

2023-1578
2023-05-23
Container Label*



VIKING™ Clethodim Herbicide

GROUP	1	HERBICIDE
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EMULSIFIABLE CONCENTRATE

COMMERCIAL (AGRICULTURAL)

USE WITH
VIKING Phosphate
Ester Adjuvant

POST-EMERGENCE HERBICIDE FOR CONTROL OF GRASSES IN SEEDLING ALFALFA, DRY COMMON BEANS (*Phaseolus vulgaris* varieties only), Highbush Blueberry, Canola, Desi and Kabuli Chickpeas, Coriander, Caraway, Fenugreek, Cranberry, Flax (including low linolenic acid varieties), Field Peas, Lentils, Oriental (Brown) Mustard (condiment and oilseed types), Yellow Mustard, Dry Onions, Potatoes, Prairie Carnations, Safflower, Soybeans, Spinach, and Sunflowers, Red Garden (Table) Beet, Parsnip, Carrot and Radish.

REGISTRATION NO. 34745 PEST CONTROL PRODUCTS ACT

ACTIVE INGREDIENT: Clethodim 240 g/L

Warning, contains the allergen soy

NET CONTENTS: 250 mL – 1020 L

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

KEEP OUT OF REACH OF CHILDREN

WARNING: EYE AND SKIN 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.

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PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN. CAUSES EYE AND SKIN IRRITATION. Avoid contact with skin, eyes and clothing. Wash concentrate from skin or eyes immediately. Do not inhale fumes. Avoid breathing vapours or spray mist. After use, wash hands and other exposed skin. When using, do not eat, drink or smoke. Remove and launder contaminated clothing separately from household laundry before reuse. Store the container tightly closed and away from seeds, feeds, fertilizer, plants and foodstuffs. Observe appropriate provincial buffer zones around bodies of water and wetland areas.

When handling the concentrate, mixing, loading or during cleanup and repair, wear goggles or face shield, rubber apron, chemical-resistant gloves, rubber boots, long-sleeved shirt and long pants. Wear long-sleeved shirt and long pants during application. In addition, for hand-held application equipment, including backpack sprayer, wear chemical-resistant gloves during application.

Apply only to agricultural crops when the potential for drift to areas of human habitation and 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.

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

ENVIRONMENTAL PRECAUTIONS:

TOXIC to aquatic organisms and non-target terrestrial plants. Toxic to certain beneficial arthropods (which may include predatory and parasitic insects, spiders, and mites). Minimize spray drift to reduce harmful effects on beneficial arthropods in habitats next to the application site such as hedgerows and woodland.

Observe spray buffer zones specific under DIRECTIONS FOR USE.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

This product contains aromatic petroleum distillates that are toxic to aquatic organisms.

This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

FIRST AID:

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 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 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.

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

TOXICOLOGICAL INFORMATION: Treat symptomatically. This product contains petroleum distillates. Vomiting may cause aspiration pneumonia. Danger from lung aspiration of petroleum-based solvents must be weighed against toxicity when considering emptying stomach.

STORAGE AND DISPOSAL

STORAGE:

To prevent contamination, store this product away from food or feed.

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.

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.

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Booklet Label



VIKING™ Clethodim Herbicide

GROUP	1	HERBICIDE
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EMULSIFIABLE CONCENTRATE

COMMERCIAL (AGRICULTURAL)

USE WITH VIKING Phosphate Ester Adjuvant

POST-EMERGENCE HERBICIDE FOR CONTROL OF GRASSES IN SEEDLING ALFALFA, DRY COMMON BEANS (*Phaseolus vulgaris* varieties only), Highbush Blueberry, Canola, Desi and Kabuli Chickpeas, Coriander, Caraway, Fenugreek, Cranberry, Flax (including low linolenic acid varieties), Field Peas, Lentils, Oriental (Brown) Mustard (condiment and oilseed types), Yellow Mustard, Dry Onions, Potatoes, Prairie Carnations, Safflower, Soybeans, Spinach, and Sunflowers, Red Garden (Table) Beet, Parsnip, Carrot and Radish.

REGISTRATION NO. 34745 PEST CONTROL PRODUCTS ACT

ACTIVE INGREDIENT: Clethodim 240 g/L
Warning, contains the allergen soy

NET CONTENTS: 250 mL – 1020 L

READ THE LABEL AND BOOKLET BEFORE USING

KEEP OUT OF REACH OF CHILDREN

WARNING: EYE AND SKIN 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.
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1-587-743-1029

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GENERAL INFORMATION:

VIKING Clethodim Herbicide is a selective post-emergence herbicide for control of a broad range of grasses in seedling alfalfa, dry common beans (*Phaseolus vulgaris* varieties only), highbush blueberry, canola, Desi and Kabuli chickpeas, coriander, caraway, field peas, fenugreek, cranberry, flax (including low linolenic acid varieties), lentils, oriental (brown) mustard (condiment and oilseed types), safflower, yellow mustard, dry onions, potatoes, prairie carnation, safflower, soybeans, spinach, sunflowers, red garden (table) beet, parsnip, carrot and radish.

VIKING Clethodim Herbicide is to be used only with VIKING Phosphate Ester Adjuvant.

VIKING Clethodim Herbicide is a systemic herbicide which is translocated from the treated foliage to the growing points of the leaves, shoots and roots. Uptake into the plant is primarily through its leaves. Thorough coverage of the foliage is important for consistent grass control.

Susceptible grasses that are actively growing will undergo a burn-back and colour change after treatment. Leaf foliage will first change from green to yellowish, then purplish and finally brown colour. The time required for complete control is normally 7 to 21 days following treatment, depending on growing conditions and crop competition.

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. CAUSES EYE AND SKIN IRRITATION. Avoid contact with skin, eyes and clothing. Wash concentrate from skin or eyes immediately. Do not inhale fumes. Avoid breathing vapours or spray mist. After use, wash hands and other exposed skin. When using, do not eat, drink or smoke. Remove and launder contaminated clothing separately from household laundry before reuse. Store the container tightly closed and away from seeds, feeds, fertilizer, plants and foodstuffs. Observe appropriate provincial buffer zones around bodies of water and wetland areas.

When handling the concentrate, mixing, loading or during cleanup and repair, wear goggles or face shield, rubber apron, chemical-resistant gloves, rubber boots, long-sleeved shirt and long pants. Wear long-sleeved shirt and long pants during application. In addition, for hand-held application equipment, including backpack sprayer, wear chemical resistant gloves during application.

Apply only to agricultural crops when the potential for drift to areas of human habitation and 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.

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

ENVIRONMENTAL PRECAUTIONS:

TOXIC to aquatic organisms and non-target terrestrial plants. Toxic to certain beneficial arthropods (which may include predatory and parasitic insects, spiders, and mites). Minimize spray drift to reduce harmful effects on beneficial arthropods in habitats next to the application site such as hedgerows and woodland

Observe spray buffer zones specific under DIRECTIONS FOR USE.

Toxic to certain beneficial insects. Minimize spray drift to reduce harmful effects on beneficial insects in habitats next to the application site such as hedgerows and woodland.

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.

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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.

This product contains aromatic petroleum distillates that are toxic to aquatic organisms.

This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

FIRST AID:

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

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

TOXICOLOGICAL INFORMATION: Treat symptomatically. This product contains petroleum distillates. Vomiting may cause aspiration pneumonia. Danger from lung aspiration of petroleum based solvents must be weighed against toxicity when considering emptying stomach.

STORAGE AND DISPOSAL

STORAGE:

To prevent contamination, store this product away from food or feed

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.

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.

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DIRECTIONS FOR USE:

VIKING Clethodim Herbicide is to be used only on seedling alfalfa, dry common beans (*Phaseolus vulgaris* varieties only), highbush blueberry, canola, Desi and Kabuli chickpeas, coriander, caraway, field peas, fenugreek, cranberry, flax (including low linolenic acid varieties), lentils, oriental (brown) mustard (condiment and oilseed types), safflower, yellow mustard, dry onions, potatoes, prairie carnations, safflower, soybeans, spinach, sunflowers, red garden (table) beet, parsnip, carrot and radish.

Not for use in greenhouses.

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.

A 30-day plant-back interval should be observed for all unlabelled crops.

TIME OF APPLICATION:

Apply **VIKING Clethodim Herbicide** when the annual grasses and volunteer cereals are in the 2 to 6 leaf stage as specified under Application Rates of **VIKING Clethodim Herbicide**. Most effective control is achieved when application is made prior to tillering when annual grasses are small and actively growing.

For suppression or control of quackgrass, apply **VIKING Clethodim Herbicide** when the quackgrass is in the 2 to 6 leaf stage and 6 to 15 cm in height. Most effective results are achieved when application is made at the 3 to 5 leaf stage, when the canopy is uniform and actively growing.

VIKING Clethodim Herbicide will be less effective when plants are stressed by lack of moisture, excessive moisture, low-temperature and/or very low relative humidity. Regrowth by tillering may occur if application is made under any of the above stress conditions. In wide row crops, where the canopy may be slow to close, cultivation may be necessary to control grasses that emerge after treatment.

Seedling alfalfa, dry common beans (*Phaseolus vulgaris* varieties only), highbush blueberry, canola, Desi and Kabuli chickpeas, field peas, cranberry, flax (including low linolenic acid varieties), lentils, oriental (brown) mustard (condiment and oilseed types), safflower, yellow mustard, dry onions, potatoes, soybeans, sunflowers and red garden (table) beet, parsnip, carrot and radish are tolerant to **VIKING Clethodim Herbicide** at all stages of growth. However, the pre-harvest interval outlined in the Crop Recommendations table must be followed to avoid excessive crop residues.

For Desi and Kabuli chickpeas, apply **VIKING Clethodim Herbicide** at a maximum of one application per season before the crop reaches the 9 node stage (18 cm height maximum) and when the annual grasses and volunteer cereals are in the 2 to 6 leaf stage.

For fenugreek, apply **VIKING Clethodim Herbicide** post-emergence, when fenugreek is in the 3 to 5 leaf stage at a maximum of one application per season.

For coriander, or prairie carnation, apply **VIKING Clethodim Herbicide** postemergence, when coriander or prairie carnation is in the 2 to 5 leaf stage. A maximum of one application may be made per year.

For safflower, apply **VIKING Clethodim Herbicide** post-emergence, when safflower is in the 6 to 8 leaf stage at a maximum of one application per season.

Cranberry is tolerant to **VIKING Clethodim Herbicide** at all stages of growth, however, do not apply **VIKING Clethodim Herbicide** between the hook stage and full fruit set.

APPLICATION RATES OF VIKING Clethodim Herbicide:

Rates of use are given below to control various grass species. Refer to crop section for the maximum use rate on each crop.

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Grass Species	Leaf Stage	Application Rate of VIKING Clethodim Herbicide	Application Rate of VIKING Phosphate Ester Adjuvant
*Foxtail (green, yellow) Wild oats Volunteer cereals (wheat, barley, oats)	2 to 4	0.125 L/ha	0.5% v/v
Barnyard Grass Witchgrass Fall panicum Proso millet Volunteer Corn Volunteer canary grass	2 to 6	0.125 L/ha	0.5% v/v
Wild oats Volunteer cereals (wheat, barley, yellow) Foxtail (green, yellow) Persian darnel Crabgrass (smooth and large) Proso millet Witchgrass Fall panicum Barnyard grass Volunteer corn Volunteer canary grass Quackgrass suppression	2 to 6	0.19 L/ha	0.5% v/v
Quackgrass control**	2 to 6	0.38 L/ha	1.0% v/v

***VIKING Clethodim Herbicide** applied at 0.125 L/ha for the control of weeds listed in this section of the table should only be applied under the following conditions:

- Good crop stand
- Early application (as in above table, prior to tillering)
- Do not apply to volunteer winter cereals
- Light to moderate weed infestation
- Adequate moisture and fertility
- Absence of stress, good growing conditions

If any one of the above conditions are not present at the time of application, use 0.19 L/ha rate of VIKING Clethodim Herbicide.

** For adequate control of quackgrass, use a minimum spray volume of 100L / ha.

CROP RECOMMENDATIONS

Crop	Maximum Application Rate of VIKING Clethodim Herbicide	Application Method	Pre-Harvest Interval
Seedling Alfalfa	0.38 L/ha	Ground application only	30 days
Dry Common Beans ^{1,2} (<i>Phaseolus vulgaris</i> varieties only)	0.19 L/ha	Ground and aerial application	60 days

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Highbush Blueberry ^{1, 5, 7}	0.38 L/ha	Ground application only	14 days
Caraway ^{1, 5, 7}	0.38 L/ha	Ground application only	60 days
Canola	0.38 L/ha	Ground and aerial application	60 days
Carrot ^{4, 7}	0.38 L/ha	Ground application only	30 days
Cranberry ^{1, 2, 7}	0.38 L/ha	Ground application only	30 days
Desi and Kabuli Chickpeas	0.19 L/ha	Ground and aerial application	60 days
Coriander ^{1, 3, 7}	0.38 L/ha	Ground application only	60 days
Flax (including low linolenic acid varieties)	0.38 L/ha	Ground and aerial application	60 days
Fenugreek ^{1, 3, 7}	0.38 L/ha	Ground application only	30 days
Field Peas	0.38 L/ha	Ground and aerial application	75 days
Lentils	0.38 L/ha	Ground and aerial application	60 days
Oriental (Brown) Mustard (condiment and oilseed types)	0.38 L/ha	Ground and aerial application	60 days
Yellow Mustard	0.38 L/ha	Ground and aerial application	60 days
Dry Onions ^{1, 7}	0.38 L/ha	Ground application only	45 days
Parsnip ^{4, 7}	0.38 L/ha	Ground application only	30 days
Potatoes	0.38 L/ha	Ground and aerial application	60 days
Prairie Carnation ^{1, 3, 7}	0.19 L/ha	Ground application only	N/A
Radish ^{4, 7}	0.38 L/ha	Ground application only	30 days
Red garden (table) beet ^{4, 7}	0.38 L/ha	Ground application only	30 days
Safflower	0.38 L/ha	Ground application only	70 days
Soybeans	0.38 L/ha	Ground and aerial application	75 days
Spinach ^{4, 7}	0.19 L/ha	Ground application only	14 days
Sunflowers	0.38 L/ha	Ground and aerial application	72 days

1. Apply a maximum of one application per year.
2. NOTE: Varieties of this crop may vary in their tolerance to herbicides, including **VIKING Clethodim Herbicide**. Since not all crop varieties have been tested for tolerance to **VIKING Clethodim Herbicide**, first use of **VIKING Clethodim Herbicide** should be limited to a small area of each variety to confirm tolerance prior to

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adoption as a general field practice. Additionally, consult your supplier for information on the tolerance of specific varieties to **VIKING Clethodim Herbicide**.

3. Do not harvest treated prairie carnations or greens of treated fenugreek as a vegetable or leaves of treated coriander (cilantro) for human consumption.
4. Apply a maximum of two applications per year. If repeat application is required, allow at least 14 days between first and second application.
5. Apply **VIKING Clethodim Herbicide** as a broadcast spray directed to the ground.
6. **SPRAY VOLUME FOR AERIAL APPLICATION:** Apply in 28 to 55 L/ha. Increase spray volumes up to 100L/ha as grass or crop foliage becomes dense.
7. Refer to section "MINOR USES" in this label for additional use instructions.

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.

VIKING CLETHODIM HERBICIDE AND BUCTRIL® M:

Flax (including low linolenic acid varieties): **VIKING Clethodim Herbicide** may be tank-mixed with BUCTRIL M for control of certain broadleaf and grassy weeds in flax (including low linolenic acid varieties) in one spray operation. Apply in 55 to 110 litres of water per hectare at a pressure of 275 kPa. DO NOT spray this tank-mix on plants under stress. DO NOT spray during periods of hot, humid weather. Follow all precautions, limitations and timing recommendations on the BUCTRIL M label. The most stringent label precautions for any individual pesticide product in a tank-mix should be used.

Time of Application: Flax (including low linolenic acid varieties) may be treated from 5 cm high to the early bud stage. For best results, apply when flax (including low linolenic acid varieties) is 5 to 10 cm high and weeds are in the seedling stage. If broadleaf weeds and grassy weeds are not in the recommended treatment stage at the same time, then separate applications should be made.

Application Rate: **VIKING Clethodim Herbicide** at 0.19 to 0.38 L/ha tank-mixed with BUCTRIL M at 1.0 L/ha and VIKING Phosphate Ester Adjuvant at 0.5 to 1.0 % v/v.

Weeds Controlled: As listed for **VIKING Clethodim Herbicide** used alone, plus certain seedling broadleaf weeds. Refer to the BUCTRIL M label for the broadleaf weeds controlled.

MIXING INSTRUCTIONS:

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. If tank-mixing **VIKING Clethodim Herbicide** and BUCTRIL M for once-over grass and broadleaf weed control in flax (including low linolenic acid varieties), add the correct amount of BUCTRIL M. Continue to agitate.
4. Add the correct amount of **VIKING Clethodim Herbicide**. Continue to agitate.

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5. Add the correct amount of VIKING Phosphate Ester Adjuvant along with the remaining amount of water necessary to fill the spray tank.
6. Continue to agitate or run the by-pass system.
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 re-mix the spray materials. Do not allow the mixture to sit overnight.
8. Immediately after use, thoroughly clean the sprayer by flushing the system with clean water containing detergent.
9. *For disposal of cleaning solution, see section on DISPOSAL.*

VIKING CLETHODIM HERBICIDE AND CURTAIL™ M:

Flax (including low linolenic acid varieties): VIKING Clethodim Herbicide may be tank-mixed with CURTAIL M for control of certain broadleaf and grass weeds in flax in one spray operation. Apply in a minimum of 100 L/ha spray volume at a pressure of 275 kPa.

Time of Application: Flax may be treated from 5 to 15 cm in height. Apply when the grassy weeds are in the 2 to 6 leaf stage and the broadleaf weeds are actively growing. Application to Canada thistle should be made when Canada thistle is between 10 cm and up to the pre-bud stage. If broadleaf weeds and grass weeds are not in recommended treatment stage at the same time, then separate applications should be made.

Application Rate: VIKING Clethodim Herbicide at 0.19 L/ha tank-mixed with CURTAIL M at 1.5 to 2.0 L/ha and with VIKING Phosphate Ester Adjuvant at 0.5 % v/v.

Weeds Controlled: Weed claims listed on the VIKING Clethodim Herbicide label plus weed claims listed on the Curtail M label. Refer to the CURTAIL M label for the broadleaf weeds controlled.

Grazing Interval

Do not cut treated crops for feed or graze until 60 days after application.

MIXING INSTRUCTIONS:

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 required amount of CURTAIL M to the tank. Continue to agitate.
4. Add the correct amount of VIKING Clethodim Herbicide. Continue to agitate.
5. Add the correct amount of VIKING Phosphate Ester Adjuvant along with the remaining amount of water necessary to fill the spray tank.
6. Continue to agitate or run the by-pass system.
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 re-mix the spray materials. Do not allow the mixture to sit overnight. In the case of tank mixtures with broadleaf herbicides, settling will occur if agitation is not continuous.
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 clean water containing detergent.

VIKING CLETHODIM HERBICIDE AND MCPA ESTER:

Flax: VIKING Clethodim Herbicide may be tank-mixed with MCPA ESTER for control of certain broadleaf and grassy weeds in flax in one spray operation. For ground applications, apply in a minimum of 100 L/ha spray volume at a pressure of 275 kPa. For aerial application apply this tank-mix in a minimum of 30 L/ha spray volume at a pressure of 235 kPa.

NOTE: THIS TANK-MIX MAY NOT BE APPLIED TO LOW LINOLENIC ACID VARIETIES OF FLAX.

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Time of application: Flax may be treated from 5 cm tall to just before the bud stage. Do not apply after the early bud stage. Apply when the grassy weeds are in the 2 to 6 leaf stage and broad leaf weeds are in the seedling stage and actively growing. If broadleaf weeds and grassy weeds are not in the recommended treatment stage at the same time, then separate applications should be made.

Application Rate: **VIKING Clethodim Herbicide** at 0.19 to 0.38 L/ha tank-mixed with MCPA ESTER and VIKING Phosphate Ester Adjuvant at 0.5 to 1.0 % v/v.

Weeds Controlled: As listed for **VIKING Clethodim Herbicide** used alone, plus certain seedling broadleaf weeds. Refer to the MCPA ESTER label for the rates and broadleaf weeds controlled and specific information on flax.

MIXING INSTRUCTIONS:

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 MCPA ESTER. Continue to agitate.
4. Add the correct amount of **VIKING Clethodim Herbicide**. Continue to agitate.
5. Add the correct amount of VIKING Phosphate Ester Adjuvant along with the remaining amount of water necessary to fill the spray tank.
6. Continue to agitate or run the by-pass system.
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 re-mix the spray materials. Do not allow the mixture to sit overnight.
8. Immediately after use, thoroughly clean the sprayer by flushing the system with clean water containing detergent.

VIKING CLETHODIM HERBICIDE AND LONTREL™ 360 HERBICIDE:

Flax (including low linolenic acid varieties): **VIKING Clethodim Herbicide** may be tank-mixed with LONTREL 360 for control of certain broadleaf and grass weeds in flax in one spray operation. Apply in a minimum of 100 L/ha spray volume at a pressure of 275 kPa.

Follow all precautions, limitations and timing recommendations on the LONTREL 360 label.

Time of Application: Flax may be treated from 5 to 10 cm in height. Apply when the grassy weeds are in the 2 to 6 leaf stage and the broadleaf weeds are actively growing. Application to Canada thistle should be made when Canada thistle is in the rosette to pre-bud stage of growth. If broadleaf weeds and grass weeds are not in recommended treatment stage at the same time, then separate applications should be made.

Application Rate: **VIKING Clethodim Herbicide** at 0.19 L/ha tank-mixed with LONTREL 360 at 0.56 to 0.83 L/ha and with VIKING Phosphate Ester Adjuvant at 0.5 % v/v.

Weeds Controlled: Wild oats, green foxtail, volunteer barley, volunteer wheat, volunteer oats, and wild buckwheat.
Canada thistle 0.56 L LONTREL 360/ha Season-long control
0.83 L LONTREL 360 /ha Control extended into following year

MIXING INSTRUCTIONS: For mixing instructions, refer to **VIKING Clethodim Herbicide** and LONTREL 360 tank-mix on canola.

Canola: **VIKING Clethodim Herbicide** may be tank-mixed with LONTREL 360 for control of certain broadleaf and grass weeds in canola in one spray operation. Apply in a minimum of 100 L/ha spray volume at a pressure of 275 kPa. Follow all precautions, limitations and timing recommendations on the LONTREL 360.

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Time of Application: Canola may be treated from the 2 to 6 leaf stage. Apply when the grassy weeds are in the 2 to 6 leaf stage and the broadleaf weeds are actively growing. Application to Canada thistle should be made when Canada thistle is in the rosette to pre-bud stage of growth. If broadleaf weeds and grass weeds are not in recommended treatment stage at the same time, then separate applications should be made.

Application Rate: **VIKING Clethodim Herbicide** at 0.19 L/ha tank-mixed with LONTREL 360 at 0.42 to 1.83 L/ha and with VIKING Phosphate Ester Adjuvant at 0.5 % v/v.

Weeds Controlled: Wild oats, green foxtail, volunteer barley, volunteer wheat, and volunteer oats.

Wild Buckwheat	0.56 L LONTREL 360/ha	Season-long control
Canada thistle	0.42 L LONTREL 360/ha	Top growth control to 6 to 8 weeks
	0.56 L LONTREL 360/ha	Season-long control
	0.83 L LONTREL 360/ha	Control into following year.

MIXING INSTRUCTIONS:

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 required amount of LONTREL 360 to the tank. Continue to agitate.
4. Add the correct amount of **VIKING Clethodim Herbicide**. Continue to agitate.
5. Add the correct amount of VIKING Phosphate Ester Adjuvant along with the remaining amount of water necessary to fill the spray tank.
6. Continue to agitate or run the by-pass system.
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. In the case of tank mixtures with broadleaf herbicides, settling will occur if agitation is not continuous.
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 clean water containing detergent.

VIKING CLETHODIM HERBICIDE AND PURSUIT®

Field Peas: **VIKING Clethodim Herbicide** may be tank-mixed with PURSUIT for control of certain broadleaf and grassy weeds in field peas in one spray operation. Apply in a minimum of 100 litres of water per hectare at a spray pressure of 275 kPa.

Time of Application: Field peas may be treated up to the sixth (6th) trifoliate leaf stage. Apply when volunteer wheat, volunteer barley, wild oats and green foxtail are in the 2 to 6 leaf stage. Apply up to the 4 leaf stage for control of broadleaf weeds. If broadleaf weeds and grassy weeds are not in the recommended treatment stage at the same time, then separate applications should be made.

Application Rate: **VIKING Clethodim Herbicide** at 0.19 L/ha tank-mixed with PURSUIT at 210 mL/ha and VIKING Phosphate Ester Adjuvant at 0.5 % v/v.

Weeds Controlled: Wild oats, green foxtail, volunteer barley, volunteer wheat plus the weeds as listed on the PURSUIT label.

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MIXING INSTRUCTIONS:

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. If tank-mixing **VIKING Clethodim Herbicide** and PURSUIT for once over grass and broadleaf weed control in field peas, add the correct amount of PURSUIT. Continue to agitate.
4. Add the required amount of **VIKING Clethodim Herbicide** to the tank. Continue to agitate.
5. Add the correct amount of VIKING Phosphate Ester Adjuvant along with the remaining amount of water necessary to fill the spray tank.
6. Continue to agitate or run the by-pass system.
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. Immediately after use, thoroughly clean the sprayer by flushing the system with clean water containing detergent.

Imazethapyr Tolerant Canola (e.g. canola varieties with the SMART trait): **VIKING Clethodim Herbicide** may be tank-mixed with PURSUIT for control of certain broadleaf and grassy weeds in imazethapyr-tolerant canola varieties in one spray operation. Apply in a minimum of 100 litres of water per hectare at a spray pressure of 275 kPa. Follow all precautions, limitations and timing recommendations on the PURSUIT label.

Time of Application: Imazethapyr-tolerant canola varieties may be treated after the crop has developed one (1) fully expanded leaf. Apply when grassy weeds are in the 2 to 6 leaf stage. Apply up to the 4 leaf stage for control of broadleaf weeds.

Application Rate: **VIKING Clethodim Herbicide** at 0.19 L/ha tank-mixed with PURSUIT at 0.105 or 0.21 L/ha and VIKING Phosphate Ester Adjuvant at 0.5 % v/v.

Weeds Controlled: As listed for **VIKING Clethodim Herbicide** plus the following additional weeds.

PURSUIT at 0.105 L/ha for control of chickweed, hemp-nettle, redroot pigweed*, stinkweed, volunteer canola (not imazethapyr-tolerant), wild mustard and wild buckwheat*, in the 1 to 4 leaf stage.

*For the control of light infestations only. For heavy infestations, use the 0.21 L/ha rate of PURSUIT.

PURSUIT at 0.21 L/ha for control of weeds as listed on the PURSUIT label.

MIXING INSTRUCTIONS: For mixing instructions, refer to **VIKING Clethodim Herbicide** and PURSUIT or tank-mix on field peas.

VIKING CLETHODIM HERBICIDE AND MUSTER®:

Canola: **VIKING Clethodim Herbicide** may be tank-mixed with MUSTER for control of certain broadleaf and grassy weeds in canola in one spray operation. Apply in a minimum of 100 litres of water per hectare at a spray pressure of 275 kPa.

Time of Application: Canola may be treated from the 2 leaf stage to the beginning of bolting. Apply when the grassy weeds are in the 2 to 6 leaf stage and when the broadleaf weeds are in the cotyledon to 6 leaf stage. If broadleaf weeds and grassy weeds are not in the recommended treatment stage at the same time, then separate applications should be made.

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Application Rate: **VIKING Clethodim Herbicide** at 0.19 L/ha tank-mixed with MUSTER at 20 or 30 g/ha and VIKING Phosphate Ester Adjuvant at 0.5 % v/v.

Weeds Controlled:

Muster at 20 or 30 g/ha: Wild oats, green foxtail, volunteer barley, volunteer oats, volunteer wheat, hemp-nettle, wild mustard, green smartweed, flaxweed (spring seedlings), stinkweed*, and redroot pigweed.

* *Stinkweed suppression at the lower rate. Apply to stinkweed in the 1 to 4 leaf stage.*

MIXING INSTRUCTIONS:

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 required amount of MUSTER to the tank. Continue to agitate.
4. Once MUSTER is in suspension, add the required amount of **VIKING Clethodim Herbicide**. Continue to agitate.
5. Add the correct amount of VIKING Phosphate Ester Adjuvant
6. along with the remaining amount of water necessary to fill the spray tank.
7. Continue to agitate or run the by-pass system.
8. On repeat tankloads, prepare a MUSTER/water slurry and add to required water volume in the spray tank prior to adding **VIKING Clethodim Herbicide** and VIKING Phosphate Ester Adjuvant.
9. After any break in the spraying operation, agitate thoroughly before spraying again. Check inside the tank to ensure that sprayer agitation is sufficient to re-mix the spray materials. Do not allow the mixture to sit overnight.
10. Immediately after use, refer to MUSTER label for appropriate tank cleanout instructions.

VIKING CLETHODIM HERBICIDE AND LIBERTY® 150 SN HERBICIDE – PRAIRIE PROVINCES AND INTERIOR OF BRITISH COLUMBIA (INCLUDING PEACE RIVER REGION) ONLY:

Canola: For use on Glufosinate Ammonium tolerant canola varieties only (e.g. varieties or hybrids labelled LIBERTYLINK®).

VIKING Clethodim Herbicide may be tank-mixed with LIBERTY 150 SN Herbicide for control of certain broadleaf and grass weeds in Glufosinate Ammonium tolerant canola varieties in one spray operation. For ground applications, apply in a minimum of 110 L/ha spray volume at a pressure of 275 kPa. For aerial applications apply this tank-mix in a minimum of 55 L/ha spray volume at a pressure of 300 kPa.

Time of Application: Glufosinate Ammonium tolerant canola varieties may be treated from the cotyledon stage up to the early bolting stage. Apply when the wild oats, volunteer wheat, volunteer oats and green foxtail are in the 1 to 5 leaf stage. Refer to the LIBERTY 150 SN Herbicide label for application timing on all remaining grass and broadleaf weeds for 2.67 or 4.0 L/ha.

Application Rate: **VIKING Clethodim Herbicide** at 63 mL/ha tank-mixed with LIBERTY 150 SN Herbicide at 2.67 to 4.0 L/ha and with VIKING Phosphate Ester Adjuvant at 0.5 % v/v.

Weeds Controlled: Wild oats, green foxtail, volunteer barley, volunteer wheat, volunteer oats plus all remaining grass weeds and broadleaf weeds listed on the LIBERTY 150 SN Herbicide label at the application rates of 2.67 and 4.0 L/ha.

MIXING INSTRUCTIONS:

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.

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3. Add the required amount of VIKING Phosphate Ester Adjuvant to the tank. Continue to agitate until thoroughly mixed.
4. STOP agitation. Add the correct amount of LIBERTY 150 SN Herbicide to the spray tank. Start agitation system.
5. Add the correct amount of **VIKING Clethodim Herbicide** 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 re-mix the spray materials. Do not allow the mixture to sit overnight. In the case of tank mixtures with broadleaf herbicides, settling will occur if agitation is not continuous.
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 clean water containing detergent.

VIKING CLETHODIM HERBICIDE AND LIBERTY® 200 SN HERBICIDE - EASTERN CANADA AND BRITISH COLUMBIA ONLY

Canola: For use on Glufosinate Ammonium tolerant canola varieties only (e.g. varieties or hybrids labelled LIBERTYLINK).

VIKING Clethodim Herbicide may be tank-mixed with LIBERTY 200 SN Herbicide for control of certain broadleaf and grass weeds in Glufosinate Ammonium tolerant canola varieties in one spray operation. Apply in a minimum of 110 L/ha spray volume at a pressure of 275 kPa.

Time of Application: Glufosinate Ammonium tolerant canola varieties may be treated from the cotyledon stage up to the early bolting stage. Apply when the wild oats, volunteer wheat, volunteer oats and green foxtail are in the 1 – 5 leaf stage. Refer to the LIBERTY 200 SN Herbicide label for application timing on all remaining grass and broadleaf weeds for 2.0 or 2.5 L/ha.

Application Rate: **VIKING Clethodim Herbicide** at 63 mL/ha tank-mixed with LIBERTY 200 SN Herbicide at 2.0 to 2.5 L/ha and with VIKING Phosphate Ester Adjuvant at 0.5% v/v.

Weeds Controlled: Wild oats, green foxtail, volunteer barley, volunteer wheat, volunteer oats plus all remaining grass weeds and broadleaf weeds listed on the LIBERTY 200 SN Herbicide label at the application rates of 2.0 and 2.5 L/ha.

MIXING INSTRUCTIONS:

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 required amount of VIKING Phosphate Ester Adjuvant to the tank. Continue to agitate until thoroughly mixed.
4. STOP agitation. Add the correct amount of LIBERTY 200 SN Herbicide to the spray tank. Start agitation system.
5. Add the correct amount of **VIKING Clethodim Herbicide** 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 re-mix the spray materials. Do not allow the mixture to sit overnight. In the case of tank mixtures with broadleaf herbicides, settling will occur if agitation is not continuous.
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 clean water containing detergent.

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MINOR USES:

NOTE TO USER:

READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS (LISTED BELOW):

The **DIRECTIONS FOR USE** for the uses described in this section of the label were developed by persons other than Viking Crop Production Partners Inc. under the User Requested Minor Use Label Expansion program. For these uses, Viking Crop Production Partners Inc. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

CROP	Weeds Controlled	Application Rate of:		Remarks
		VIKING Clethodim Herbicide	VIKING Phosphate Ester Adjuvant	
PRAIRIE CARNATION	Annual weeds listed on the VIKING Clethodim Herbicide label. Refer to weed/rate chart in this label.	0.19 L/ha	0.5 % v/v	TIME OF APPLICATION: Apply VIKING Clethodim Herbicide post- emergence of weeds and crop. Apply a maximum of one application per year using ground equipment. Apply in a minimum spray volume of 110 L/ha. Do not harvest treated prairie carnations for human consumption. Ground application only.
HIGHBUSH BLUEBERRY	VIKING Clethodim Herbicide labelled grassy weeds. Refer to weed/rate chart in this label.	0.19-0.38 L/ha	0.5 to 1.0 % v/v	TIME OF APPLICATION: Apply VIKING Clethodim Herbicide postemergence of weeds and crop. Apply a maximum of one application per year, post-emergent by ground equipment. Apply as a broadcast spray directed to the ground. Apply in a minimum spray volume of 100 L/ha. Observe a PHI of 14 days. Ground application only.

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CORIANDER, CARAWAY	Annual weeds listed on VIKING Clethodim Herbicide label	Refer to VIKING Clethodim Herbicide + VIKING Phosphate Ester Adjuvant weed/rate chart in this label.	Refer to VIKING Clethodim Herbicide + VIKING Phosphate Ester Adjuvant weed/rate chart in this label.	TIME OF APPLICATION: Apply VIKING Clethodim Herbicide post-emergent when coriander is in the 2 to 5 leaf stage. Apply a maximum of one application per year, using ground equipment. Observe a PHI of 60 days. Do not harvest leaves of treated coriander (cilantro) for human consumption. Ground application only.
FENUGREEK	Annual weeds listed on label	Refer to VIKING Clethodim Herbicide + VIKING Phosphate Ester Adjuvant weed/rate chart in this label.	Refer to VIKING Clethodim Herbicide + VIKING Phosphate Ester Adjuvant weed/rate chart in this label.	TIME OF APPLICATION: Apply VIKING Clethodim Herbicide when fenugreek is in the 3 to 5 leaf stage. Apply a maximum of one application per season, using ground equipment. Observe a PHI of 30 days. Do not graze or feed VIKING Clethodim Herbicide forage to livestock. Do not use the greens of treated fenugreek as a vegetable for human consumption. Ground application only.
DRY ONIONS	Annual weeds listed on the VIKING Clethodim Herbicide label and suppression of annual bluegrass at the 2 to 6 leaf stage	0.38 L/ha	0.5 % v/v	TIME OF APPLICATION: Apply VIKING Clethodim Herbicide post-emergent when the crop is in the 1 to 4 leaf stage. Apply by ground application. One application per year. Observe a PHI of 45 days. Ground application only.
SAFFLOWER	Annual weeds listed on VIKING Clethodim Herbicide label	0.19-0.38 L/ha.	0.5-1.0% v/v.	TIME OF APPLICATION: Apply VIKING Clethodim Herbicide post-emergent when safflower is in the 6-8 leaf stage. Apply a maximum of one application per season using ground equipment. Apply in a minimum spray volume of 100 litres of water per hectare. Observe a PHI of 70 days. Ground application only.

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SPINACH	Annual Weeds listed on VIKING Clethodim Herbicide label	Refer to VIKING Clethodim Herbicide + VIKING Phosphate Ester Adjuvant weed/rate chart in this label.	Refer to VIKING Clethodim Herbicide + VIKING Phosphate Ester Adjuvant weed/rate chart in this label.	Apply a maximum of two applications per year with 14 days between applications, post emergent by ground application when grassy weeds are in the 2 to 6 leaf stage. Observe a PHI of 14 days. Ground application only.
CRANBERRY	Labelled grassy weeds. Refer to weed/rate chart in this label.	0.19-0.38 L/ha	0.5-1.0% v/v	TIME OF APPLICATION: Apply VIKING Clethodim Herbicide post-emergence of weeds and crop. Do not apply between the hook stage and full fruit set. Apply a maximum of one application per year using ground equipment. Apply in a minimum spray volume of 110 L of water /ha. Observe a PHI of 30 days.
RED GARDEN (TABLE) BEET, PARSNIP, CARROT, RADISH	Labelled grassy weeds. Refer to weed/rate chart in this label.	0.19-0.38 L/ha	0.5-1.0% v/v	TIME OF APPLICATION: Apply VIKING Clethodim Herbicide post- emergence of weeds and crop using ground equipment. Apply a maximum of two applications per year. If repeat application is required, allow at least 14 days between first and second application. Do not apply more than 0.38 L/ha (90 grams ai/ha) per crop season. Apply in a minimum spray volume of 110 L/ha. Observe a PHI of 30 days. Ground application only.

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APPLICATION INSTRUCTIONS:

GROUND APPLICATION

Water volume and spray pressure:

For ground application, use sprayers equipped with standard flat fan nozzles. For optimum spray coverage, use nozzles tilted 45° forward.

The use of flood jet or hollow cone nozzles is not recommended because of uneven and inadequate spray coverage. Thorough and uniform spray coverage over the entire leaf area of the target weeds is necessary for optimum weed control.

Thoroughly clean all screens to prevent nozzle clogging, especially when spray volumes of 55 to 110 L/ha are used.

For ground applications, use spray volumes of 55 to 225 L/ha and a minimum of 275 kPa pressure. For applications to dense weed infestations or to dense crop canopies, use a minimum of 110 L/ha spray volume at pressures of 275 to 425 kPa. In any situation, ensure the proper rate of VIKING Phosphate Ester Adjuvant is maintained as listed on the label under APPLICATION RATES OF **VIKING Clethodim Herbicide**.

For dry common beans (*Phaseolus vulgaris* varieties only), a minimum spray volume of 110 L/ha is recommended.

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

AERIAL APPLICATION

Water volume and spray pressure:

Apply **VIKING Clethodim Herbicide** alone or in tank mixes (ONLY with the recommended tank mix partners that are registered for aerial use) in no less than 28 L/ha spray volume at a pressure no less than 300 kPa.

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 10 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. Nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan.

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

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

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- It is desirable that the pilots have communication capabilities at each treatment site at the time of application.
- The field crew and the mixer/loaders must wear goggles or face shield, rubber apron, chemically resistant gloves, rubber boots, long sleeved shirt and long- legged pants. 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 manufacturer at 1-587-743-1029 or obtain technical advice from the distributor or your provincial agricultural representative.

Spray Buffer zones:

Spot treatments using hand-held equipment **DO NOT** require a spray buffer zone.

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) and 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 Habitat of Depths:		Terrestrial habitat
			Less than 1 m	Greater than 1 m	
Field sprayer	All crops		1	1	1
Aerial	Canola, flax (including low linolenic acid varieties), field peas, lentils, potatoes, Oriental (brown) mustard (condiment and oilseed types), yellow mustard, soybeans, sunflowers, dry bulb onions	Fixed wing	5	1	40
		Rotary wing	5	1	35
	Dry common beans, Desi and Kabuli chickpeas	Fixed wing	1	1	20
		Rotary wing	1	1	20

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 Pesticides portion of the Canada.ca website.

RESTRICTIONS AND LIMITATIONS:

1. Use only for crops listed on the label.

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2. Thorough preplant tillage operations are required to fields where sod or forage grass crops may have grown in the previous year.
3. Take necessary precautions to avoid sprayer overlaps.
4. Rainfall within one hour of application may reduce the effectiveness of the spray.
5. Allow 4 days between application of **VIKING Clethodim Herbicide** and any other chemical not recommended as a tankmix combination on the label.
6. Do not apply more than 0.38 L/ha (90 grams a.i./ha) per season.
7. Do not use crops for grazing of livestock or green feed following application of **VIKING Clethodim Herbicide** until after the appropriate interval as specified in the crop recommendations table has been observed. Do not cut treated crops for forage until the appropriate interval as specified in the crop recommendations table has been observed.
8. **VIKING Clethodim Herbicide may be applied by air for certain crops specified in this label.**
9. **DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

HERBICIDE RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, **VIKING Clethodim Herbicide** is a Group 1 herbicide. Any weed population may contain or develop plants naturally resistant to **VIKING Clethodim Herbicide** and other Group 1 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 Clethodim Herbicide** or other Group 1 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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