GROUP 1 HERBICIDE

### ADAMA QUIZALOFOP

Herbicide

EMULSIFIABLE CONCENTRATE

COMMERCIAL (AGRICULTURAL)

FOR SALE FOR USE ON CANOLA, FLAX, (INCLUDING LOW LINOLENIC ACID VARIETIES), SOYBEANS (INCLUDING VARIETIES DESIGNATED "STS"), SEED ALFALFA, LENTILS, PEAS (FIELD AND PROCESSING), SEEDLING LEGUMES FOR SEED PRODUCTION, SEEDLING OR ESTABLISHED CREEPING RED FESCUE FOR SEED PRODUCTION, ESTABLISHED RED AND ALSIKE CLOVER FOR SEED PRODUCTION, DRY FABA BEANS (DRY BROAD BEANS) AND NARROW LEAF LUPIN, SUGARBEETS, AND SNAP BEANS; DRY COMMON BEANS; FOR USE IN WESTERN CANADA ON CHICKPEAS; CONDIMENT AND OILSEED TYPE ORIENTAL MUSTARD (INCLUDING CANOLA QUALITY *BRASSICA JUNCEA*); YELLOW AND BROWN MUSTARD; THE FOLLOWING BEANS IN SOUTHERN ONTARIO (LIMA, ADZUKI AND MUNG BEANS); RUTABAGAS IN ONTARIO AND QUEBEC; AND ON INDUSTRIAL HEMP GROWN FOR FIBRE, SEED AND OIL PRODUCTION AND CUCURBIT VEGETABLES IN CANADA.

READ THE LABEL AND ATTACHED BROCHURE BEFORE USING

ACTIVE INGREDIENT: Quizalofop-P-ethyl 100 g/L

REGISTRATION NO. 34935 PEST CONTROL PRODUCTS ACT



KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: 1 L - 1050 L

For emergency medical help and health/safety inquiries call ProPharma Group at 1.877.250.9291 (24 hours a day).

For spill, leak or fire call INFOTRAC at 1.800.535.5053 (24 hours a day).

ADAMA Agricultural Solutions Canada Ltd. 300 – 191 Lombard Avenue Winnipeg, Manitoba R3B 0X1 1-855-264-626

# PRECAUTIONS

# KEEP OUT OF REACH OF CHILDREN.

**DO NOT** use in greenhouses.

Harmful if inhaled. Avoid breathing vapours or spray mist. Use adequate ventilation.

Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves, protective eyewear and hat are not required during application within a closed cab and/or cockpit.

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 reuse.

Apply only to agricultural crops when the potential for drift to areas of human habitation and human activity, such as houses, cottages, school 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. Observe spray buffer zones specified under DIRECTIONS FOR USE.

This product contains an active ingredient and aromatic petroleum distillate, which are toxic to aquatic organisms.

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

Avoid application when heavy rain is forecast.

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

# FIRST AID

**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 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.

**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.

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

# TOXICOLOGICAL INFORMATION

THIS PRODUCT CONTAINS PETROLEUM DISTILLATES. Vomiting may cause aspiration pneumonia. Treat symptomatically.

#### STORAGE

- 1. Store this product away from food and feed. Store in original container.
- 2. Do not ship or store near food, feed, seed and fertilizers.
- 3. Store in cool, dry, locked, well-ventilated area without floor drain.
- 4. DO NOT FREEZE.

#### 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/territorial requirements.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial 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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NET CONTENTS: 1 L - 1050 L

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ADAMA Agricultural Solutions Canada Ltd. 300 – 191 Lombard Avenue Winnipeg, Manitoba R3B 0X1 1-855-264-6262

# SAFETY AND HANDLING

# SECTION 1: PRECAUTIONS, PROTECTIVE CLOTHING AND EQUIPMENT, AND RE-ENTRY RESTRICTIONS

#### **KEEP OUT OF REACH OF CHILDREN.**

**DO NOT** use in greenhouses.

Harmful if inhaled. Avoid breathing vapours or spray mist. Use adequate ventilation.

Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves, protective eyewear and hat are not required during application within a closed cab and/or cockpit.

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 reuse.

Apply only to agricultural crops when the potential for drift to areas of human habitation and human activity, such as houses, cottages, school 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.

# SECTION 2: FIRST AID AND TOXICOLOGICAL INFORMATION

#### 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.

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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.

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

# TOXICOLOGICAL INFORMATION

THIS PRODUCT CONTAINS PETROLEUM DISTILLATES. Vomiting may cause aspiration

pneumonia. Treat symptomatically.

# SECTION 3: ENVIRONMENTAL PRECAUTIONS

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

This product contains an active ingredient and aromatic petroleum distillate, which are toxic to aquatic organisms.

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.

### **SECTION 4: STORAGE**

- 1. Store this product away from food and feed. Store in original container.
- 2. Do not ship or store near food, feed, seed and fertilizers.
- 3. Store in cool, dry, locked, well-ventilated area without floor drain.
- 4. DO NOT FREEZE.

# SECTION 5: DISPOSAL AND DECONTAMINATION

#### 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/territorial requirements.

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

#### **SECTION 6: 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.

#### **DIRECTIONS FOR USE**

# **SECTION 7: PRODUCT OVERVIEW**

**ADAMA QUIZALOFOP** is a selective postemergence herbicide for the control of annual and perennial grasses. **ADAMA QUIZALOFOP** is a systemic herbicide which is rapidly absorbed and readily translocated from the treated foliage to the root systems and growing points of the plant. This product does not control sedges or broadleaf weeds.

Grass crops, including wheat, barley, rye, oats, and corn are highly sensitive to ADAMA QUIZALOFOP.

Under certain environmental conditions, minor leaf spotting may occur on soybeans. New growth is unaffected and there is no adverse effect on crop yield.

Control Symptoms - Treated plants show a reduction in growth and a loss of competitiveness. An early yellowing or browning of the younger plant tissues is followed by a progressive collapse of the remaining foliage. These symptoms will generally be observed in one to three weeks depending on the grass species treated and the environmental conditions.

For registered crops, application rates and timing refer to SECTION 11: REGISTERED CROPS AND APPLICATION TIMING and SECTION 12: WEEDS CONTROLLED of the label.

### SECTION 8: APPLICATION INSTRUCTIONS AND USE LIMITATIONS

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.

<u>Aerial application</u>: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply when the wind speed is greater than 16 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) medium classification. Reduce drift caused by turbulent wingtip vortices. Nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing-or rotor-span.

# **GROUND APPLICATION:**

#### EQUIPMENT - SPRAY VOLUME

Apply the spray mixture with ground equipment only. Use a properly calibrated sprayer that will provide thorough coverage of the weeds with the spray. Apply a minimum of 100 litres per hectare total spray volume. Use flat fan nozzles. DO NOT USE FLOOD JET NOZZLES.

Use 50 mesh screens or larger. A spray pressure of 210-275 kPa is recommended. Under heavy weed pressure, use increased volumes up to 400 litres total spray volume per hectare.

Avoid overlapping. Shut off spray booms while starting, turning, slowing or stopping to prevent over

application.

Use spray preparation of **ADAMA QUIZALOFOP** within 24 hours or product degradation may occur. If spray preparation is left without agitation, thoroughly agitate before using.

Do not apply when environmental conditions such as wind speed, temperature, relative humidity, etc. are favourable for drift to occur.

Do not apply to terrain where there is a potential for surface run-off to enter aquatic systems.

NOTE: Extreme care must be taken to prevent drift to desirable plants or non-target agricultural land.

# AERIAL APPLICATION: (Only for ADAMA QUIZALOFOP used alone)

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

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

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

# **Use Precautions:**

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

#### **Operator Precautions:**

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear coveralls over a long-sleeved shirt, long pants, chemicalresistant gloves, socks and shoes during mixing/loading, clean-up and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label. All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly. Do not use human flaggers.

# **Product Specific Precautions:**

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-855-264-6262 or obtain technical advice from the distributor or your provincial agricultural representative.

Application of this specific product must meet and/or conform to the following:

Volume: Apply the recommended rate in a minimum spray volume of 55 litres per hectare.

# TANK MIXTURES:

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 ADAMA Agricultural Solutions Canada Ltd. at 1-855-264-6262 for information before applying any tank mix that is not specifically recommended on this label.

# SECTION 9: PRE-HARVEST, GRAZING AND FEEDING INTERVALS

Do not graze the treated crops or cut for hay; sufficient data are not available to support such use. Refer to the REGISTERED CROPS AND APPLICATION TIMING section of this label for information. When tank mix partners are used, the most restricted PHIs must be observed.

### SECTION 10: SPRAY BUFFER ZONES

A spray buffer zone is NOT required for:

• low-clearance hooded or shielded sprayers that prevent spray contact with crop, fruit or foliage.

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			Spray Buffer Zones (meters) Required for the Protection of:		
application	Use rate		Aquatic Habitat of Depths		Terrestrial
			Less than 1 m	Greater than 1m	Habitat
Field sprayer	Field crops at 0.365–0.48 L/ha		1	0	3
	Field crops up	to 0.72 L/ha	1	0	5
Aerial	Field crops at	Fixed wing	1	0	85
	0.365 L/ha	Rotary wing	1	0	70
	Field crops at	Fixed wing	1	0	100
	0.48 L/ha	Rotary wing	1	0	85
	Field crops at	Fixed wing	1	0	150
	0.72 L/ha	Rotary wing	1	0	125

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.

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.

# SECTION 11: REGISTERED CROPS AND APPLICATION TIMING

Apply the specified rate of **ADAMA QUIZALOFOP** with MERGE® at 5-10 litres per 1000 litres of spray solution, SURE-MIX<sup>TM</sup> at 0.5% (0.5 litres per 100 litres of spray solution), LI 700 at 0.25- 0.5% v/v, Liberate<sup>TM</sup> Adjuvant at 0.5% v/v, Companero® Adjuvant at 0.5% - 1.0% v/v (5-10 litres per 1000 litres of spray solution), or other non-ionic or methylated seed oil adjuvants, at the leaf stage of the grass indicated below:

#### **SECTION 12: WEEDS CONTROLLED**

Rate	Weeds Controlled	Weed Leaf Stage At Application
0.365 L/ha	Green foxtail	2 leaf to early tillering
	Volunteer barley	2 leaf to early tillering
	Volunteer corn	2-6 leaf
	Volunteer oats	<sup>†</sup> 2 leaf to early tillering
	Volunteer wheat	2 leaf to early tillering
	Wild oats	1-5 leaf without tillers
	Weeds Controlled	Weed Leaf Stage At Application
	Those controlled by 0.365 L/ha and:	
	Barnyard grass	2 leaf to early tillering
	Wild oats	<sup>†</sup> 1-5 leaf to early tillering (up to two tillers)
	Fall panicum	2 leaf to early tillering
0.48 L/ha	Old Witchgrass	2 leaf to early tillering
	Proso millet	2 leaf to early tillering
	Yellow foxtail	2 leaf to early tillering
	Foxtail Barley	2 leaf to 4 leaf $+$ 3 tillers
	Downy brome	2-5 leaf stage
	Japanese brome	2-5 leaf stage
0 49 J /l	Weeds Suppressed	Weed Leaf Stage At Application
0.48 L/ha	Quackgrass	2-6 leaf
0.72 L /ha	Weeds Controlled	Weed Leaf Stage At Application
0.72 L/ha	Those listed above and Quackgrass	2-6 leaf

#### **USE RATE (GROUND OR AERIAL):**

<sup>†</sup> Best results on volunteer/wild oats if application is made before tillering begins.

Use the higher rate of adjuvant when wild oats or quackgrass are the main target weeds, or under conditions not conducive to good growth.

When using a broadleaf herbicide, other than those registered for tank mixing with **ADAMA QUIZALOFOP**, wait a minimum of 24 hours after the **ADAMA QUIZALOFOP** application to apply the broadleaf herbicide or wait 7 days after the broadleaf application to apply **ADAMA QUIZALOFOP**.

# POSTEMERGENCE APPLICATIONS

CROP	RATE	COMMENTS
Flax (including	0.365 – 0.72 L/ha	GROUND OR AERIAL
low linolenic acid	ADAMA QUIZALOFOP	APPLICATION.
varieties)	PLUS	• One application per year only
	MERGE® at 0.5% - 1.0% v/v, SURE-	• Do not apply within 82 days of
	MIX <sup>TM</sup> at 0.5% v/v, LI 700 at 0.25% -	harvest.
	0.5% v/v, Liberate <sup>™</sup> Adjuvant at 0.5%	
	v/v, Companero® Adjuvant at 0.5% -	
	1.0% v/v	
Lentils, Peas	0.365 – 0.72 L/ha	GROUND OR AERIAL
(field	ADAMA QUIZALOFOP	APPLICATION.
& processing)	PLUS	• One application per year only
1 0,	MERGE® at 0.5% - 1.0% v/v, SURE-	• Do not apply within 65 days of
	MIX <sup>TM</sup> at 0.5% $v/v$ , LI 700 at 0.25% -	harvest.
	0.5% v/v, Liberate <sup>TM</sup> Adjuvant at 0.5%	nur vost.
	v/v, Companero® Adjuvant at 0.5% -	
	1.0%  v/v	
Chickpeas	0.365 – 0.72 L/ha	GROUND APPLICATION ONLY.
(western Canada	ADAMA QUIZALOFOP	<ul> <li>One application per year only.</li> </ul>
only)	PLUS	<ul> <li>Use a minimum of 100 L of water/ha</li> </ul>
() (in y)	MERGE® at 0.5% - 1.0% v/v, SURE-	
	MIX <sup>TM</sup> at 0.5% $v/v$ , LI 700 at 0.25% -	• Do not apply within 85 days of harvest.
	0.5% v/v, Liberate <sup>TM</sup> Adjuvant at 0.5%	narvest.
	v/v, Companero® Adjuvant at 0.5% -	
	1.0%  v/v	
Condiment and	0.365 – 0.72 L/ha	GROUND OR AERIAL
Oilseed Type	ADAMA QUIZALOFOP	APPLICATION.
Oriental Mustard	PLUS	One application per year only.
(including canola	MERGE® at 0.5% - 1.0% v/v, SURE-	<ul><li>Do not apply within 64 days of</li></ul>
quality <i>Brassica</i>	MIX <sup>TM</sup> at 0.5% $v/v$ , LI 700 at 0.25% -	harvest.
<i>juncea</i> ) and	0.5% v/v, Liberate <sup>TM</sup> Adjuvant at 0.5%	narvest.
yellow and brown	v/v, Companero® Adjuvant at 0.5% -	
mustard	1.0%  v/v	
(western Canada	1.070 17	
only)		
Canola (rapeseed)	0.365 – 0.72 L/ha	GROUND OR AERIAL
cultora (rapeseea)	ADAMA QUIZALOFOP	APPLICATION.
	PLUS	• One application per year only.
	MERGE® at 0.5% - 1.0% v/v, SURE-	<ul><li>Do not apply within 64 days of</li></ul>
	MIX <sup>TM</sup> at 0.5% $v/v$ , LI 700 at 0.25% -	harvest.
	0.5%  v/v, Liberate <sup>TM</sup> Adjuvant at $0.5%$	
	v/v, Companero® Adjuvant at 0.5% -	
	1.0%  v/v	
Soybeans	0.365 – 0.72 L/ha <b>ADAMA</b>	GROUND OR AERIAL
(including	QUIZALOFOP	APPLICATION.
varieties	PLUS	<ul> <li>One application per year only.</li> </ul>
designated "STS"	MERGE® at 0.5% - 1.0% v/v, SURE-	<ul> <li>Do not apply within 80 days of</li> </ul>
actignated 515	MERGE® at $0.5\% - 1.0\%$ V/v, SURE- MIX <sup>TM</sup> at $0.5\%$ v/v, LI 700 at $0.25\%$ -	
	with at 0.5% v/v, L1 /00 at 0.25% -	harvest.

	0.5% v/v, Liberate <sup>™</sup> Adjuvant at 0.5% v/v, Companero® Adjuvant at 0.5% - 1.0% v/v	
Seed Alfalfa	0.365 - 0.72 L/ha         ADAMA QUIZALOFOP         PLUS         MERGE® at 0.5% - 1.0% v/v, SURE-         MIX™ at 0.5% v/v, LI 700 at 0.25% -         0.5% v/v, Liberate™ Adjuvant at 0.5%         v/v, Companero® Adjuvant at 0.5% -         1.0% v/v	<ul> <li>GROUND APPLICATION ONLY.</li> <li>One application per year only.</li> </ul>

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than ADAMA Agricultural Solutions Canada Ltd. under the User Requested Minor Use Label Expansion program. For these uses, ADAMA Agricultural Solutions Canada Ltd. 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.

Refer to:

- SECTION 12: WEEDS CONTROLLED of this label for a complete list of grassy weeds and their stages of control for each application rate.
- USE PRECAUTIONS section of this label for additional application and/or use precaution instructions.
- SECTION 13: MIXING INSTRUCTIONS of this label for mixing instructions.

CROP	RATE	COMMENTS
Dry Faba Beans (Dry Broad Beans) and	0.365 -0.72 L/ha <b>ADAMA</b> <b>QUIZALOFOP</b> PLUS	<ul> <li>GROUND APPLIATION ONLY.</li> <li>Use 100-400 litres of water/ha.</li> <li>Use as single post amorgant approximately.</li> </ul>
Narrow Leaf Lupin	MERGE® at 0.5% - 1.0% v/v, SURE-MIX <sup>TM</sup> at 0.5% v/v, LI 700 at 0.25% - 0.5% v/v, Liberate <sup>TM</sup> Adjuvant at 0.5% v/v, Companero® Adjuvant at 0.5% - 1.0% v/v	<ul><li>Use as single post emergent spray.</li><li>Do not apply within 30 days of harvest.</li></ul>
Established red and alsike clovers	0.365 – 0.72 L/ha ADAMA QUIZALOFOP	<ul><li>GROUND APPLICATION ONLY.</li><li>Do not graze or cut for hay in the year of</li></ul>
for seed production	PLUS	treatment.
production	MERGE® at 0.5% - 1.0% v/v, SURE-MIX <sup>™</sup> at 0.5% v/v, LI 700 at 0.25% - 0.5% v/v, Liberate <sup>™</sup>	<ul><li>Do not apply within 30 days of harvest.</li><li>Application should be made before crop canopy closes.</li></ul>
	Adjuvant at 0.5% v/v, Companero® Adjuvant at 0.5% - 1.0% v/v	<ul><li>Make one application per year.</li><li>Apply a minimum of 100 L/ha of total spray volume.</li></ul>
GROUP 9 – CUCURBIT	0.365 – 0.72 L/ha ADAMA QUIZALOFOP	<ul><li>GROUND APPLICATION ONLY.</li><li>For the control of grassy weeds listed on</li></ul>
	PLUS	the label as well as volunteer cereals, corn,

	ſ	,
VEGETABLES	MERGE® at 0.5% - 1.0% v/v,	and quackgrass. Apply at the labelled leaf
including:	SURE-MIX <sup>TM</sup> at 0.5% v/v, LI 700	stage of grassy weeds.
citron melon;	at 0.25% - 0.5% v/v, Liberate <sup>TM</sup>	• Do not apply within 30 days of harvest.
cucumber;	Adjuvant at 0.5% v/v, Companero®	• Make one application per year when the
gherkin; edible	Adjuvant at 0.5% - 1.0% v/v	crop is at the 2-6 leaf stage.
gourd (hyotan,		• Use in a minimum of 100 litres of
cucuzza); Chinese		water/ha.
okra; Chinese		• Do not enter or allow worker entry into
cucumber;		treated areas during the restricted entry
muskmelon		interval (REI) of 12 hours.
hybrids and or		
cultivars of		
Cucumis melo		
including true		
cantaloupe,		
cantaloupe,		
casaba, Crenshaw		
melon, golden		
pershaw melon,		
honeydew melon,		
honey balls,		
mango melon,		
Persian melon,		
pineapple melon,		
Santa Claus		
melon, and snake		
melon; pumpkin;		
summer squash		
including		
crookneck squash,		
scallop squash,		
straightneck		
squash, vegetable		
marrow, and		
zucchini; winter		
squash including		
butternut squash,		
calabaza, hubbard		
squash, acorn		
squash, spaghetti		
squash;		
watermelon		
including hybrids		
and/or varieties of		
Citrullus lanatus.		
Seedling Legumes	0.480 - 0.72 L/ha <b>ADAMA</b>	GROUND APPLICATION ONLY.
for Seed	QUIZALOFOP	• Apply before crop canopy closes to
Production Only	PLUS	maximize spray coverage.
(for bird's-foot	MERGE® at 0.5% - 1.0% v/v,	• One application per year only.
trefoil, alsike, red,	SURE-MIX <sup>TM</sup> at 0.5% $v/v$ , LI 700	fr fr fr fr fr fr.
	SOLUTIN at 0.570 V/V, LI 700	1

white and sweet clover and sainfoin)	at 0.25% - 0.5% v/v, Liberate <sup>TM</sup> Adjuvant at 0.5% v/v, Companero® Adjuvant at 0.5% - 1.0% v/v	<ul> <li>Use a properly calibrated sprayer that will provide thorough coverage of the weeds</li> <li>Apply a minimum of 100 L/ha of total spray volume.</li> <li>DO NOT graze or cut for hay in the year of treatment.</li> </ul>
Established Creeping Red Fescue for Seed Production Only	0.480 – 0.72 L/ha ADAMA QUIZALOFOP PLUS 7.5 g/ha Ally <sup>®</sup> Herbicide PLUS MERGE® at 0.5% - 1.0% v/v, SURE-MIX <sup>TM</sup> at 0.5% v/v, LI 700 at 0.25% - 0.5% v/v, Liberate <sup>TM</sup> Adjuvant at 0.5% v/v, Companero® Adjuvant at 0.5% - 1.0% v/v	<ul> <li>GROUND APPLICATION ONLY.</li> <li>Apply ADAMA QUIZALOFOP + ALLY<sup>®</sup> Herbicide tank mixture post emergent to the first main flush of actively growing weeds, when established creeping red fescue is in the 2 leaf to flag leaf (shot blade) stage.</li> <li>Apply before the crop canopy is dense enough to prevent thorough coverage of the weeds.</li> <li>One application per year only.</li> </ul>
Seedling or Established Creeping Red Fescue for Seed Production	0.480 – 0.72 L/ha ADAMA QUIZALOFOP PLUS MERGE® at 0.5% - 1.0% v/v, SURE-MIX <sup>™</sup> at 0.5% v/v, LI 700 at 0.25% - 0.5% v/v, Liberate <sup>™</sup> Adjuvant at 0.5% v/v, Companero® Adjuvant at 0.5% - 1.0% v/v	<ul> <li>GROUND APPLICATION ONLY.</li> <li>Apply when quackgrass is in the 2-6-leaf stage and when annual grassy weeds are from the 2-leaf stage to early tillering.</li> <li>Apply before crop canopy closes to maximize spray coverage.</li> <li>One application per year only.</li> <li>Use a properly calibrated sprayer that will provide thorough coverage of the weeds with the spray solution.</li> <li>Apply a minimum of 100 L/ha of total spray volume.</li> <li>DO NOT graze or cut treated established creeping red fescue for feed or hay in the year of treatment.</li> </ul>
Snap Beans	0.365 – 0.72 L/ha ADAMA QUIZALOFOP PLUS MERGE® at 0.5% - 1.0% v/v, SURE-MIX <sup>™</sup> at 0.5% v/v, LI 700 at 0.25% - 0.5% v/v, Liberate <sup>™</sup> Adjuvant at 0.5% v/v, Companero® Adjuvant at 0.5% - 1.0% v/v	<ul> <li>GROUND APPLICATION ONLY.</li> <li>One application per year only at the 2- to 5-leaf stage of annual grasses and up to the 3-leaf stage of quackgrass.</li> <li>DO NOT apply within 30 days of harvest.</li> </ul>
Sugarbeets	0.365 L/ha ADAMA QUIZALOFOP PLUS MERGE® at 0.5% - 1.0% v/v, SURE-MIX <sup>™</sup> at 0.5% v/v, LI 700 at 0.25% - 0.5% v/v, Liberate <sup>™</sup> Adjuvant at 0.5% v/v, Companero® Adjuvant at 0.5% - 1.0% v/v	<ul> <li>GROUND APPLICATION ONLY.</li> <li>Apply ADAMA QUIZALOFOP as a post emergent broadcast application to small, emerged grassy weeds between the 2 leaf to early tillering leaf stage.</li> <li>Apply before crop canopy closes to maximize spray coverage.</li> </ul>

Dry Common Beans ( <i>Phaseolus</i> <i>vulgaris</i> spp) including but not limited to all dry common bean types listed on this label	0.365 - 0.72 L/ha ADAMA QUIZALOFOP PLUS MERGE® at 0.5% - 1.0% v/v, SURE-MIX <sup>TM</sup> at 0.5% v/v, LI 700 at 0.25% - 0.5% v/v, Liberate <sup>TM</sup> Adjuvant at 0.5% v/v, Companero® Adjuvant at 0.5% - 1.0% v/v	<ul> <li>If a second flush of annual grasses or volunteer cereals is observed, apply an additional (sequential) application of ADAMA QUIZALOFOP at 0.365 L /ha + recommended adjuvant.</li> <li>For control of annual grassy weeds, volunteer cereals and quackgrass, apply ADAMA QUIZALOFOP at 0.72 L/ha with recommended adjuvant.</li> <li>Do not exceed an accumulative, seasonal use rate of 0.72 L/ha of ADAMA QUIZALOFOP per year.</li> <li>Use a properly calibrated sprayer that will provide thorough coverage of the weeds with the spray solution.</li> <li>DO NOT apply within 60-80 days of harvest.</li> <li>The minimal re-treatment interval (RTI) is 14 days.</li> <li>GROUND APPLICATION ONLY.</li> <li>For the control of grassy weeds listed on the label as well as volunteer cereals, corn, and quackgrass.</li> <li>Dry common bean varieties may vary in their tolerance to herbicides, including ADAMA QUIZALOFOP. The tolerance of some dry common bean varieties listed on this label has been confirmed when the herbicide is applied as directed. Since not all dry common bean varieties have been tested for tolerance to ADAMA QUIZALOFOP, first use of ADAMA QUIZALOFOP</li> <li>should be limited to a small area of each variety to confirm tolerance prior to adoption as a general field practice. Additionally, consult your seed supplier for information on the tolerance of specific varieties of dry common beans to ADAMA QUIZALOFOP.</li> <li>DO NOT apply within 30 days of harvest.</li> <li>One application per year.</li> </ul>
Pinto, Navy, Great Northern, Pink and Small Red Beans (western Canada only)	0.365 – 0.72 L/ha ADAMA QUIZALOFOP PLUS MERGE® at 0.5% - 1.0% v/v, SURE-MIX <sup>TM</sup> at 0.5% v/v, LI 700 at 0.25% - 0.5% v/v, Liberate <sup>TM</sup> Adjuvant at 0.5% v/v, Companero® Adjuvant at 0.5% - 1.0% v/v	<ul> <li>GROUND APPLICATION ONLY.</li> <li>Apply a minimum of 100 L of water/ha of total spray volume.</li> <li>One application per year.</li> <li>DO NOT apply within 30 days of harvest.</li> </ul>

White, White and Red Kidney, Cranberry, Black, Brown and Yellow Eye, Lima, Mung, Otebo and Adzuki Beans (southern Ontario Only)	$\begin{array}{c} 0.365 - 0.72 \text{ L/ha ADAMA} \\ \hline \textbf{QUIZALOFOP} \\ \hline \textbf{PLUS} \\ \hline \textbf{MERGE® at } 0.5\% - 1.0\% \text{ v/v}, \\ \textbf{SURE-MIX^{TM} at } 0.5\% \text{ v/v}, \text{ LI } 700 \\ at 0.25\% - 0.5\% \text{ v/v}, \text{ Liberate^{TM}} \\ \hline \textbf{Adjuvant at } 0.5\% \text{ v/v}, \text{ Companero®} \\ \hline \textbf{Adjuvant at } 0.5\% \text{ - } 1.0\% \text{ v/v} \\ \end{array}$	<ul> <li>GROUND APPLICATION ONLY.</li> <li>For the control of grassy weeds listed on the label as well as volunteer cereals, corn, and quackgrass.</li> <li>Apply at the 2-5-leaf stage of the annual grasses.</li> <li>One application per year.</li> <li>DO NOT apply within 30 days of harvest.</li> </ul>
Pinto, Pink, Great Northern and Small Red Beans (western Canada only)	0.605 L/ha ADAMA QUIZALOFOP PLUS 1.75 – 2.25 L/ha Basagran <sup>®</sup> Herbicide PLUS MERGE® at 0.5% - 1.0% v/v, SURE-MIX <sup>TM</sup> at 0.5% v/v, LI 700 at 0.25% - 0.5% v/v, Liberate <sup>TM</sup> Adjuvant at 0.5% v/v, Companero® Adjuvant at 0.5% - 1.0% v/v	<ul> <li>GROUND APPLICATION ONLY.</li> <li>One application per year only.</li> <li>Apply a post-emergent tank-mix at the 1-3 trifoliate stage of beans.</li> <li>For the control of volunteer cereals, wild oats, and broadleaf weeds listed on the Basagran<sup>®</sup> Herbicide label.</li> <li>DO NOT apply within 65 days of harvest</li> </ul>
Rutabagas (Ontario and Quebec only)	0.36 – 0.72 L/ha ADAMA QUIZALOFOP PLUS MERGE® at 0.5% - 1.0% v/v, SURE-MIX <sup>TM</sup> at 0.5% v/v, LI 700 at 0.25% - 0.5% v/v, Liberate <sup>TM</sup> Adjuvant at 0.5% v/v, Companero® Adjuvant at 0.5% - 1.0% v/v	<ul> <li>GROUND APPLICATION ONLY.</li> <li>For the control of grassy weeds listed on the label, corn, and quackgrass.</li> <li>Apply at the 2-5-leaf stage of the annual grasses.</li> <li>One application per year.</li> <li>DO NOT apply within 30 days of harvest.</li> </ul>
Industrial Hemp for Fibre, Seed and Oil Production Soybeans (Ontario	0.365 – 0.72 L/ha ADAMA QUIZALOFOP PLUS MERGE® at 0.5% - 1.0% v/v, SURE-MIX <sup>TM</sup> at 0.5% v/v, LI 700 at 0.25% - 0.5% v/v, Liberate <sup>TM</sup> Adjuvant at 0.5% v/v, Companero® Adjuvant at 0.5% - 1.0% v/v 0.365 L/ha ADAMA QUIZALOFOP	<ul> <li>GROUND APPLICATION ONLY.</li> <li>One application per year only when the crop is at the 2-6 crop leaf stage (6-25 cm in height).</li> <li>Use in a minimum of 100 litres of water/ha with a spray pressure of 210-275 kPa.</li> <li>DO NOT apply within 73 days of harvest.</li> <li>GROUND APPLICATION ONLY.</li> <li>For the control of long-spined sandbur</li> </ul>
only)	PLUS           MERGE® at 0.5% - 1.0% v/v,           SURE-MIX <sup>TM</sup> at 0.5% v/v, LI 700           at 0.25% - 0.5% v/v, Liberate <sup>TM</sup> Adjuvant at 0.5% v/v, Companero®           Adjuvant at 0.5% - 1.0% v/v	<ul> <li>apply as a single post emergent spray at the 2 leaf to tillering stage of Long-spinged Sandbur.</li> <li>DO NOT apply within 80 days of harvest.</li> </ul>

# SECTION 13: MIXING INSTRUCTIONS

- 1. Make sure that spray tank is thoroughly cleaned before mixing.
- 2. Fill tank half full with water. KEEP AGITATOR RUNNING.
- 3. If tank mixing **ADAMA QUIZALOFOP** with another pesticide and/or adjuvant, use the following sequence:
  - a. Water conditioning agents
  - b. Wettable Powders (WP)
  - c. Dry Granules (WDG)
  - d. Suspension Concentrates (SC) or Flowables
  - e. Emulsifiable concentrates (EC) or oil based products (ADAMA QUIZALOFOP)
  - f. Surfactants (NIS, COC, MSO)
- 4. Ensure that the herbicide is completely mixed before proceeding to the next step.
- 5. Add the rest of the required water to the tank. Mix well before applying to the crop.

On repeat tank loads, ensure that the amount of spray solution left in the tank from the previous load is less than 10% of volume about to be mixed.

Do not mix, load or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

# SECTION 14: RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management **ADAMA QUIZALOFOP** is a Group 1 herbicide. Any weed population may contain or develop plants naturally resistant to **ADAMA QUIZALOFOP** and other Group 1 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 **ADAMA QUIZALOFOP** 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 company representatives at 1-855-264-6262 or at <u>www.adama.com</u>.

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