

2023-03-23

2023-0545

Container Label



VIKING Navik Herbicide

GROUP	2	HERBICIDE
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WETTABLE GRANULES

COMMERCIAL - AGRICULTURAL

FOR SALE FOR USE ON WHEAT (SPRING, WINTER OR DURUM), BARLEY AND OATS, AND SEEDLING AND ESTABLISHED GRASS SPECIES FOR FORAGE AND SEED PRODUCTION ONLY

REGISTRATION. NO.: 34791 PEST CONTROL PRODUCTS ACT

ACTIVE INGREDIENTS: Thifensulfuron methyl 50% Tribenuron methyl 25%
Warning, contains the allergen sulfites

NET CONTENTS: 160 grams – 13.6 Kg

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

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

PRECAUTIONS:

- **KEEP OUT OF REACH OF CHILDREN.**
- Avoid breathing spray mist. Use with adequate ventilation.
- Avoid contact with skin, eyes and clothing.
- Do not contaminate any body of water.
- May be harmful if swallowed, inhaled or absorbed through skin.
- Causes eye and skin irritation.
- When using, do not eat, drink or smoke. Wash skin thoroughly with soap and water after handling.
- Remove contaminated clothing immediately after use. Store and wash contaminated clothing separately from household laundry before re-use.
- Do not apply by air.
- Wear goggles or face shield, coveralls, socks, suitable chemical resistant gloves and footwear during mixing and loading. Wear long-sleeved shirt, long pants, socks, and chemical-resistant gloves and footwear during application, clean-up and repair. Chemical-resistant gloves are not required while operating groundboom sprayers.
- **Do not** enter or allow entry into treated areas for 12 hours after application.

FIRST AID:

IF IN EYES:

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

IF ON SKIN OR CLOTHING:

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

IF 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 INHALATED:

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 the product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION: Treat symptomatically.

ENVIRONMENTAL PRECAUTIONS:

TOXIC to plants, aquatic organisms and non-target terrestrial plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.

STORAGE:

Store this product away from food or feed. Store product in original container only, away from other pesticides, fertilizer, food or feed. Not for use or storage in or around the home. Keep container closed

DISPOSAL:**For Recyclable Container**

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.
2. Add the rinsing's to the spray mixture in the tank.
3. 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.

If this is a refillable container:

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

If this is a returnable container:

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

For all package types:

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 Navik Herbicide

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WETTABLE GRANULES

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1-587-743-1029

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

PRECAUTIONS:

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- Avoid breathing spray mist. Use with adequate ventilation.
- Avoid contact with skin, eyes and clothing.
- Do not contaminate any body of water.
- May be harmful if swallowed, inhaled or absorbed through skin.
- Causes eye and skin irritation.
- When using, do not eat, drink or smoke. Wash skin thoroughly with soap and water after handling.
- Remove contaminated clothing immediately after use. Store and wash contaminated clothing separately from household laundry before re-use.
- Do not apply by air.
- Wear goggles or face shield, coveralls, socks, suitable chemical resistant gloves and footwear during mixing and loading. Wear long-sleeved shirt, long pants, socks, and chemical-resistant gloves and footwear during application, clean-up and repair. Chemical-resistant gloves are not required while operating groundboom sprayers.
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IF INHALATED:

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 the product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION: Treat symptomatically.

IMPORTANT

Injury to or loss of desirable trees or vegetation may result from failure to observe the following:

Do not apply, drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Do not use on lawns, walks, driveways, recreational grounds or similar areas. Prevent drift of spray to desirable plants. Do not contaminate any body of water, including irrigation water that may be used on other crops.

DO NOT APPLY BY AIR.

Carefully observe sprayer clean-up instructions, as spray tank residues may damage crops other than wheat, barley or oats.

APPLY WITH A SURFACTANT REGISTERED FOR USE WITH VIKING Navik Herbicide.

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GENERAL INFORMATION

VIKING Navik Herbicide is recommended for selective postemergence control or suppression of broadleaf weeds in wheat (spring, winter or durum), barley and oats not underseeded to legumes or grasses. **VIKING Navik Herbicide** is a 75% active ingredient herbicide formulated as a dry flowable dispersible granule. **VIKING Navik Herbicide** is to be mixed with water and a recommended surfactant and applied as a uniform broadcast spray. It is noncorrosive, nonflammable, nonvolatile and does not freeze.

VIKING Navik Herbicide MUST be applied with a recommended surfactant, early postemergence, to the main flush of actively growing broadleaf weeds. Recommended surfactants are AGRAL® 90, AG-SURF®, and CITOWETT® PLUS.

Warm, moist growing conditions promote active weed growth and enhance the activity of **VIKING Navik Herbicide** by allowing maximum foliar uptake and contact activity. Weeds hardened off by cold weather or drought stress may not be adequately controlled or suppressed and regrowth may occur. APPLY **VIKING Navik Herbicide** WITH GROUND EQUIPMENT ONLY. For best results, ensure thorough spray coverage of target weeds. See "Postemergence Applications" section of this label for complete use details.

VIKING Navik Herbicide stops growth of susceptible weeds rapidly. However, typical symptoms (discolouration) of dying weeds may not be noticeable for 1 to 3 weeks after application, depending upon growing conditions and weed susceptibility. Degree of control and duration of effect are dependent on weed sensitivity, weed size, crop competition, growing conditions at and following treatment, and spray coverage.

The following crops may be planted two months after an application of **VIKING Navik Herbicide**: canola, flax, lentils and alfalfa.

DIRECTIONS FOR USE

- DO NOT re-enter treated fields until 12 hours after application.
- Apply only to agricultural crops when the potential for drift to areas of human habitation and areas of human activity (houses, cottages, schools and recreational areas) is minimal. Take into consideration wind speed, wind direction, temperature inversion, application equipment and sprayer settings.
- Applications to wheat, barley or oats that are stressed by severe weather conditions, frost, low fertility, drought, water logged soil (soils at or near field capacity), disease or insect damage may result in crop injury. Drought, disease or insect damage following application may also result in crop injury.
- Do not apply to irrigated land where tail water will be used to irrigate cropland.
- Do not contaminate irrigation water.
- Do not apply to crops underseeded to legumes or grasses as injury to forage may result.
- Do not remove soil from treated fields for use on lawns, in gardens or for back fill.
- **VIKING Navik Herbicide** should be applied only with water as a carrier. Other carriers may accelerate breakdown of the product and reduce its effectiveness.
- Do not exceed a total of 20 g of **VIKING Navik Herbicide** per hectare per crop year.
- Do not plant to any crop until two months after application.
- Wheat, barley or oats may not be grazed by or fed to livestock within 7 days of application.
- Under certain conditions (such as heavy rainfall, prolonged cool weather, frost conditions, wide fluctuations in day/night temperatures) temporary lightening in crop colour and occasionally a slight reduction in crop height may occur.
- Do not use on highly variable soils that have large gravelly or sandy areas, eroded knolls, or calcium deposits.
- Limit use of **VIKING Navik Herbicide** to currently licensed varieties of wheat (spring, durum, winter), barley and oats. Consult Viking Crop Production Partners Inc. prior to use on unlicensed varieties for crop tolerance information. DO NOT USE ON LEGER BARLEY AND BELVEDERE WHEAT.
- As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests. DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Field sprayer application:

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

Spray Buffer zones:

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, pastures, rangelands, riparian areas, and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Method of Application	Spray Buffer zone (metres) required for the protection of:		
	Terrestrial habitat	Aquatic habitats of water depths:	
		<1m	>1m
Field sprayer*	15	1	0

*For field sprayer application, spray buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labelled spray buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labelled spray buffer zone can be reduced by 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 Pesticides portion of the Canada.ca website.

ENVIRONMENTAL PRECAUTIONS:

- **TOXIC** to plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.
- **TOXIC** to aquatic organisms and non-target terrestrial plants. Observe spray buffer zones specified under **DIRECTIONS FOR USE**.
- To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay. Avoid application when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

VIKING NAVIK HERBICIDE**Wheat (Spring, winter and durum), Barley and Oats**

Apply 20 grams of **VIKING Navik Herbicide** per hectare with a surfactant which is recommended for use with **VIKING Navik Herbicide** at 2.0 litres per 1,000 litres of spray volume (see "Mixing Instructions" section of this label). Apply postemergence when the crop is in the two-leaf to flag leaf (shot blade) stage of growth, (prior to head emergence) but before the crop canopy will prevent thorough coverage of target weeds. For best results apply to emerged, young, actively growing weeds that are less than 10 cm tall or across. Thorough coverage of target weeds is essential.

WEEDS CONTROLLED:

Annual smartweed (green smartweed, lady's thumb)	Narrow-leaved hawk's-beard
Ball mustard	Redroot pigweed
Chickweed ²	Russian thistle

Corn spurry
Cow cockle
Flixweed
Groundsel, common
Hemp-nettle
Kochia
Lamb's-quarters

Shepherd's purse
Stinkweed
Tartary buckwheat
Volunteer rapeseed⁶
Volunteer sunflower
Wild buckwheat³
Wild mustard

WEEDS SUPPRESSED:

Canada thistle¹
Cleavers (1 to 3 whorls)
Round-leaved mallow⁴
Scentless chamomile
Sow thistle¹
Stork's-bill (2-6 leaf)
Toadflax⁵

Weed suppression is a visual reduction in weed competition (reduced population and/or vigour) as compared to an untreated check. Degree of suppression will vary with size of weed and environmental conditions prior to and following treatment.

Specific Weed Recommendations:

1. Canada thistle, Sow thistle: Apply **VIKING Navik Herbicide** plus recommended surfactant postemergence when the majority of the thistles have emerged and are actively growing. For best top growth control, apply when thistles are no larger than 15 cm tall, before bud stage, and before crop canopy prevents thorough coverage of thistles. A single application will effectively inhibit the ability of emerged thistles to compete with the crop. Later emerging thistles will not be controlled.
2. Chickweed: Apply **VIKING Navik Herbicide** plus recommended surfactant when the chickweed is small (1-6 leaf) and actively growing but before crop canopy prevents thorough coverage of weeds. Chickweed emerging after application will not be controlled.
3. Wild Buckwheat: Apply **VIKING Navik Herbicide** plus surfactant to actively growing wild buckwheat in the cotyledon - 3 leaf stage. Under stress conditions such as dry weather control may be reduced. Large plants may regrow after treatment.
4. Round-leaved Mallow: Apply **VIKING Navik Herbicide** plus a surfactant to actively growing round leaved mallow in the 2-6 leaf stage (10-12 cm in height). **VIKING Navik Herbicide** will keep mallow stunted but may not reduce the overall populations.
5. Toadflax: Apply **VIKING Navik Herbicide** plus recommended surfactant when toadflax is no taller than 15 cm in height. A control program for this weed includes both frequent tillage and chemical application.
6. Volunteer rapeseed: **VIKING Navik Herbicide** alone will not control imazamox and imazethapyr tolerant canola, (e.g. Clearfield canola)

NOTE: Avoid making applications to weeds when rainfall is threatening. Rainfall within 4 hours will result in reduced weed control of **VIKING Navik Herbicide**.

TANK MIXES WITH VIKING NAVIK HERBICIDE

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 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 NAVIK HERBICIDE PLUS MCPA

Wheat (Spring, winter and durum), Barley and Oats

Apply **VIKING Navik Herbicide** at 20 grams per hectare plus MCPA Amine or Ester 500 at 0.7 - 1.1 litres per hectare (or acid equivalent to deliver 350 - 560 grams active ingredient per hectare) plus a recommended surfactant at 2 litres per 1,000 litres of spray volume (see "Mixing Instructions" section of the label). Apply the tank mix from the full 3-leaf stage to just before the flag leaf stage of wheat (spring, durum, winter), barley and oats. This tank mix will control:

WEEDS CONTROLLED:

Annual smartweed †	Prickly lettuce
Ball mustard	Ragweed ††
Burdocks (seedling)	Redroot pigweed
Chickweed	Russian pigweed ††
Cocklebur ††	Russian thistle
Corn spurry	Shepherd's purse
Cow cockle	Stinkweed
False ragweed ††	Tartary buckwheat
Flixweed	Tumble mustard
Giant ragweed ††	Volunteer rapeseed †††
Hare's-ear mustard	Wild buckwheat
Hemp-nettle	Plantain (common)
Indian mustard	Wild mustard
Kochia ††	Wild radish
Lamb's-quarters	Wormseed mustard

† Green smartweed and lady's thumb

†† Use a minimum of 400 grams MCPA active ingredient per hectare.

††† Including imazamox and imazethapyr tolerant canola (e.g., Clearfield canola).

WEEDS SUPPRESSED:

Canada thistle
Round-leaved mallow
Scentless chamomile
Sow thistle
Stork's-bill (2-6 leaf) (MCPA Ester only)

Follow "Specific Weed Recommendations" for Canada and sow thistle, wild buckwheat, round-leaved mallow and chickweed.

WEEDS CONTROLLED BY VIKING NAVIK HERBICIDE PLUS MCPA (0.56 L/HA)

Weeds controlled or suppressed by **VIKING Navik Herbicide** alone plus volunteer imazamox and imazethapyr tolerant canola (e.g., Clearfield canola) (2-4 leaf stage).

VIKING NAVIK HERBICIDE PLUS 2,4-D

Wheat or Barley – DO NOT USE ON OATS

Apply **VIKING Navik Herbicide** at 20 grams per hectare tank mixed with 2,4-D and a recommended surfactant. Rates and formulation of 2,4-D include:

1. 2,4-D Amine 500 at 0.84 - 1.1 litres per hectare or
2. 2,4-D Ester LV700 at 0.6 - 0.8 litres per hectare or
3. 2,4-D Ester LV600 at 0.7 - 0.9 litres per hectare or
4. Acid equivalent.

A recommended surfactant at 2 litres per 1,000 litres of spray volume must be added (see "Mixing Instructions" section of the label). Apply the tank mix from the full 3-leaf stage to just before the flag leaf stage of wheat (spring, durum, winter) and barley. **DO NOT USE ON OATS.**

WEEDS CONTROLLED:

Annual smartweed †	Prickly lettuce
Ball mustard	Redroot pigweed
Burdocks (seedling)	Russian pigweed
Chickweed	Russian thistle
Cocklebur	Shepherd's purse
Common ragweed	Stinkweed
Corn spurry	Stork's-bill
Cow cockle	(2-6 leaf)
False ragweed	(2,4-D ester only)
Flixweed	Sweet clover
Giant ragweed	Tartary buckwheat
Hare's-ear mustard	Tumble mustard
Hemp-nettle	Volunteer rapeseed ††
Indian mustard	Wild buckwheat
Kochia	Wild mustard
Lamb's-quarters	Wild radish
Plantain (common)	Wormseed mustard

†green smartweed and lady's thumb

†† including imazamox and imazethapyr tolerant canola varieties (e.g., Clearfield canola). Consult the 2,4-D label for appropriate use rates

WEEDS SUPPRESSED:

Canada thistle
Round-leaved mallow
Scentsless chamomile
Sow thistle
Toadflax (2,4-D Ester only)

Follow "Specific Weed Recommendations" for Canada and sow thistle, chickweed, wild buckwheat and round-leaved mallow.

VIKING NAVIK HERBICIDE PLUS ASSERT 300 SC Herbicide

Spring Wheat and Spring Barley Only

For Use in the Prairie Provinces and Peace River Region of British Columbia Only.

Apply **VIKING Navik Herbicide** at 20 grams per hectare plus ASSERT 300 SC Herbicide at 1.3 to 1.6 litres of product per hectare for the control of broadleaf weeds controlled by **VIKING Navik Herbicide**, and wild oats.

Use the low rate of ASSERT 300 SC Herbicide when the majority of wild oats are in the 1 - 3 leaf stage and the higher rate if wild oats are in the 4 leaf stage. Application can be made from the 2-leaf up to and including the 6-leaf stage of the crop.

Consult the ASSERT 300 SC Herbicide label for additional application instructions; use precautions and recropping information.

Use the spray preparation within 12 hours or product degradation may occur.

VIKING NAVIK HERBICIDE + ASSERT 300 SC Herbicide + MCPA ESTER 500

Spring Wheat and Spring Barley Only

For Use in the Prairie Provinces and Peace River Region of British Columbia Only

Apply **VIKING Navik Herbicide** at 20 grams per hectare plus ASSERT 300 SC Herbicide at 1.3 - 1.6 litres of product per hectare plus MCPA Ester 500 at 0.7 - 1.1 litres per hectare (or acid equivalent to deliver 350 - 560 grams active ingredient per hectare) for the control of broadleaf weeds controlled by **VIKING Navik Herbicide** plus MCPA, and wild oats. Apply at the 4-leaf to 6-leaf stage of the crop.

SOIL ZONES	ASSERT 300 SC Herbicide RATE
Black and Grey Wooded	1.6 L/ha
Brown and Dark Brown	1.3 L/ha if the majority of the wild oats are in the 1-3 leaf stage. Apply Assert 300 SC
	Herbicide at the 1.6 L/ha if the wild oats are in the 4-leaf stage.

Use the spray preparation within 12 hours or product degradation may occur.

VIKING NAVIK HERBICIDE + PUMA SUPER

For Use On Spring Wheat (Including Durum) And Barley

In The Prairie Provinces And Peace River Region Of British Columbia Only.

APPLY:

VIKING Navik Herbicide	at 20 grams per hectare
Plus	
PUMA SUPER	at 0.5 Or 1.0 Litres per hectare

A non-ionic surfactant is NOT required when **VIKING Navik Herbicide** is tank-mixed with PUMA SUPER.

Apply the **VIKING Navik Herbicide** + PUMA SUPER tankmix to spring and durum wheat at the 1 to 6-leaf plus 3 tillers stage or to barley at the 1 to 5-leaf plus 2 tillers stage. Apply the tankmix to annual grasses in the 1-6 leaf stage (up to emergence of third tiller).

WEEDS CONTROLLED:

Green Foxtail (PUMA SUPER at 0.5 or 1.0 L/ha)
Wild Oats (PUMA SUPER at 1.0 L/ha)
Barnyard Grass (PUMA SUPER at 1.0 L/ha)

This tankmix will also control or suppress the broadleaf weeds listed for **VIKING Navik Herbicide** alone at 20 grams/ha.

VIKING NAVIK HERBICIDE + MCPA ESTER 500 + PUMA SUPER

**For Use On Spring Wheat (Including Durum) And Barley
In The Prairie Provinces And Peace River Region Of British Columbia Only.**

APPLY:

VIKING Navik Herbicide	at 20 grams per hectare
Plus	
MCPA ESTER 500	at 0.84 Litres per hectare
Plus	
PUMA SUPER	at 0.5 OR 1.0 Litres per hectare

A non-ionic surfactant is NOT required when **VIKING Navik Herbicide** is tank-mixed with MCPA ESTER 500 + PUMA SUPER. Use ONLY MCPA ESTER 500 in this tankmix and only at the recommended rate or a decrease in wild oat control may be observed.

Apply the **VIKING Navik Herbicide** + MCPA ESTER 500 + PUMA SUPER tankmix to spring and durum wheat at the 1 to 6-leaf plus 3 tillers stage or to barley at the 1 to 5-leaf plus 2 tillers stage. Apply to annual grasses in the 1-6 leaf stage (up to emergence of third tiller).

WEEDS CONTROLLED:

Green Foxtail (PUMA SUPER at 0.5 or 1.0 L/ha)
Wild Oats (PUMA SUPER at 1.0 L/ha)
Barnyard Grass (PUMA SUPER at 1.0 L/ha)

This tankmix will also control or suppress the broadleaf weeds listed for **VIKING Navik Herbicide** at 20 grams/ha + MCPA ESTER 500 at 0.84 Litres/ha.

VIKING NAVIK HERBICIDE + LONTREL 360 + 2,4-D ESTER or MCPA ESTER

For Use On Spring Wheat (Excluding Durum) And Barley Only. For Use in Western Canada Only.

APPLY:

VIKING Navik Herbicide	at 20 grams per hectare
plus	
LONTREL 360	at 0.21 litres per hectare
plus	
MCPA Ester (500 g/L)	at 0.84 litres per hectare
or	
2,4-D Ester (600 g/L)	at 0.7 litres per hectare

Add a recommended non-ionic surfactant such as AGRAL 90, AG-SURF or CITOWETT PLUS at a rate of 0.2% of the final spray volume (i.e., 2.0 litres per 1000 litres of spray solution). See "Mixing Instructions" section of the label.

WEEDS CONTROLLED:

Canada thistle[†]

Lady's thumb

Perennial sow thistle

Stinkweed

Volunteer canola

Wild buckwheat

Wild mustard

† Provides seasonal control of Canada thistle

WEEDS SUPPRESSED:

Cleavers

PLUS: all other broadleaf weeds controlled or suppressed by **VIKING Navik Herbicide** alone at 20 grams per hectare.

Refer to the MCPA Ester or 2,4-D Ester labels for additional broadleaf weeds controlled at the rates recommended above.

DO NOT USE ON OATS.

VIKING NAVIK HERBICIDE + CURTAIL M

**For Use On Spring Wheat (Excluding Durum) And Spring Barley Only.
For Use in the Prairie Provinces and Peace River Region of British Columbia Only.**

APPLY:

VIKING Navik Herbicide	20 grams per hectare
plus	
CURTAIL M	1.5 litres per hectare
plus	
a recommended surfactant	at 2 litres per 1,000 litres of spray volume

See “Mixing Instructions” section of the label for proper mixing/application instructions. Ensure that **VIKING Navik Herbicide** is completely in suspension in the spray tank before adding CURTAIL M.

Apply the tank mix from the full 3-leaf stage of spring wheat and spring barley.

WEEDS CONTROLLED:

Canada thistle[†]
Wild buckwheat^{††}

PLUS all other broadleaf weeds controlled or suppressed by **VIKING Navik Herbicide** alone at 20 grams per hectare.

[†] Canada thistle: Apply **VIKING Navik Herbicide** plus CURTAIL M plus a recommended surfactant postemergence after all the thistles have emerged, and are actively growing. For best control, apply when thistles are no larger than 15 cm tall, before bud stage and before canopy prevents thorough coverage of thistles. Later emerging thistles will not be controlled.

^{††} Wild buckwheat: Apply **VIKING Navik Herbicide** plus CURTAIL M plus a recommended surfactant to actively growing wild buckwheat in the cotyledon to 5 leaf stage. Under stress conditions such as dry weather, control may be reduced. Large plants may regrow after treatment.

VIKING NAVIK HERBICIDE + ACCORD DF HERBICIDE

**SPRING WHEAT (Including Durum) AND SPRING BARLEY (grown for feed purposes only. Not Underseeded To Forages.
For Use in the Prairie Provinces and Peace River Region of British Columbia**

APPLY:

VIKING Navik Herbicide	at 20 grams per hectare
plus	
ACCORD DF Herbicide	At 67 OR at 135-165 grams per hectare
plus	

MERGE® adjuvant	at 1.0% v/v (10 litres per 1000 litres spray volume)
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A non-ionic surfactant is NOT required when **VIKING Navik Herbicide** is tank mixed with ACCORD DF Herbicide plus the MERGE adjuvant.

Make application when crop is in the 2-5 leaf stage. Use the 165 grams per hectare rate of ACCORD DF Herbicide when green foxtail is the target weed. Thorough coverage of foliage is important for consistent weed control. Do not apply this tank mixture more often than once every two years. Do not graze the treated crops or cut for hay within 77 days of application.

WEEDS CONTROLLED WHEN ACCORD DF HERBICIDE IS USED AT 135-165 GRAMS/HA	APPLICATION TIMING
Green Foxtail	1-5 leaf, 2 tillers
Barnyard Grass	1-5 leaf
Volunteer Flax	1-8 cm
Cleavers	1-4 whorls
Annual Sowthistle	1-4 leaf
PLUS: Weeds controlled or suppressed by VIKING Navik Herbicide alone	

Do not graze the treated crops or cut for hay within 77 days (spring wheat, durum) or 80 days (spring barley) of application.

WEEDS CONTROLLED WHEN ACCORD DF Herbicide IS USED AT 67 GRAMS/HA	APPLICATION TIMING
Cleavers	1-3 whorls
Annual Sowthistle	1-4 leaf
PLUS: Weeds controlled or suppressed by VIKING Navik Herbicide alone	

VIKING NAVIK HERBICIDE + ATTAIN HERBICIDE TANK MIX

For Use On Spring Wheat (Excluding Durum), And Spring Barley Only, Not Underseeded to Legumes. In The Prairie Provinces and Peace River Region of British Columbia Only.

APPLY:

VIKING Navik Herbicide	at 20 grams per hectare
plus	
ATTAIN Herbicide Tank Mix	Attain A (fluroxypyr) at 0.30 L/ha
	Attain B (2,4-D ester) at 0.50 L/ha
plus	
Adjuvants: AGRAL 90, AGSURF, or CITOWETT	at 2L/1000 litres of spray solution

Apply from the 4-leaf to flag-leaf stage of spring wheat or spring barley and seedling stage to 4-leaf/whorls of weed.

Mixing order is **VIKING Navik Herbicide**, then Attain A then Attain B then adjuvant. Refer to MIXING DIRECTIONS section for general instructions. Use a spray volume of 100 L/ha.

Do not permit lactating dairy animals to graze fields within 7 days of application. Do not harvest forage or cut hay within 30 days after application. Withdraw meat animals from treated fields at least 3 days before slaughter. Do not harvest the treated mature crop within 60 days after application.

WEEDS CONTROLLED:

Weeds controlled or suppressed by VIKING Navik Herbicide alone
Cleavers (excluding Group 2 resistant cleavers).

VIKING NAVIK HERBICIDE + LONTREL 360

For Use On Spring Wheat (Excluding Durum), And Spring Barley Only In The Prairie Provinces and Peace River Region of British Columbia Only.

APPLY:

VIKING Navik Herbicide	at 20 grams per hectare
plus	
LONTREL 360	at 0.21 litres per hectare
plus	
a recommended surfactant	at 2 litres per 1000 litres of spray volume

See "Mixing Instructions" section of the label for proper mixing/application instructions. Ensure that **VIKING Navik Herbicide** is completely in suspension in the spray tank before adding LONTREL 360.

Apply the tankmix from the full 3 leaf stage to the flag leaf stage of spring wheat and barley.

WEEDS CONTROLLED:

Canada Thistle (seasonal control) †
Wild Buckwheat††

PLUS: All other broadleaf weeds controlled or suppressed by **VIKING Navik Herbicide** alone at 20 grams/ha.

† Canada Thistle (seasonal control): Apply **VIKING Navik Herbicide** plus LONTREL 360 plus a recommended surfactant postemergent, after all the thistles have emerged, and are actively growing. For best control, apply when thistles are no larger than 15 cm tall, before bud stage and before crop canopy prevents thorough coverage of thistles. Later emerging thistles will not be controlled.

†† Wild Buckwheat: Apply **VIKING Navik Herbicide** plus LONTREL 360 plus a recommended surfactant to actively growing wild buckwheat in the cotyledon to 5-leaf stage. Under stress conditions such as dry weather, control may be reduced. Large plants may regrow after treatment.

VIKING NAVIK HERBICIDE + BANVEL II

For Use On Spring Wheat (Excluding Durum), And Spring Barley Only. Not Underseeded To Forages. In The Prairie Provinces and Peace River Region of British Columbia Only.

Apply from the 2-5 leaf stage of spring wheat or spring barley and seedling stage to 8 leaf stage of kochia.

VIKING Navik Herbicide	20 grams/hectare
Banvel II	0.110 litres/hectare
Adjuvants: Agral 90, Ag-surf or Citowett Plus	2 litres/1000 litres of spray solution

Mixing order is **VIKING Navik Herbicide** then Banvel II then adjuvant. Refer to the MIXING DIRECTIONS section for general instructions. Use minimum volume of 55 L/ha.

Do not permit lactating dairy animals to graze fields within 7 days after application.

WEEDS CONTROLLED:

Broadleaf weeds controlled or suppressed by **VIKING Navik Herbicide**

Kochia, including Group 2 resistant kochia

VIKING NAVIK HERBICIDE + 2,4-D AMINE OR ESTER + EVEREST SOLUPAK 70 DF OR EVEREST 70 WDG

**For Use On Spring Wheat (Including Durum) Only
In The Prairie Provinces and Peace River Region of British Columbia Only**

Apply one of the following tank mixes from the 1 to 6-leaf (1 to 4 leaves on main stem, plus 2 tillers) growth stage of the crop. For wild oats, green foxtail and volunteer tame oats, apply from the 1 to 6-leaf (1 to 4 leaves on main stem, plus 2 tillers):

TANK MIX COMPONENTS AND APPLICATION RATES								
Component 1		Component 2		Component 3		Component 4		WEEDS CONTROLLED - Broadleaf weeds controlled or suppressed by VIKING Navik Herbicide alone plus:
VIKING Navik Herbicide	20 g/ha	Everest 70 WDG	43 g/ha	Agral 90 or Agsurf	0.25% v/v			Wild oats, green foxtail, volunteer tame oats. Use 43 g/ha when wild oat infestations are greater than 100 plants/m ² or when plants are not actively growing due to poor environmental conditions.
VIKING Navik Herbicide	20 g/ha	Everest 70 WDG or Everest Solupak 70 DF	43 g/ha	2,4-D Amine or Ester	up to 560 g ae/ha	Agral 90 or Agsurf	0.25% v/v	Wild oats, green foxtail and volunteer tame oats. Use 43 g/ha when wild oat infestations are greater than 100 plants/m ² or when plants are not actively growing due to poor environmental conditions.
VIKING Navik Herbicide	20 g/ha	Everest 70 WDG or Everest Solupak 70 DF	28.5 g/ha	2,4-D Amine or Ester	up to 560 g ae/ha	Agral 90 or Agsurf	0.25% v/v	Wild oats and volunteer tame oats only. Use 28.5 g/ha when wild oat populations are below 100 plants/m ² and when plants are actively growing.
VIKING Navik Herbicide	20 g/ha	Everest 70 WDG or Everest Solupak 70 DF	21.5 g/ha	2,4-D Amine or Ester	up to 560 g ae/ha	Agral 90 or Agsurf	0.25% v/v	Green foxtail only

Mixing order is Everest Solupak 70 DF or Everest 70 WDG then **VIKING Navik Herbicide** then 2,4-D Amine or Ester then adjuvant. Refer to MIXING DIRECTIONS section for general instructions.

Observe minimum interval to harvest of 80 days after treatment. For black, dark brown and gray-wooded soil zones only, field peas may be grown the year following Everest Solupak application in fields where precipitation has been normal or above normal (10 year average) during the growing season, and where organic matter content is above 4% and pH below 7.5. Recrop spring wheat only in brown soil zone.

NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS (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.

SEEDLING AND ESTABLISHED GRASS SPECIES FOR FORAGE AND SEED PRODUCTION

For broadleaf weed control, apply 20 grams of **VIKING Navik Herbicide** per hectare with a surfactant recommended for use with **VIKING Navik Herbicide** at 2.0 litres per 1,000 litres of spray volume. (See "Mixing Instructions" section of the label.)

Apply postemergence to the following Seedling or Established Grasses for Forage or Seed Production:

Meadow Bromegrass	Pubescent Wheatgrass
Smooth Bromegrass	Tall Wheatgrass
Creeping Red Fescue	Slender Wheatgrass
Tall Fescue	Streambank Wheatgrass
Orchard Grass	Northern Wheatgrass
Crested Wheatgrass	Western Wheatgrass
Intermediate Wheatgrass	

Apply postemergence to the following Established Grasses for Forage or Seed Production:

Kentucky Bluegrass

VIKING Navik Herbicide will control the broadleaf weeds listed for **VIKING Navik Herbicide** alone. For best results apply to emerged, young, actively growing weeds that are less than 10 cm tall or across. Thorough coverage of target weeds is essential.

Apply with ground equipment only. Make only one application per growing season.

The above grasses may not be grazed by or fed to livestock within 7 days of application.

Please refer to the appropriate sections of this label for additional use precautions, application and/or mixing instructions.

MIXING INSTRUCTIONS:

1. Select a spray volume that will ensure thorough coverage and uniform spray pattern. Use a minimum of 55-L spray volume per hectare. If tankmixing with other herbicides, always consult the label of the tank mix partner(s) for minimum spray volume requirements and apply the tank mixture using a water volume recommended for all products.
2. Fill the spray tank 1/4 – 1/3 full with fresh water and start agitation.
3. Add the required amount of **VIKING Navik Herbicide** to the tank. Make sure all of the **VIKING Navik Herbicide** is in suspension before proceeding to the next step. Continuous agitation is recommended throughout the entire mixing procedure to ensure products are completely dissolved and/or in suspension.
4. If using **VIKING Navik Herbicide** alone, a recommended surfactant such as AGRAL 90, AG-SURF or CITOWETT PLUS must be added to the spray mixture at a rate of 2 litres per 1000 litres of spray solution.
5. Specific Tank Mix Instructions:

If tank-mixing with MCPA, 2,4-D, CURTAIL M or LONTREL 360, add the required amount of MCPA, 2,4-D, CURTAIL M or LONTREL 360 to the tank while maintaining agitation. Once the herbicide is completely in suspension, add a recommended surfactant such as AGRAL 90, AG-SURF or CITOWETT PLUS at 2 L per 1000 L spray solution. Anti-foaming agents may be required.

If tank-mixing with PUMA SUPER or MCPA + PUMA SUPER, add the required amount of PUMA SUPER and/or MCPA while maintaining agitation. DO NOT ADD A SURFACTANT.

If tank mixing with ASSERT 300 SC Herbicide or ASSERT 300 SC Herbicide /MCPA: once **VIKING Navik Herbicide** is completely in suspension, add the required amount of Spray Water pH Adjuster and agitate until dissolved. Add the required amount of ASSERT 300 SC Herbicide while maintaining agitation. If adding MCPA, add it to the tank last. Addition of surfactant is not required with this mixture.

When mixing with LONTREL 360 + 2,4-D Ester or MCPA Ester, mix **VIKING Navik Herbicide** first in fresh water, then add the required amount of LONTREL 360 followed by MCPA or 2,4-D. Add the recommended non-ionic surfactant such as AGRAL 90, AG-SURF or CITOWETT® PLUS last, at a rate of 2 litres per 1000 litres spray solution.

When tank-mixing with ACCORD DF Herbicide, add the required amount of **VIKING Navik Herbicide** and ACCORD to the tank. Add the MERGE adjuvant at the appropriate rate last. Do not add an additional non-ionic surfactant.

6. Continue to fill tank and maintain agitation for at least 5 minutes to ensure thorough mixing.
7. On repeat loads, ensure that the amount of spray solution left in the tank from the previous load is less than 10% of the volume about to be mixed.
8. Use the spray preparation of **VIKING Navik Herbicide** within 24 hours or product degradation may occur. Use spray preparation containing ASSERT 300 SC Herbicide within 12 hours or product degradation may occur. If spray solution is left standing without agitation, thoroughly agitate and re-suspend any settled **VIKING Navik Herbicide** before resuming the spraying operation.

The volumetric measuring guide to measure **VIKING Navik Herbicide** is to be used only as a guide. For precise measurement use scales calibrated in grams.

APPLICATION INSTRUCTIONS:

Apply the spray mixture uniformly with properly calibrated ground equipment only. Ensure thorough coverage and a uniform spray pattern. Flat fan nozzles are recommended (minimum 55 litres spray volume per hectare). Use 50 mesh filter screens or larger (metal or nylon). A spray pressure of 210-275 kPa is recommended. Continuous agitation is required to keep **VIKING Navik Herbicide** in suspension. Apply uniformly. Avoid overlapping and shut off spray boom while starting, turning, slowing or stopping to prevent crop injury from over application.

SPRAYER CLEANUP:

To avoid subsequent injury to crops other than wheat, barley or oats, immediately after spraying and prior to spraying other crops, thoroughly remove all traces of **VIKING Navik Herbicide** from mixing and spray equipment as follows:

1. Drain tank; then flush tank, boom and hoses with clean water for a minimum of ten minutes. Visually inspect tank to ensure removal of all visible residues of **VIKING Navik Herbicide**. If necessary, repeat Step 1. **DO NOT CLEAN SPRAYER NEAR WELL OR WATER SOURCE OR NEAR TO DESIRABLE VEGETATION.**
2. Fill the tank with clean water, then add 1 litre household AMMONIA (containing minimum of 3% ammonia) per 100 litres of water. Flush solution through boom and hoses, and then add more water to completely fill tank. Allow to sit for 15 minutes with agitation. Again flush the hoses, boom and nozzles with the cleaning solution and drain tank.
3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
4. Repeat Step 2.
5. Thoroughly rinse the tank with clean water for a minimum of 5 minutes, flushing water through the hoses and boom.

CAUTION:

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

RESISTANCE-MANAGEMENT RECOMMENDATIONS:

For resistance management, **VIKING Navik Herbicide** is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to **VIKING Navik Herbicide** and other Group 2 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist.

Appropriate resistance-management strategies should be followed. To delay herbicide resistance:

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

- For further information or to report suspected resistance, contact your local Viking Crop Production Partners Inc. representative at 1-587-743-1029.

STORAGE:

Store this product away from food or feed. Store product in original container only, away from other pesticides, fertilizer, food or feed. Not for use or storage in or around the home. Keep container closed.

DISPOSAL:**For Recyclable Container**

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.
2. Add the rinsing's to the spray mixture in the tank.
3. 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.

If this is a refillable container:

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

If this is a returnable container:

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

For all package types:

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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