

2023-03-07
2023-0118
Container Label



VIKING™ Glufosinate 150 Herbicide

GROUP	10	HERBICIDE
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SOLUTION

COMMERCIAL (AGRICULTURAL)

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

REGISTRATION NUMBER: 34726 PEST CONTROL PRODUCTS ACT

ACTIVE INGREDIENT: glufosinate ammonium 150 g/L

NET CONTENTS: 1 L – 1020 L

READ THE LABEL AND ATTACHED BROCHURE BEFORE USING

WARNING



POISON

SKIN and EYE IRRITANT

In case of emergency call the 24 hour Emergency Response Number 1-800-424-9300 or 1-703-527-3887

Viking Crop Production Partners Inc.

Box 18033
RPO Shawnessy
Calgary, AB. T2Y 0K3
1-587-743-1029

Viking (TM) is a trademark of Viking Crop Production Partners Inc.

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. Harmful or fatal if absorbed through the skin. Harmful if swallowed. This product may cause eye irritation. DO NOT get in eyes, on skin or on clothing. Avoid breathing spray mist. Wash thoroughly after using and before eating, drinking or smoking.

- Workers must wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes, and goggles during mixing, loading, application, clean-up and repair. Wear a respirator during mixing, loading and application.
- When tank-mixes are permitted, read and observe all label directions, including rates and restrictions for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.
- 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 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.
- Avoid spray drift to susceptible plants and USE ONLY FOR RECOMMENDED PURPOSES AND AT RECOMMENDED RATES. Keep in original container during storage. Do not contaminate water supply, ponds, lakes, streams and irrigation ditches by direct application, spray drift or when cleaning and rinsing spray equipment or containers.

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.

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

If swallowed: 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: 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: 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: 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: Treat symptomatically. Medical personnel should contact 1-800-424-9300.

STORAGE: CANNOT be stored below freezing. If stored for one year or longer, shake well before using. Store this product away from food or feed. Do not use or store in or around the home. Keep in original container during storage.

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

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

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).

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

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

Booklet Label



VIKING™ Glufosinate 150 Herbicide

GROUP	10	HERBICIDE
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PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN. Harmful or fatal if absorbed through the skin. Harmful if swallowed. This product may cause eye irritation. DO NOT get in eyes, on skin or on clothing. Avoid breathing spray mist. Wash thoroughly after using and before eating, drinking or smoking.

- Wear protective clothing including a long-sleeved shirt, long pants, goggles, chemical resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair.
- Wear a respirator during mixing, loading and application.
- When tank-mixes are permitted, read and observe all label directions, including rates and restrictions for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.
- 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 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.
- Avoid spray drift to susceptible plants and USE ONLY FOR RECOMMENDED PURPOSES AND AT RECOMMENDED RATES. Keep in original container during storage. Do not contaminate water supply, ponds, lakes, streams and irrigation ditches by direct application, spray drift or when cleaning and rinsing spray equipment or containers.

ENVIRONMENTAL PRECAUTIONS:

TOXIC to aquatic organisms and non-target terrestrial plants. Observe spray buffer zones specified under DIRECTIONS FOR USE. DO NOT contaminate irrigation or drinking water supplies or aquatic habitats through direct application, disposal of waste or cleaning equipment. 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.

STORAGE

CANNOT be stored below freezing. If stored for one year or longer, shake well before using. Store this product away from food or feed. Do not use or store in or around the home. Keep in original container during storage.

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

If swallowed: 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.

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If inhaled: 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: Treat symptomatically. Medical personnel should contact 1-800-424-9300.

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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).

Disposal of Unused, Unwanted Product: 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

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.

GROUND APPLICATION

Field sprayer application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

Apply **VIKING Glufosinate 150 Herbicide** in a minimum of 110 litres of water per hectare at a pressure of 275 kPa and at a ground speed of 6 to 8 km/h. 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.

For desiccation uses only, where crop canopy is dense, or weed growth is heavy, better spray coverage will be achieved with higher spray volumes. Under these conditions, apply 170-220 litres of water per hectare.

- DO NOT USE FLOOD JET NOZZLES, CONTROLLED DROPLET APPLICATION EQUIPMENT OR AIR-ASSISTED SPRAY EQUIPMENT.
- UNIFORM, THOROUGH SPRAY COVERAGE IS IMPORTANT TO ACHIEVE CONSISTENT CROP DESICCATION AND WEED CONTROL.

Application of the spray at a 45° angle forward will result in better spray coverage. Follow directions elsewhere on the label for the correct rate and timing of application.

DO NOT apply when winds exceed 16 km/h when using open boom sprayers. Do not apply when winds exceed 25 km/h when using hooded sprayers.

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 12 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 S572.1) coarse classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wingspan or rotorspan.

Ensure thorough coverage of foliage. Consult nozzle manufacturer's recommendation for spray pressures for specific nozzles.

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

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

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 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, a long-sleeved shirt, long pants, coveralls, shoes plus socks, and goggles or face shield during mixing/loading, cleanup and repair. Applicators must wear long-sleeved shirt, long pants, and shoes plus socks. 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.

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!

When applying **VIKING Glufosinate 150 Herbicide** by aircraft, uniform spray coverage is essential. 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. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Desiccation Use Only Water Volume Range: Apply **VIKING Glufosinate 150 Herbicide** in 33-55 litres of water per hectare. Where crop canopy is dense, or weed growth is heavy, better spray coverage will be achieved with higher spray volumes. Follow directions elsewhere on the label for the correct rate and timing of application.

Post-emergent Use in Glufosinate Ammonium Tolerant Canola Water Volume: Apply **VIKING Glufosinate 150 Herbicide** in a minimum of 55 L/ha of water only.

Aerial drift is increased under certain meteorological conditions. Do not apply **VIKING Glufosinate 150 Herbicide** by aircraft when the wind speed is greater than 12 km/h.

For the protection of non-target habitats overspray or drift to sensitive habitats should be avoided.

HARVEST AID – DESICCATION (PRAIRIE PROVINCES AND PEACE RIVER REGION OF BRITISH COLUMBIA ONLY)

VIKING Glufosinate 150 Herbicide may be used as a harvest aid (desiccant) in the listed crops. **VIKING Glufosinate 150 Herbicide** will also desiccate weeds present in the field at application.

Desiccation of crops and weeds will be best when environmental conditions are favourable (warm temperatures, good moisture conditions, high humidity). The speed of action of **VIKING Glufosinate 150 Herbicide** is influenced by environmental factors. At cool temperatures (below 10°C), poor moisture and low humidity, speed of action may be reduced. Generally, visual symptoms appear 2 to 4 days after application.

For best results, apply to emerged, young, actively growing weeds. Weeds that emerge after application will not be controlled.

VIKING Glufosinate 150 Herbicide will have an effect on weeds that are larger than the recommended leaf stage; however speed of activity and control may be reduced.

When a rate range is given the higher rate should be utilized:

- 1) when crop or weed growth is dense.
- 2) when environmental conditions are cool and dry.

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

VIKING Glufosinate 150 Herbicide is a non-selective herbicide. Avoid contact with desirable plants either from direct application or from spray drift as severe damage may occur.

VIKING Glufosinate 150 Herbicide works primarily as a contact herbicide. Thorough coverage of the plant tissue to be desiccated or controlled is essential.

Grain and meal from treated crops can be fed to livestock.

DO NOT graze or feed other portions of the treated crop to livestock; there are not sufficient data to support such use.

MIXING INSTRUCTIONS

VIKING Glufosinate 150 Herbicide must be applied with properly calibrated clean equipment.

VIKING Glufosinate 150 Herbicide is specially formulated to mix readily in water. Prior to adding **VIKING Glufosinate 150 Herbicide** to the spray tank, ensure that the spray tank is thoroughly clean (see "CLEANING INSTRUCTIONS").

1. Fill tank one-half full of clean water prior to adding **VIKING Glufosinate 150 Herbicide**.
2. Add the correct amount of **VIKING Glufosinate 150 Herbicide**.
3. Add the remaining amount of water, begin agitation, and spray out immediately.

NOTE: Ensure that all circuits (pipes, booms, etc.) have the correct **VIKING Glufosinate 150 Herbicide**/water concentration before application is started.

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

CLEANING INSTRUCTIONS

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

VIKING GLUFOSINATE 150 HERBICIDE MAY BE USED AS A DESICCANT IN THE FOLLOWING CROPS:

- LENTILS
- POTATOES
- ALFALFA (Grown for Seed)

VIKING Glufosinate 150 Herbicide will also desiccate weeds present in the field at application (Wild Buckwheat may not be completely desiccated).

LENTILS

DO NOT APPLY TO LENTILS GROWN FOR SEED; THERE ARE NOT SUFFICIENT DATA TO SUPPORT SUCH USE.

Apply **VIKING Glufosinate 150 Herbicide** at 2-2.7 litres of product per hectare. Apply when the crop is in the 40- 60% pod turn (yellow to brown) stage. Use the higher rate when the crop canopy is dense and/or there are high populations of weeds present at application. DO NOT harvest treated crop within 9 days after application.

VIKING Glufosinate 150 Herbicide will provide assist in lentil plant drydown to facilitate straight combining, reducing the risks associated with adverse weather affecting the windrowed crop.

POTATOES

DO NOT APPLY TO POTATOES GROWN FOR SEED STOCK.

DO NOT HARVEST THE TREATED CROP WITHIN 9 DAYS AFTER APPLICATION.

Apply **VIKING Glufosinate 150 Herbicide** at 3 litres of product per hectare. Apply approximately 14-21 days prior to expected harvest. Desiccation of crops and weeds will be more rapid under warmer and drier conditions.

VIKING Glufosinate 150 Herbicide may be applied to promote uniform drydown of an unevenly maturing crop and will allow for planning of harvest timing. Desiccation of vines and weeds will facilitate mechanical harvesting.

ALFALFA (Grown for Seed)

Apply at 50-75% pod turn (brown) stage. Apply **VIKING Glufosinate 150 Herbicide** at 2.7 L/ha of product. Do not apply more than once per year.

POST EMERGENT USE

CANOLA - PRAIRIE PROVINCES AND INTERIOR OF BRITISH COLUMBIA ONLY

VIKING Glufosinate 150 Herbicide is registered for aerial and ground application to glufosinate ammonium tolerant Canola varieties or hybrids [example: varieties or hybrids labelled with LibertyLink® grown in the Prairie Provinces and Interior of British Columbia only.

- To assure crop safety and optimal herbicide performance, only use **VIKING Glufosinate 150 Herbicide** on glufosinate ammonium tolerant (i.e., LibertyLink) Canola grown from certified seed. **VIKING Glufosinate 150 Herbicide** is not registered for use on other glufosinate ammonium tolerant crops.
- Application of **VIKING Glufosinate 150 Herbicide** to non-tolerant Canola varieties or hybrids or other non-tolerant crops will result in severe crop injury or death of the crop.
- Apply **VIKING Glufosinate 150 Herbicide** from the cotyledon stage up until, but prior to, early bolting stage of Canola.
- Slight discoloration of the Canola may be visible after application. This effect is temporary and will not influence crop growth, maturity or yield.
- 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 **VIKING Glufosinate 150 Herbicide** for hybrid seed production should be made at 3.33 L/ha.
- DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

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

WEED	RECOMMENDED WEED LEAF STAGE	RATE
Cow Cockle	4	1.33 L/ha
Green Foxtail	6 (Maximum 3 tillers)	

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

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WEED	RECOMMENDED WEED LEAF STAGE	RATE
Canada Thistle ¹	Up to 10 cm height	2.67 L/ha
Common Chickweed	4 (Leaf Pairs)	
Hemp-nettle	3 (Leaf Pairs)	
Kochia	Up to 8 cm height	
Perennial Sow Thistle	8	
Quackgrass ¹	4	
Redroot Pigweed	4	
Round-leaved Mallow	4	
Scentless Chamomile	Up to 10 cm height	
Shepherd's-purse	6	
Volunteer Barley ²	4 (Maximum 2 tillers)	
Volunteer Wheat	4 (Maximum 2 tillers)	
Wild Buckwheat	3	

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WEED	RECOMMENDED WEED LEAF STAGE	RATE
Cleavers	2 (Whorls)	3.33 L/ha
Dandelion	1-15 cm rosette	
Flixweed	Up to 10 cm height	
Hemp-nettle	4 (Leaf Pairs)	
Quackgrass ³	4	
Stork's Bill	3	
Wild Oats	4 (Maximum 2 tillers)	

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WEED	RECOMMENDED WEED LEAF STAGE	RATE
		3.33 L/ha

Heavy Populations

Canada Thistle ¹	Up to 10 cm height
Quackgrass ¹	4
Volunteer Barley ²	4 (Maximum 2 tillers)
Volunteer Wheat	4 (Maximum 2 tillers)
Wild Buckwheat	3

WEED	RECOMMENDED WEED LEAF STAGE	RATE
		4 L/ha

Canada Thistle⁴ Up to 10 cm height

Quackgrass⁵ 4

¹ Top Growth Suppression Only

² Suppression Only

³ Improved Top Growth Control

⁴ Better Top Growth Suppression

⁵ Season Long Control for Heavy Populations

SECOND APPLICATION - CANOLA

- A second application of **VIKING Glufosinate 150 Herbicide** can be made to canola treated initially with up to 4 L/ha if new weed germination or growth is present.
- A first application of up to 4 L/ha may be followed by a second application of up to 3.33 L/ha, OR A first application of up to 3.33 L/ha may be followed by a second application of up to 4 L/ha.
- **Do not apply more than a total of 7.33 L/ha per year.**
- Apply when the new weed growth is in the correct leaf stage and up until, but prior to, the bolting stage of Canola.

THIRD APPLICATION - CANOLA: FOR HYBRID SEED PRODUCTION ONLY

- Three applications of **VIKING Glufosinate 150 Herbicide**, each at 3.33 L/ha, may be required for hybrid seed production. The third application must occur prior to bolting of the Canola crop.
- For best results, apply to emerged, young, actively growing weeds. Weeds that emerge after application will not be controlled.
- **VIKING Glufosinate 150 Herbicide** will have an effect on weeds that are larger than the recommended leaf stage, however speed of activity and control may be reduced.

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 Viking Crop Production Partners Inc. at 1-587-743-1029 for information before applying any tank mix that is not specifically recommended on this label.

When tank-mixes are permitted, read and observe all label directions, including rates and restrictions for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on all product labels.

CANOLA

TANK MIX PRODUCT	RATE	DIRECTIONS
Centurion® or Select®	63 mL/ha	For control of Volunteer Barley and Wild Oats, apply VIKING Glufosinate 150 Herbicide at a rate of 2.67 – 4.0 L/ha plus Centurion or Select at 63 mL/ha with adjuvant as recommended on the Centurion or Select label. Apply when the weeds are in the 1-4 leaf stage with a maximum of 2 tillers.

Mixing Instructions

- **VIKING Glufosinate 150 Herbicide** must be applied with properly calibrated, clean equipment.
- **VIKING Glufosinate 150 Herbicide** is specially formulated to mix readily in water.
- Prior to adding **VIKING Glufosinate 150 Herbicide** to the spray tank, ensure that the spray tank is thoroughly clean (see "CLEANING INSTRUCTIONS")
 1. Fill the tank three-quarters full with clean water.
 2. Add the correct amount of **VIKING Glufosinate 150 Herbicide**.
 3. Add the remaining amount of water, begin agitation, and spray out immediately.

VIKING Glufosinate 150 Herbicide and Centurion or Select: Glufosinate Ammonium Tolerant Canola only

When tank mixing **VIKING Glufosinate 150 Herbicide** and Centurion or Select, always add Amigo® adjuvant to the tank first, then add **VIKING Glufosinate 150 Herbicide** to the tank followed by the Centurion or Select.

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
2. Fill clean spray tank half full with clean water. Start agitation system.
3. Add the correct amount of Amigo adjuvant. Continue to agitate until adjuvant is thoroughly mixed.
4. STOP agitation. Add the required amount of **VIKING Glufosinate 150 Herbicide** to the spray tank. Start agitation system.
5. Add the correct amount of Centurion or Select along with the remaining amount of water necessary to fill the spray tank.
6. Continue to agitate or run the by-pass system and spray out immediately.

7. 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.
8. If an oil film starts to build up in the tank, drain it and clean tank with strong detergent solution.
9. Immediately after use, thoroughly clean the sprayer by flushing the system with water containing detergent.

CLEANING INSTRUCTIONS

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

Plant-back Intervals:

- 70 days for buckwheat, barley, millet, oats, rye, sorghum, triticale and wheat.
- 120 days for all other crops except field corn, canola and soybeans, dry common beans (not grown for seed), alfalfa, carrot, lettuce, onion and potato.

Livestock Feeding and Preharvest Intervals

LIVESTOCK FEEDING:

Canola:

Grain and meal from treated crop can be fed to livestock.

Do not graze the treated crop or cut for hay; sufficient data are not available to support such use.

PREHARVEST INTERVALS:

Canola:

When **VIKING Glufosinate 150 Herbicide** is tank mixed with Centurion or Select, observe a PHI of 60 days from the date of treatment (or last treatment when a second application has been made).

Spray Buffer Zones:

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

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).

Method of application	Crop	Spray Buffer Zones (metres) Required for the Protection of:		
		Freshwater Habitats of Depths:		Terrestrial Habitats
		Less than 1 m	Greater than 1 m	
Field sprayer	Alfalfa Lentils Potato	1	0	1
	Canola	1	0	1
Aerial (fixed wing and rotary)	Alfalfa Lentils Potato	1	0	20
	Canola	1	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 (ASAE) category indicated on the labels for those tank mix partners.

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

RESISTANCE MANAGEMENT

For resistance management, **VIKING Glufosinate 150 Herbicide** is a Group 10 herbicide. Any weed population may contain or develop plants naturally resistant to VIGOR **VIKING Glufosinate 150 Herbicide** 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 **VIKING Glufosinate 150 Herbicide** 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 Viking Crop Production Partners Inc. at 1-587-743-1029.

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.

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