

VIKING™ Tribenuron Herbicide

GROUP 2 HERBICIDE

DRY FLOWABLE 75%

COMMERCIAL (AGRICULTURAL)

FOR SALE FOR USE IN THE PRAIRIE PROVINCES AND THE INTERIOR OF BRITISH COLUMBIA (INCLUDING THE PEACE RIVER REGION) AS A PRE-SEEDING HERBICIDE ON FIELDS TO BE PLANTED TO WHEAT (SPRING AND DURUM) AND BARLEY, AND FOR WEED CONTROL IN SUMMERFALLOW, ONLY

REGISTRATION NO.: 34738 PEST CONTROL PRODUCTS ACT

ACTIVE INGREDIENT: Tribenuron Methyl 75%

NET CONTENTS: 5 g - 1.28 kg

READ THE LABEL AND ENCLOSED BOOKLET BEFORE USING

WARNING - EYE IRRITANT

POTENTIAL SKIN SENSITIZER

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.
- WARNING: EYE IRRITANT
- POTENTIAL SKIN SENSITIZER
- DO NOT APPLY BY AIR
- MAY BE HARMFUL IF SWALLOWED. INHALED OR ABSORBED THROUGH SKIN.
- AVOID BREATHING SPRAY MIST OR VAPOURS. USE WITH ADEQUATE VENTILATION.
- AVOID CONTACT WITH SKIN, EYES AND CLOTHING.
- DO NOT CONTAMINATE ANY BODY OF WATER.
- WEAR SUITABLE CHEMICAL RESISTANT GLOVES AND GOGGLES OR FACE SHIELD DURING MIXING AND LOADING.
- MAY IRRITATE SKIN AND EYES. WHEN USING, DO NOT EAT, DRINK OR SMOKE.
- WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING. REMOVE CONTAMINATED CLOTHING IMMEDIATELY AFTER USE.
- WASH THOROUGHLY WITH SOAP AND WATER AFTER USE.
- DO NOT ENTER OR ALLOW WORKER ENTRY INTO TREATED AREAS FOR 12 HOURS FOLLOWING 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 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.

ENVIRONMENTAL PRECAUTIONS:

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

STORAGE:

Store this product in original container in a secure, dry area, away from fertilizer, seed, food or feed. Not for use or storage in or around the home. Keep container tightly closed.

DISPOSAL:

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

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

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

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

NOTICE TO USER:

This PEST control product is to be used only in accordance with the directions on the label. It is an offence under the *PEST CONTROL PRODUCTS ACT* to use this product in any way that is inconsistent with the directions on the label.



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IMPORTANT INFORMATION - READ BEFORE USING

Injury to or loss of desirable trees, shrubs, flowers, vegetables, fruits or other 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, tennis courts, 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 crops.

DO NOT APPLY BY AIR.

Do not apply in high winds.

Carefully observe sprayer clean-up instructions, as spray tank residue may damage crops other than spring wheat, durum or barley. Thoroughly clean all traces of tank mix from application equipment immediately after use. Flush tank, pump, hoses, and boom with several changes of water after removing nozzle tips and screens (clean these parts separately). Wash away any spray mixture from the outside of spray tank, nozzle or spray rig.

A MINIMUM RECROPPING INTERVAL OF 2 MONTHS SHOULD BE LEFT BETWEEN THE APPLICATION OF THIS PRODUCT AND SEEDING OF THE NEXT CROP. After 2 months, the following crops can be seeded: canola, flax, lentils, alfalfa.

DO NOT APPLY VIKING TRIBENURON HERBICIDE WITH A CARRIER OTHER THAN WATER OR ANY ADDITIVE OTHER THAN THOSE INDICATED ON THIS LABEL. Other carriers may accelerate breakdown of this product and reduce its effectiveness.

ENVIRONMENTAL PRECAUTIONS:

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

DIRECTIONS FOR USE

GENERAL INFORMATION:

VIKING Tribenuron Herbicide provides control of certain broad-leaved weeds as a pre-seeding herbicide on fields to be planted to spring wheat (including durum) and barley.

Warm, moist growing conditions promote active weed growth and enhance the activity of **VIKING Tribenuron Herbicide** by allowing maximum foliar uptake and contact activity. Weeds hardened off by environmental stress such as cold weather, drought stress or excessive heat may not be adequately controlled or suppressed, and regrowth may occur. **VIKING Tribenuron Herbicide** may only be applied using ground spray equipment. For best results, ensure thorough spray coverage of target weeds.

VIKING Tribenuron Herbicide rapidly stops growth of susceptible weeds. However, typical symptoms (discolouration) of dying weeds may not be noticeable for 1 to 3 weeks after application, depending on growing conditions and weed susceptibility. Degree of control and duration of effect depend on weed sensitivity, weed size, spray coverage and growing conditions. Activity of the herbicide mixture may be delayed by cold, dry conditions after application.

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.

<u>Field sprayer application:</u> **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 (grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrub lands), sensitive freshwater habitats (lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands).

Method of Application	_	Spray Buffer Zones (meters) Required for the Protection of:			
	Сгор	Freshwater Ha	Terrestrial		
		Less than 1 m	Greater than 1 m	Habitats	
	Summer fallow, fields to be planted to wheat (spring and durum), barley (only as a pre- seeding herbicide)		0	3	
Field Sprayer*	Wheat and Barley	1	0	4	

^{*} 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.

FOR WEED CONTROL IN SUMMERFALLOW

With any summerfallow treatment, allow at least 10 days to elapse between treatment and tillage. Only weeds that have emerged at the time of application will be controlled.

APPLICATION TIMING:

VIKING Tribenuron Herbicide + 2,4-D Ester Tank Mix

Apply **VIKING Tribenuron Herbicide** at 10 grams per hectare with 2,4-D ester at 420 grams/ha (0.6 L 2,4-D Ester LV-700).

Apply the tank mix in the spring after emergence, up to the early flowering stage of the target weeds.

WEEDS CONTROLLED: Flixweed and Stinkweed (fall rosettes and spring seedlings)

CONTROL OF BROADLEAF WEEDS AND GRASSES IN FALLOW AND PRE-SEED TO SPRING WHEAT (INCLUDING DURUM) AND BARLEY.

With any summerfallow treatment, allow 10 days to elapse between treatment and tillage. Only weeds emerged at time of application will be controlled.

Fields treated with **VIKING Tribenuron Herbicide** can be seeded to wheat (spring or durum) or barley a minimum of 24 hours after application.

Apply VIKING Tribenuron Herbicide at 10 grams per hectare, tank mixed with one of the following companion herbicides and adjuvant (where required) in a total spray volume of 55-110 L/ha.

Companion Herbicide Application Rate	Roundup® Transorb® HC Liquid Herbicide 1.25 L/ha	Roundup Weathermax®			
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Application Stage	Weeds controlled			Weeds supressed*	
Up to 8 cm	Canada fleabane, Common ragweed, Narrow- leaved hawk's beard				
Up to 15 cm	Dandelion, Downy brome, Flixweed, Giant foxtail, Green foxtail, Hemp nettle, Kochia, Lady's thumb, Lamb's-quarters, Persian darnel, Redroot pigweed, Russian thistle, Stinkweed, Volunteer barley, Volunteer canola (including glyphosate-tolerant varieties), Volunteer flax, Volunteer wheat, Wild mustard, Wild oats				
Up to 3-leaf	Wild buckwheat, Cow cockle				
Rosette					Canada thistle

Companion Herbicide	Roundup Transorb HC Liquid Herbicide, plus Agral® 90				
Application Rate	0.75 L/ha + 0.35				
Application Stage	Weeds controlled		Weeds supressed*		
Any stage	Volunteer canola (including glyphosate tolera				
Seedlings and rosettes (nonflowering)		Narrow-leaved hawk's beard			
Up to 10 cm	Kochia, Lamb's-quarters,	Redroot pigweed, Russian thistle			
Up to 8 cm	Green foxtail, Lady's thumb, Stinkweed, Volun Volunteer wheat, Wild mustard, Wild oats (1-3 buckwheat (1-3 leaf)				
Companion Herbicide	Roundup Transorb HC Liquid Herbicide, plus		Agral 90		
Application Rate	1.0 L/ha + 0.35				
Application Stage	Weeds controlled	Weeds supressed*			
Rosettes (non- flowering)	Dandelion (top growth)	Canada thistle (top growth)			

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

Fields treated with **VIKING Tribenuron Herbicide** + Roundup can be seeded with wheat (spring or durum) or barley a minimum of 24 hours after application.

MIXING INSTRUCTIONS:

- 1. Add one-third of the necessary volume of water to the spray tank.
- 2. With the agitator running, add the required amount of VIKING Tribenuron Herbicide.
- 3. When **VIKING Tribenuron Herbicide** is in suspension, add the required amount of the appropriate tank mix partners.
- 4. Specific Tank Mix Instructions:
 - VIKING Tribenuron Herbicide + 2,4-D Ester: Once VIKING Tribenuron Herbicide is completely in

suspension, add the required amount of 2,4-D Ester while maintaining agitation. Do not add a surfactant.
VIKING Tribenuron Herbicide + Roundup Transorb or Roundup Weathermax: Once VIKING Tribenuron Herbicide is completely in suspension, add the required amount of Roundup Transorb or Roundup Weathermax as indicated in the APPLICATION RATES AND TIMING tables. Once components are in suspension, if required, add AGRAL 90 at 3.5 L per 1000 L of spray solution (0.35% v/v).

- 5. Add the rest of the water. If an antifoam agent is required, add this last.
- 6. Use a minimum spray volume of 55 L/ha.
- 7. For repeat tankloads, reduce the material remaining in the tank to 10% of the original volume or less before proceeding with step 1. If this is not possible, pre-slurry **VIKING Tribenuron Herbicide** in a small amount (5-10 L) of water before adding to the tank.

Continuous agitation is required to keep **VIKING Tribenuron Herbicide** in suspension. If the spray preparation is left standing without agitation, thoroughly agitate to re-suspend the mixture before spraying. Use spray preparation within 24 hours or product degradation may occur.

MINIMUM RECROPPING INTERVAL AND CROP ROTATION GUIDELINES:

A minimum recrop interval of 2 months should be left between the application of this product and seeding of the next crop. The following crops can be seeded two months after application of **VIKING Tribenuron Herbicide** + 2,4-D Ester: canola, flax, lentils, and alfalfa.

EQUIPMENT-SPRAY VOLUMES:

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).

Continuous agitation is required to keep the spray materials in suspension. Apply uniformly and avoid overlapping. Shut off spray boom while starting, turning, slowing or stopping to prevent crop injury from over application. Reduce drift with high water volume, low pressure, coarse sprays and drop nozzles.

SPRAYER CLEANUP:

It is difficult to remove all traces of 2,4-D Ester from a sprayer. A sprayer used to apply this herbicide should not be used to spray crops sensitive to this herbicide. The following clean-out procedure will remove traces of **VIKING Tribenuron Herbicide** from the sprayer.

- 1 Drain tank; then flush tank, boom and hoses with clean water for a minimum of ten minutes to remove all visible residues.
- 2 Fill the tank with clean water then add 1 litre household AMMONIA (containing a minimum of 3% ammonia) per 100 litres of water. Fill boom and hoses with solution and allow sprayer to sit for 15 minutes. Drain.
- 3 Repeat step 2.
- 4 Nozzles and screens should be removed and cleaned separately. To remove traces of ammonia, rinse the tank, hoses and booms thoroughly with clean water.
- 5 Dispose of tank rinseate according to Provincial directions.

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

RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, **VIKING Tribenuron Herbicide** is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to **VIKING Tribenuron Herbicide** and other Group 2 herbicides. The resistance 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 Tribenuron 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 resistancemanagement and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact your Viking Crop Production Partners Inc. representative at 1-587-743-1029 for further information.

USE PRECAUTIONS:

Licensed wheat and barley varieties have shown acceptable tolerance to VIKING Tribenuron Herbicide. Consult Viking Crop Production Partners Inc. prior to use on unlicensed varieties for crop tolerance information.

Do not apply to irrigated land where tail water will be used to irrigate other crop land.

Do not contaminate irrigation water.

Use a maximum of 10 grams of VIKING Tribenuron Herbicide per hectare per year.

Do not use on highly variable soils that have large gravely or sandy areas, eroded knolls or calcium deposits.

Do not apply to fields to be planted to spring wheat, durum wheat or barley undersown with legumes or grasses as injury to the forage may result.

VIKING Tribenuron Herbicide applied to fields to be planted to spring wheat, durum wheat or barley that is stressed by severe conditions such as drought, low fertility, saline soils, waterlogged soils (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, grade or yield loss.

Do not remove soil from treated fields for use on lawns, in gardens or for backfill.

Under certain conditions such as prolonged cool weather temperature or wide fluctuations in day/night temperatures just prior to or soon after treatment, temporary yellowing and/or crop stunting may occur.

Control of weeds growing in wheel tracks may be reduced when **VIKING Tribenuron Herbicide** is applied under dry, dusty conditions.

STORAGE:

Store this product in original container in a secure, dry area, away from fertilizer, seed, food or feed. Not for use or storage in or around the home. Keep container tightly closed.

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:

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