

Ground Application Precautions

- Field sprayer application: **DO NOT** apply when wind speed is less than 1 km/h. Avoid application of this product when winds are gusty. **DO NOT** apply with sprays finer than the American Society of Agricultural and Biological Engineers (ASABE) S572 (572.1 to 572.3) medium classification. Boom height must be 60 cm or less above the crop or ground.
- DO NOT apply if winds exceed 16 kph when using open boom sprayers for ground application.
- DO NOT apply if winds exceed 25 kph when using hooded sprayer for ground application.
- DO NOT use flood jet nozzles, controlled droplet application equipment or air-assisted spray equipment.

Aerial Application Precautions

- Conventionally piloted aircraft application: **DO NOT** apply when wind speed is less than 1 km/h. 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 sprays finer than the American Society of Agricultural and Biological Engineers (ASABE) S572 (572.1 to 572.3) coarse classification. Reduce drift caused by turbulent wingtip vortices. Nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing or rotorspan.

Rainfast Period

- If rainfall occurs within 4 hours of application, effectiveness may be reduced.

Spray Buffer Zones

A spray buffer zone is NOT required for:

- uses with hand-held application equipment permitted on this label.

The spray 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 Application	Crop/Site		Spray Buffer Zones (metres) Required for the Protection of:				
			Freshwater Habitat of Depths:		Estuarine/Marine Habitat of Depths:		Terrestrial Habitat
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer	Alfalfa, Canola, Corn, Raspberry, Soybean		1	0	0	0	1
Aerial	Alfalfa, soybean	Fixed wing	1	0	0	0	20
		Rotary wing	1	0	0	0	20
	Canola	Fixed wing	1	0	0	0	35
		Rotary wing	1	0	0	0	30

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

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

Section 13: Mixing Instructions

- Surmise 150 must be applied with properly calibrated, clean equipment.
- Surmise 150 is specially formulated to mix readily in water.
- Prior to adding Surmise 150 to the spray tank, ensure that the spray tank is thoroughly clean (see Section 14, “Sprayer Cleanup”).
    1. Fill the tank three-quarters full with clean water.
    2. Add the correct amount of Surmise 150.
    3. Add the remaining amount of water, begin agitation, and spray out immediately.

Surmise 150 and CENTURION EMULSIFIABLE CONCENTRATE POST-EMERGENCE HERBICIDE, or CENTURION ADV or SELECT EMULSIFIABLE CONCENTRATE POST-EMERGENCE HERBICIDE: Glufosinate ammonium tolerant canola only

When tank mixing Surmise 150 and CENTURION Emulsifiable Concentrate Post-Emergence Herbicide or SELECT Emulsifiable Concentrate Post-Emergence Herbicide add Surmise 150

to the tank followed by the CENTURION Emulsifiable Concentrate Post-Emergence Herbicide or SELECT Emulsifiable Concentrate Post-Emergence Herbicide.

When tank mixing Surmise 150 and CENTURION ADV, add Surmise 150 to the tank first followed by CENTURION ADV. **An adjuvant is not required when tank mixing with CENTURION ADV.**

The addition of an anti-foaming agent may reduce foaming, especially when using soft water.

1. Thoroughly clean the sprayer by flushing the system with water containing detergent (see Section 14, “Sprayer Cleanup”).
2. Fill clean spray tank half full with clean water. Start agitation system. Agitation should be running the entire mixing procedure.
3. Add the required amount of Surmise 150 to the spray tank. Continue to agitate until Surmise 150 is thoroughly mixed.
4. Add the correct amount of CENTURION Emulsifiable Concentrate Post-Emergence Herbicide, CENTURION ADV or SELECT Emulsifiable Concentrate Post-Emergence Herbicide along with the remaining amount of water necessary to fill the spray tank.
5. Continue to agitate or run the by-pass system, and spray out immediately.
6. After any break in the spraying operation, agitate thoroughly before spraying again. Check inside the tank to ensure that sprayer agitation is sufficient to remix the spray materials. Do not allow the mixture to sit overnight.
7. If an oil film starts to build up in the tank, drain it and clean tank with strong detergent solution.
8. Immediately after use, thoroughly clean the sprayer by flushing the system with water containing detergent (see Section 14, “Sprayer Cleanup”).

Section 14: Sprayer Cleanup

- Before and after using Surmise 150 always complete a thorough cleaning of the spray tank, lines, and filter. Spray equipment should be thoroughly rinsed using a strong detergent solution.

Section 15: Livestock Feeding and Preharvest Intervals

LIVESTOCK FEEDING

Canola:

- Grain and meal from treated crop can be fed to livestock.
- **DO NOT** graze or feed treated hay to livestock.

Corn (used as separator rows in hybrid canola seed production):

- **DO NOT** graze, cut or feed treated crops to livestock.

Soybean:

- **DO NOT** permit livestock to graze treated crop within 20 days after application.

PRE-HARVEST INTERVALS (PHI)

Canola:

- When Surmise 150 is tank mixed with Centurion Emulsifiable Concentrate Post-Emergence Herbicide, Centurion ADV or Select Emulsifiable Concentrate Post-Emergence Herbicide, observe a PHI of 60 days from the date of treatment (or last treatment when a second application has been made).

Soybean:

- DO NOT harvest soybean seed within 70 days of application.

Section 16: Notices

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.

All products listed are registered trademarks or trademarks of their respective companies.