

GROUP	14	HERBICIDE
-------	----	-----------

REFLEX®
Liquid Herbicide

COMMERCIAL (AGRICULTURAL)

HERBICIDE

For selective pre- and post-emergence broadleaf weed control in soybeans, dry edible beans, snap common beans (yellow and green), dry shelled peas, succulent peas (shelled and edible-podded), cucumber, potatoes and perennial strawberries.

FOR SALE FOR USE IN EASTERN CANADA AND FOR SOYBEANS IN MANITOBA AND DRY EDIBLE BEANS IN THE RED RIVER VALLEY OF MANITOBA ONLY.

FOR USE ON CUCUMBER AND PERENNIAL STRAWBERRIES IN EASTERN CANADA AND BRITISH COLUMBIA ONLY.

FOR USE ON POTATOES, DRY SHELLED, SUCCULENT SHELLED AND EDIBLE PODED PEAS IN EASTERN CANADA ONLY.

ACTIVE INGREDIENT:

Fomesafen 240 g/litre
(as sodium salt)

Contains 1,2-benzisothiazolin-3-one at 0.048% and 2-bromo-2-nitropropane-1,3-diol at 0.03% as preservatives OR contains 5-chloro-2-methyl-4-isothiazolin-3-one at 0.001%, 2-methyl-4-isothiazolin-3-one at 0.0004% and 2-bromo-2-nitropropane-1,3-diol at 0.03% as preservatives.

**READ THE LABEL AND ATTACHED BOOKLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN**

**DANGER - CORROSIVE: CAUSES IRREVERSIBLE EYE DAMAGE. HARMFUL IF
SWALLOWED, INHALED OR ABSORBED THROUGH SKIN.**

REGISTRATION NO. **24779**
PEST CONTROL PRODUCTS ACT

NET CONTENTS: **10 L**

Syngenta Canada Inc.
140 Research Lane, Research Park
Guelph, Ontario N1G 4Z3
Telephone: 1-877-964-3682

Label

1.0 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. The user assumes the risk to persons or property that arises from any such use of this product.

2.0 FIRST AID

IN CASE OF POISONING, IMMEDIATELY contact a physician or a poison control centre. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

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 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.

GENERAL: Never give anything by mouth to an unconscious person. Remove person to a safe and uncontaminated area. Seek medical attention **IMMEDIATELY** if irritation persists or is severe.

3.0 TOXICOLOGICAL INFORMATION

There is no specific antidote for REFLEX® Liquid Herbicide. Treat symptomatically.

4.0 PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN

May be harmful if swallowed. May cause skin irritation. Do not get on skin or in eyes. Do not wear contact lenses when using chemicals.

CORROSIVE to the eye. DO NOT get in eyes.

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

Apply only when the potential for drift to areas of human habitation or areas of human activity such

as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

DO NOT APPLY by air.

DO NOT APPLY IN GREENHOUSES.

If this pest control product is to be used on a commodity that may be exported to other countries in the world and you require information on acceptable residue levels in these countries, please contact Syngenta Canada Inc. at 1-87-SYNGENTA / 1-877-964-3682.

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

5.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wear boots with socks, a long sleeve shirt and long pants or coveralls, chemical-resistant gloves and protective eyewear when handling the concentrate and during application (including mixing, loading, and spraying activities). Wash the outside of the gloves before removing. Wash splashes from skin and eyes **IMMEDIATELY** with plenty of water. Wear chemical-resistant gloves if contact with spray nozzles is necessary.

Avoid working in spray mist. Avoid all drift or contact with other vegetation. After spraying, wash hands and shower thoroughly with soap and water. While using product, do not eat, drink or handle tobacco. Wash hands and exposed skin with soap and water thoroughly before eating, drinking, handling tobacco, applying cosmetics or using the toilet.

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Wash splashes from skin **IMMEDIATELY** with plenty of water. Remove PPE immediately after handling this product. Wash the outside of gloves with soap and water before removing. As soon as possible, wash thoroughly and change into clean clothing. After spraying, wash hands and shower thoroughly with soap and water.

Heavily contaminated or drenched clothing and other absorbent materials contaminated with this product should be discarded. Do not reuse them.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Wear freshly laundered clothes daily.

Do not wear contaminated shoes.

6.0 ENVIRONMENTAL PRECAUTIONS

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

Fomesafen is persistent and may carryover. It is recommended that this product not be used in areas treated with any products containing fomesafen during the previous season.

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

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.

7.0 STORAGE

Store above 0°C. Storing REFLEX LIQUID Herbicide below 0°C can negatively affect product quality. Always store product in original container with top closed in a cool, dry place. Avoid contamination of seed, feed, fertilizers and foodstuffs. Store this product away from food or feed.

8.0 DISPOSAL

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.

For Recyclable Containers

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. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
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.

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING,
CALL 1-800-327-8633 (FASTMED)***

GROUP	14	HERBICIDE
-------	-----------	-----------

REFLEX®
Liquid Herbicide

COMMERCIAL (AGRICULTURAL)

HERBICIDE

For selective pre- and post-emergence broadleaf weed control in soybeans, dry edible beans, snap common beans (yellow and green), dry shelled peas, succulent peas (shelled and edible-podded), cucumber, potatoes and perennial strawberries.

FOR SALE FOR USE IN EASTERN CANADA AND FOR SOYBEANS IN MANITOBA AND DRY EDIBLE BEANS IN THE RED RIVER VALLEY OF MANITOBA ONLY.

FOR USE ON CUCUMBER AND PERENNIAL STRAWBERRIES IN EASTERN CANADA AND BRITISH COLUMBIA ONLY.

FOR USE ON POTATOES, DRY SHELLED, SUCCULENT SHELLED AND EDIBLE PODDED PEAS IN EASTERN CANADA ONLY.

ACTIVE INGREDIENT:

Fomesafen 240 g/litre
(as sodium salt)

Contains 1,2-benzisothiazolin-3-one at 0.048% and 2-bromo-2-nitropropane-1,3-diol at 0.03% as preservatives OR contains 5-chloro-2-methyl-4-isothiazolin-3-one at 0.001%, 2-methyl-4-isothiazolin-3-one at 0.0004% and 2-bromo-2-nitropropane-1,3-diol at 0.03% as preservatives.

**READ THE LABEL AND ATTACHED BOOKLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN**

**DANGER - CORROSIVE: CAUSES IRREVERSIBLE EYE DAMAGE. HARMFUL IF
SWALLOWED, INHALED OR ABSORBED THROUGH SKIN.**

REGISTRATION NO. **24779**
PEST CONTROL PRODUCTS ACT

Syngenta Canada Inc.
140 Research Lane, Research Park
Guelph, Ontario N1G 4Z3
Telephone: 1-877-964-3682

Pamphlet

Table of Contents

	<u>Section Number</u>
NOTICE TO USER	1.0
FIRST AID	2.0
TOXICOLOGICAL INFORMATION.....	3.0
PRECAUTIONS.....	4.0
PERSONAL PROTECTIVE EQUIPMENT (PPE)	5.0
ENVIRONMENTAL PRECAUTIONS	6.0
STORAGE	7.0
DISPOSAL	8.0
PRODUCT INFORMATION.....	9.0
DIRECTIONS FOR USE.....	10.0
General Information	10.1
Ground Application.....	10.2
Spray Buffer Zones	10.3
Pre-Harvest Intervals	10.4
Rotational Cropping Information	10.5
CROP USE DIRECTIONS	11.0
Timing of Application	11.1
Application Rates.....	11.2
Dry Edible Beans – Eastern Canada ONLY	11.3
Snap Common Beans (Yellow and Green) – Eastern Canada ONLY	11.4
Soybeans – Eastern Canada ONLY	11.5
Soybeans –Manitoba ONLY	11.6
MINOR USES	12.0
Lima Beans	12.1
Otebo Beans - Ontario ONLY.....	12.2
Soybeans – Control of Tall Waterhemp	12.3
Potatoes – Eastern Canada ONLY	12.4
Dry Edible Beans – Red River Valley of Manitoba ONLY	12.5
Dry Shelled Peas – Eastern Canada ONLY	12.6
Succulent Peas (Shelled and Edible-Podded) – Eastern Canada ONLY	12.7
Cucumber – Eastern Canada and British Columbia ONLY	12.8
Perennial Strawberries – Eastern Canada and British Columbia ONLY	12.9
Rotational Cropping Information	12.10
RESISTANCE MANAGEMENT RECOMMENDATIONS	13.0

1.0 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. The user assumes the risk to persons or property that arises from any such use of this product.

2.0 FIRST AID

IN CASE OF POISONING, IMMEDIATELY contact a physician or a poison control centre. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

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 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.

GENERAL: Never give anything by mouth to an unconscious person. Remove person to a safe and uncontaminated area. Seek medical attention **IMMEDIATELY** if irritation persists or is severe.

3.0 TOXICOLOGICAL INFORMATION

There is no specific antidote for REFLEX® Liquid Herbicide. Treat symptomatically.

4.0 PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN

May be harmful if swallowed. May cause skin irritation. Do not get on skin or in eyes. Do not wear contact lenses when using chemicals.

CORROSIVE to the eye. DO NOT get in eyes.

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

Apply only when the potential for drift to areas of human habitation or areas of human activity such

as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

DO NOT APPLY by air.

DO NOT APPLY IN GREENHOUSES.

If this pest control product is to be used on a commodity that may be exported to other countries in the world and you require information on acceptable residue levels in these countries, please contact Syngenta Canada Inc. at 1-87-SYNGENTA / 1-877-964-3682.

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

5.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wear boots with socks, a long sleeve shirt and long pants or coveralls, chemical-resistant gloves and protective eyewear when handling the concentrate and during application (including mixing, loading, and spraying activities). Wash the outside of the gloves before removing. Wash splashes from skin and eyes **IMMEDIATELY** with plenty of water. Wear chemical-resistant gloves if contact with spray nozzles is necessary.

Avoid working in spray mist. Avoid all drift or contact with other vegetation. After spraying, wash hands and shower thoroughly with soap and water. While using product, do not eat, drink or handle tobacco. Wash hands and exposed skin with soap and water thoroughly before eating, drinking, handling tobacco, applying cosmetics or using the toilet.

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Wash splashes from skin **IMMEDIATELY** with plenty of water. Remove PPE immediately after handling this product. Wash the outside of gloves with soap and water before removing. As soon as possible, wash thoroughly and change into clean clothing. After spraying, wash hands and shower thoroughly with soap and water.

Heavily contaminated or drenched clothing and other absorbent materials contaminated with this product should be discarded. Do not reuse them.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Wear freshly laundered clothes daily.

Do not wear contaminated shoes.

6.0 ENVIRONMENTAL PRECAUTIONS

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

Fomesafen is persistent and may carryover. It is recommended that this product not be used in areas treated with any products containing fomesafen during the previous season.

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

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.

7.0 STORAGE

Store above 0°C. Storing REFLEX LIQUID Herbicide below 0°C can negatively affect product quality. Always store product in original container with top closed in a cool, dry place. Avoid contamination of seed, feed, fertilizers and foodstuffs. Store this product away from food or feed.

8.0 DISPOSAL

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.

For Recyclable Containers

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. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
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.

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING,
CALL 1-800-327-8633 (FASTMED)***

9.0 PRODUCT INFORMATION

REFLEX Liquid Herbicide is a selective pre-and post-emergence herbicide for control of many

broadleaf weeds in soybeans, dry edible beans and snap common beans (yellow and green), dry shelled peas, succulent peas (shelled and edible-podded), cucumber, potatoes or perennial strawberries. These crops are tolerant to REFLEX Liquid Herbicide when applied at the labelled growth stages and suggested rates provided the crops have not been subjected to certain stress conditions such as cold temperatures, excessive moisture, drought, injury from hail or from prior herbicide applications. Avoid application to crops which may have been subjected to such stress conditions. Some bronzing, crinkling or spotting of soybean, dry edible bean and snap common bean leaves may occur, but plants normally outgrow these effects with no adverse effects on maturity or crop yield.

REFLEX Liquid Herbicide activity is unaffected by rain falling 4 hours after application.

10.0 DIRECTIONS FOR USE

10.1 General Information

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Do not treat any crop other than soybeans, dry edible beans, snap common beans (yellow and green), dry shelled peas, succulent peas (shelled and edible-podded), cucumber, potatoes or perennial strawberries.

Apply using ground equipment only.

DO NOT APPLY by air.

Do not apply when wind velocity is greater than 15 km/h.

Do not apply REFLEX Liquid Herbicide to any field more often than once every two years.

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 Syngenta Canada Inc. at 1-877-SYNGENTA (1-877-964-3682) for information before applying any tank mix that is not specifically recommended on this label.

Syngenta Canada Inc. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) of all potential tank-mixes under all environmental conditions or for all crop varieties. Tank mixes that are not specifically listed on this label should be tested on a small area first, under

local conditions and using standard practices, to confirm the tank mix is suitable for widespread application.

To determine the physical compatibility of this product with other products, use a jar test.

Always read and follow label directions including WALES mixing order.

10.2 Ground Application

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

10.3 Spray Buffer Zones

A spray buffer zone is NOT required for:

- Uses with hand-held application equipment permitted on this label
- 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).

Method of Application	Crops	Spray Buffer Zones (metres) Required for the Protection of Terrestrial Habitat:
Field sprayer	Soybean, dry edible beans, snap common beans, lima beans, otebo beans, cucumber, potato, strawberry	4

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 web site.

NOTE: For products where one or more other active ingredients are co-formulated with fomesafen, the most restrictive terrestrial and aquatic spray buffer zones will be required on the label.

10.4 Pre-Harvest Intervals

CROP	PRE-HARVEST INTERVAL
Soybeans	90 days
Dry edible beans	84 days
Dry shelled peas	77 days
Succulent peas (shelled and edible podded)	46 days
Perennial strawberries	77 days
Snap common beans	30 days
Cucumber	42 days
Lima beans	30 days

CAUTION: **DO NOT** graze the treated crop or cut for hay.

10.5 Rotational Cropping Information

REFLEX Liquid Herbicide can remain active in the soil for several months after application and the residues of REFLEX Liquid Herbicide present a potential carry-over damage to certain crops.

Refer to the table below for a list of crops that may be seeded following an application of REFLEX Liquid Herbicide at the recommended rates of 1.0 L/ha and 0.58 L/ha. Prior to seeding any crop that is not listed including sweet corn, a field bioassay should be conducted. A field bioassay involves seeding a test strip of the crop(s) intended for production the following year and growing the crop(s) to maturity.

Crop to be Planted	Minimum Rotation Interval (Months after Last REFLEX Liquid Herbicide Application at 0.58 L/ha)	Minimum Rotation Interval (Months after Last REFLEX Liquid Herbicide Application at 1.0 L/ha)
Winter Wheat ³	4	4
Spring wheat ²	10	10
Soybeans		
Dry edible beans ²		
Field corn ²		
Oats ¹		
Field peas ¹		
Canola ¹	Bioassay	
Sunflower ¹		
All other crops	Bioassay	

¹ Precipitation during the (April to October) year of application is equal or greater than the 30-year average for the local location.

² Precipitation during the (April to October) year of application is equal or greater than the 30-year average for the local location when applied outside the Red River Valley of Manitoba..

³ Bioassay required if located outside the Red River Valley.

Field Bioassay: Select an area in the field previously treated with REFLEX Liquid Herbicide which most closely approximates the soil conditions of the field as a whole. Test strips should be seeded perpendicular to the direction in which the site was sprayed using standard seeding equipment and following normal cultivation practices. Strips of sufficient length to transect several spray swaths should be seeded to the crops intended for later planting. Reliability of the bioassay results will increase with the number and length of the test strips used. A check strip in an adjacent, untreated area should also be seeded for comparison purposes.

Examine the test strips for possible germination or stand reductions and other symptoms of injury such as colour, vigour and height. Should results of the bioassay suggest that germination or plant development is affected by residues of REFLEX Liquid Herbicide, do not seed until a future bioassay indicates that growth of the crop is normal.

11.0 CROP USE DIRECTIONS

11.1 Timing of Application

Soybeans, dry edible beans and snap common beans are tolerant to REFLEX Liquid Herbicide application made to plants in the 1- to 2-trifoliolate leaf stage. Do not use before the 1st trifoliolate leaf stage or increased risk of crop injury may result.

REFLEX Liquid Herbicide provides pre- and post-emergent weed control. Post-emergent applications should be made when the main flush of weeds is complete and the majority of the weeds are at the cotyledon to 3 or 4 true leaf stage and actively growing. REFLEX Liquid Herbicide will control the weeds listed in the following table up to the specified maximum number of leaves. Later applications may result in poor weed control due to advanced weed growth.

WEEDS CONTROLLED	Maximum Number of Leaves
Redroot pigweed ¹	4
Common ragweed ¹	4
Wild mustard	4
Velvetleaf ²	3
Lady's-thumb	4
Lambsquarters ²	3
Eastern black nightshade	4
Cocklebur	4
Volunteer canola	4

¹REFLEX Liquid Herbicide also provides pre-emergent control of these weeds with 1 L/ha rate.

²Suppression only

11.2 Application Rates

REFLEX Liquid Herbicide acts primarily by contact, therefore, it is essential to achieve good coverage and ample penetration of the foliage in order to obtain acceptable weed control.

Do not apply REFLEX Liquid Herbicide to any field more often than once every two years.

Apply REFLEX Liquid Herbicide in a minimum of 200 L of water per hectare and at a pressure of 245 kPa. Increased water volume (350 L) and pressure (420 kPa) are recommended for fields with heavy weed densities and for weeds which are at the upper limit of their recommended stage for treatment. Do not increase the rate of REFLEX Liquid Herbicide. Do not apply at pressures which exceed 420 kPa.

11.3 Dry Edible Beans– Eastern Canada ONLY

DRY EDIBLE BEANS Eastern Canada ONLY	
CROP APPLICATION TIMING	1 -2 trifoliolate leaf
RATE/HA REFLEX LIQUID HERBICIDE	1.0 L
RATE ADJUVANT	0.1% v/v non-ionic surfactant OR 0.5% v/v crop oil concentrate
REFLEX LIQUID HERBICIDE PLUS VENTURE® L HERBICIDE	<p>REFLEX Liquid Herbicide alone will not control grass weeds. For control of both grass and broadleaf weeds REFLEX Liquid Herbicide can be tank mixed with VENTURE L Herbicide. Apply REFLEX Liquid Herbicide at 1.0 L/ha with VENTURE L Herbicide at 0.6 L/ha - 2.0 L/ha for control of broadleaf weeds listed on the REFLEX Liquid Herbicide label plus other weeds which appear on the VENTURE L Herbicide label as being controlled with the rate specified. Consult the VENTURE L Herbicide label for use directions, weeds controlled, and additional precautions and restrictions. Do not apply this tank mix later than the second trifoliolate leaf stage of the crop.</p> <p>Dry edible bean varieties may vary in their tolerance to herbicides, including the tank mix of REFLEX Liquid Herbicide plus VENTURE L Herbicide. Since not all dry common bean varieties have been tested for tolerance to the tank mix of REFLEX Liquid Herbicide plus VENTURE L Herbicide, first use of either should be limited to a small area of each variety to confirm tolerance prior to adoption as a general field practice.</p>

11.4 Snap Common Beans (Yellow and Green) – Eastern Canada Only)

SNAP COMMON BEANS (YELLOW AND GREEN) Eastern Canada ONLY	
CROP APPLICATION TIMING	1-2 trifoliolate leaf
RATE/HA REFLEX LIQUID HERBICIDE	1.0 L
RATE ADJUVANT	0.1% v/v non-ionic surfactant

11.5 Soybeans – Eastern Canada ONLY

SOYBEANS Eastern Canada ONLY	
CROP APPLICATION TIMING	1-2 trifoliolate leaf
RATE/HA REFLEX LIQUID HERBICIDE	1.0 L
RATE ADJUVANT	0.1% v/v non-ionic surfactant OR 0.5% v/v crop oil concentrate
REFLEX LIQUID HERBICIDE PLUS VENTURE L HERBICIDE	REFLEX Liquid Herbicide alone will not control grass weeds. For control of both grass and broadleaf weeds REFLEX Liquid Herbicide can be tank mixed with VENTURE L Herbicide. Apply REFLEX Liquid Herbicide at 1.0 L/ha with VENTURE L Herbicide at 0.6 L/ha-2.0 L/ha for control of broadleaf weeds listed on the REFLEX Liquid Herbicide label plus other weeds which appear on the VENTURE L Herbicide label as being controlled with the rate specified. Add non-ionic surfactant at 0.1% v/v or crop oil concentrate at 0.5% v/v of spray solution. Consult the VENTURE L Herbicide label for use directions, weeds controlled, and additional precautions and restrictions. Do not apply this tank mix later than the second trifoliolate leaf stage of the crop.
REFLEX LIQUID HERBICIDE PLUS PURSUIT® HERBICIDE	REFLEX Liquid Herbicide alone will not control grass weeds. For control of both grass and broadleaf weeds REFLEX Liquid Herbicide can be tank mixed with Pursuit Herbicide. Apply REFLEX Liquid Herbicide at 1.0 L/ha with Pursuit Herbicide at 0.312 L/ha for control of broadleaf weeds listed on the REFLEX Liquid Herbicide label plus other weeds which appear on the Pursuit Herbicide label as being controlled with the rate specified. Apply REFLEX Liquid Herbicide at 0.8 L/ha with Pursuit Herbicide at 0.312 L/ha for control of common ragweed at the cotyledon to 4-leaf growth stage plus other weeds as listed on the Pursuit Herbicide label. Add non-ionic surfactant at 0.25 L per 100 L of water (0.25% v/v) along with 28% Urea Ammonium Nitrate (UAN) liquid fertilizer as directed on the Pursuit Herbicide label. Consult the Pursuit Herbicide label for use directions, weeds controlled, and additional precautions and restrictions. Note: The level of annual grass control provided by Pursuit Herbicide may be slightly reduced when the product is applied in tank mixture with REFLEX Liquid Herbicide.

11.6 Soybeans –Manitoba ONLY

SOYBEANS Manitoba ONLY	
CROP APPLICATION TIMING	1-2 trifoliolate leaf
RATE/HA REFLEX LIQUID HERBICIDE	0.58 L/ha
RATE ADJUVANT	0.1% v/v non-ionic surfactant OR 0.5% v/v crop oil concentrate
REFLEX LIQUID HERBICIDE PLUS BASAGRAN® LIQUID HERBICIDE	Apply REFLEX Liquid Herbicide at 0.58 L/ha with Basagran Liquid Herbicide at 1.75 L/ha for control of broadleaf weeds listed on the REFLEX Liquid Herbicide label plus other weeds which appear on the Basagran Liquid Herbicide label as being controlled with the rate specified. Add non-ionic surfactant at 0.1% v/v or crop oil concentrate at 0.5% v/v of spray solution. Do not apply REFLEX Liquid Herbicide to any field more often than once every two years. Consult the Basagran Liquid Herbicide label for use directions, weeds controlled, and additional precautions and restrictions. Manitoba rate will not provide residual control of common ragweed or redroot pigweed.
GLYPHOSATE-TOLERANT SOYBEAN VARIETIES Manitoba ONLY	
NOTE: Always use pedigreed (i.e. certified) glyphosate-tolerant soybean varieties. Soybeans which are not designated as glyphosate-tolerant will be damaged or destroyed by this treatment.	
CROP APPLICATION TIMING	1-2 trifoliolate leaf
RATE/HA REFLEX LIQUID HERBICIDE	0.58 L/ha
RATE ADJUVANT	0.1% v/v non-ionic surfactant OR 0.5% v/v crop oil concentrate
REFLEX LIQUID HERBICIDE PLUS glyphosate	Apply REFLEX Liquid Herbicide at 0.58 L/ha with glyphosate herbicide registered for use on glyphosate-tolerant soybeans at 900-1800 g a.e./ha for control of volunteer canola and burndown of annual and perennial grasses and broadleaf weeds which appear on the glyphosate label as being controlled with the rate specified. Add non-ionic surfactant at 0.1% v/v or crop oil concentrate at 0.5% v/v of spray solution. Consult the glyphosate label for use directions, weed controlled, and additional precautions and restrictions.

12.0 MINOR USES**NOTE TO BUYER/USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR SPECIAL USE APPLICATIONS:**

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

ALWAYS REFER TO THE RESPECTIVE PRODUCT LABEL FOR FURTHER INFORMATION ON WEEDS CONTROLLED, APPLICATION DIRECTIONS, AND USE PRECAUTIONS.**12.1 Lima Beans**

WEEDS CONTROLLED	Labelled weeds Refer to full product label for complete listing of weeds controlled.
RATE OF APPLICATION	REFLEX Liquid Herbicide at 1.0 L/ha Include a non-ionic surfactant at 0.25% v/v of spray solution.
NUMBER OF APPLICATIONS	One
APPLICATION TIMING	1-2 trifoliolate stage of the beans
OTHER	Ground application only. DO NOT APPLY by air. Preharvest interval (PHI) of 30 days. Under certain growing conditions, some initial transient visual injury may occur following application, but there is no effect on yield. Do not apply REFLEX Liquid Herbicide to any field more often than once every two years.

12.2 Otebo Beans - Ontario ONLY

WEEDS CONTROLLED	Labelled weeds Refer to full product label for complete listing of weeds controlled.
RATE OF APPLICATION	REFLEX Liquid Herbicide at 1.0 L/ha Include a non-ionic surfactant at 0.25% v/v of spray solution.
NUMBER OF APPLICATIONS	One
APPLICATION TIMING	1-2 trifoliolate stage of the beans
OTHER	Ground application only. DO NOT APPLY by air. Under certain growing conditions, some initial transient visual injury may occur following application, but there is no effect on yield. Do not apply REFLEX Liquid Herbicide to any field more often than once every two years.

12.3 Soybeans – Control of Tall Waterhemp

WEEDS CONTROLLED	Tall Waterhemp
RATE OF APPLICATION	REFLEX Liquid Herbicide at 1.0 L/ha Include a non-ionic surfactant at 0.1% v/v or crop oil concentrate at 0.5% v/v of spray solution.
NUMBER OF APPLICATIONS	One
APPLICATION TIMING	1-2 trifoliolate stage of the beans Application should be made when the main flush of weeds is complete and the majority of the weeds are at the cotyledon to 3 or 4 true leaf stage.
OTHER	Ground application only. DO NOT APPLY by air. Under certain growing conditions, some initial transient visual injury may occur following application, but there is no effect on yield. Do not apply REFLEX Liquid Herbicide to any field more often than once every two years.

12.4 Potatoes - Eastern Canada ONLY

WEEDS CONTROLLED	Redroot pigweed, common ragweed
WEEDS SUPPRESSED	Lambquarters
RATE OF APPLICATION	REFLEX Liquid Herbicide at 1.0 L/ha If weeds are emerged at time of application, include a non-ionic surfactant at 0.1% v/v of spray solution.
NUMBER OF APPLICATIONS	One
APPLICATION TIMING	Pre-emergent prior to potato emergence.
OTHER	Ground application only. DO NOT APPLY by air. Do not apply on soils with >5% organic matter or fine textured soils. Do not cultivate for 7 days after application of REFLEX Liquid Herbicide as effectiveness will be reduced. Do not apply REFLEX Liquid Herbicide to any field more often than once every two years. Do not harvest potatoes within 70 days of application of REFLEX Liquid Herbicide.

12.5 Dry Edible Beans– Red River Valley of Manitoba ONLY

WEEDS CONTROLLED	Labelled weeds Refer to full product label for complete listing of weeds controlled.
RATE OF APPLICATION AND SPRAY VOLUME	REFLEX Liquid Herbicide at 580 mL/ha + 1.75 L/ha Basagran Liquid Herbicide + 0.1% v/v non-ionic surfactant (100mL/100L of spray solution) in a minimum of 200 L of water per hectare and a pressure of 245 kPa.
NUMBER OF APPLICATIONS	One
APPLICATION TIMING	Crop Stage: 1-2 trifoliolate leaf Weed Stage: 3-4 leaf
OTHER	Do not treat any crop other than dry edible beans. Ground application only. DO NOT APPLY by air. Increased water volume (350 L) and pressure (420 kPa) are recommended for fields with heavy weed densities and for weeds which are at the upper limit of their recommended stage for treatment. Do not increase the rate of REFLEX Liquid Herbicide. Do not apply at pressures which exceed 420 kPa. Do not apply REFLEX Liquid Herbicide to any field more often than once every two years. Preharvest Interval - Dry edible beans - 84 days. CAUTION: DO NOT graze the treated crop or cut for hay.

12.6 Dry Shelled Peas - Eastern Canada ONLY

WEEDS CONTROLLED	Labelled weeds
METHOD OF APPLICATION	Broadcast spray
RATE OF APPLICATION AND SPRAY VOLUME	REFLEX Liquid Herbicide at 1.0 L/ha If target weeds have emerged, REFLEX Liquid Herbicide must be used with a non-ionic surfactant at 0.1% v/v or crop oil concentrate at 0.25% v/v of spray solution. Spray volume: minimum 200 L/ha
NUMBER OF APPLICATIONS	One
APPLICATION TIMING	Apply after planting but prior to crop emergence.
OTHER	Do not use flood type or other spray nozzles, which deliver coarse, large droplet sprays. DO NOT APPLY by air. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding. DO NOT ROTATE TO ANOTHER CROP IN THE SAME SEASON. Do not apply REFLEX Liquid Herbicide to any field more often than once every two years.

12.7 Succulent Peas (Shelled and Edible-Podded) - Eastern Canada ONLY

Pea (succulent) varieties may vary in their response to REFLEX Liquid Herbicide. If soils are cold and wet during pea germination and emergence, the use of REFLEX Liquid Herbicide may delay maturity and/or reduce yields. When using REFLEX Liquid Herbicide for the first time on a particular variety, always determine crop tolerance before using. Plant only high quality seed and do not plant when unfavourable growing conditions exist.

WEEDS CONTROLLED	Labelled weeds
METHOD OF APPLICATION	Broadcast spray
RATE OF APPLICATION AND SPRAY VOLUME	REFLEX Liquid Herbicide at 1.0 L/ha If target weeds have emerged, REFLEX Liquid Herbicide must be used with a non-ionic surfactant at 0.1% v/v or crop oil concentrate at 0.25 %v/v of spray solution. Spray volume: minimum 200 L/ha
NUMBER OF APPLICATIONS	One
APPLICATION TIMING	Apply after planting but prior to crop emergence.
OTHER	Do not use flood type or other spray nozzles, which deliver coarse, large droplet sprays. DO NOT APPLY by air. Do not graze animals on green forage or stubble. Do not utilize hay or straw for animal feed or bedding. DO NOT ROTATE TO ANOTHER CROP IN THE SAME SEASON. Do not apply REFLEX Liquid Herbicide to any field more often than once every two years.

12.8 Cucumber - Eastern Canada and British Columbia ONLY

WEEDS CONTROLLED	Labelled weeds
METHOD OF APPLICATION	Banded application (ground only) to row middles
RATE OF APPLICATION AND SPRAY VOLUME	REFLEX Liquid Herbicide at 1.0 L/ha REFLEX Liquid Herbicide must be used with a non-ionic surfactant at 0.1% v/v or crop oil concentrate at 0.25 %v/v of spray solution if target weeds have emerged. Spray volume 200 L/ha
NUMBER OF APPLICATIONS	One
APPLICATION TIMING	Preemergent to the crop. Make application just after seeding but prior to crop emergence or just prior to transplanting cucumber plants.
PRE-HARVEST INTERVAL	42 days
OTHER	<p>Adjust rate according to band and row width. Leave a 30-cm (12-inch) untreated strip centered over the planted row.</p> <p>DO NOT APPLY by air.</p> <p>Do not apply REFLEX Liquid Herbicide to any field more often than once every two years.</p> <p>DO NOT ROTATE TO ANOTHER CROP IN THE SAME SEASON.</p> <p>Application of REFLEX Liquid Herbicide to cucumbers may result in phytotoxicity, if application is made too close to the plants. It is imperative to adjust rate according to band and row width and not to apply directly to cucumber plants. Some varieties of cucumber are more tolerant than others. It is recommended to test a small area before application to the entire crop.</p> <p>Rotational Cropping Information – REFLEX Liquid Herbicide can remain active in the soil for several months after application and the residues of REFLEX Liquid Herbicide presents a potential carry-over damage to certain crops.</p>

12.9 Perennial Strawberries - Eastern Canada and British Columbia ONLY

Strawberry cultivars may vary in their tolerance to herbicides, including REFLEX Liquid Herbicide. Since not all strawberry cultivars have been tested for tolerance to REFLEX Liquid Herbicide, first use of REFLEX Liquid Herbicide should be limited to a small area of each variety to confirm tolerance prior to adoption as a general field practice.

WEEDS CONTROLLED	Labelled weeds
METHOD OF APPLICATION	Broadcast spray
RATE OF APPLICATION AND SPRAY VOLUME	REFLEX Liquid Herbicide at 1.0 L/ha If target weeds have emerged, REFLEX Liquid Herbicide must be used with a non-ionic surfactant at 0.1% v/v or crop oil concentrate at 0.25 %v/v of spray solution. Apply REFLEX Liquid Herbicide in a minimum of 200 L of water per hectare and at a pressure of 245 kPa.
NUMBER OF APPLICATIONS	One
APPLICATION TIMING	Apply during dormancy in the fall or early winter (prior to snowfall)
OTHER	Do not apply to annual strawberries. Do not use flood type or other spray nozzles, which deliver coarse, large droplet sprays. If growing on plastic mulch, application must be made prior to laying the plastic mulch. DO NOT APPLY by air. Do not apply REFLEX Liquid Herbicide to any field more often than once every two years. DO NOT ROTATE TO ANOTHER CROP IN THE SAME SEASON. Rotational Cropping Information – REFLEX Liquid Herbicide can remain active in the soil for several months after application and the residues of REFLEX Liquid Herbicide presents a potential carry-over damage to certain crops.

12.10 Rotational Cropping Information

REFLEX Liquid Herbicide can remain active in the soil for several months after application and the residues of REFLEX Liquid Herbicide presents a potential carry-over damage to certain crops.

Refer to the table below for a list of crops that may be seeded following an application of REFLEX Liquid Herbicide at the recommended rate of 580 mL/ha. Prior to seeding any crop that is not listed including sweet corn, a field bioassay should be conducted. A field bioassay involves seeding a test strip of the crop(s) intended for production the following year and growing the crop(s) to maturity.

Crop to be Planted	Minimum Rotation Interval (Months After Last REFLEX Liquid Herbicide Application)
Winter Wheat	4
Spring Wheat	10
Soybeans, Dry edible beans, Field corn	10
All other crops	Bioassay

Field Bioassay: Select an area in the field previously treated with REFLEX Liquid Herbicide which most closely approximates the soil conditions of the field as a whole. Test strips should be seeded perpendicular to the direction in which the site was sprayed using standard seeding equipment and following normal cultivation practices. Strips of sufficient length to transect several spray swaths should be seeded to the crops intended for later planting. Reliability of the bioassay results will increase with the number and length of the test strips used. A check strip in an adjacent, untreated area should also be seeded for comparison purposes.

Examine the test strips for possible germination or stand reductions and other symptoms of injury such as colour, vigour and height. Should results of the bioassay suggest that germination or plant development is affected by residues of REFLEX Liquid Herbicide, do not seed until a future bioassay indicates that growth of the crop is normal.

13.0 RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, REFLEX Liquid Herbicide is a Group 14 herbicide. Any weed population may contain or develop plants naturally resistant to REFLEX Liquid Herbicide and other Group 14 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 REFLEX Liquid Herbicide or other Group 14 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 Syngenta company representatives at 1-877-SYNGENTA (1-877-964-3682) or at www.syngenta.ca.

REFLEX® and VENTURE® are trademarks of a Syngenta Group Company.
Basagran® and Pursuit® are trademarks of their respective companies.