



## Imazethapyr 240 SL

GROUP	2	HERBICIDE
-------	---	-----------

Herbicide Solution

COMMERCIAL (AGRICULTURAL)

ACTIVE INGREDIENT: Imazethapyr 240 g/L

REGISTRATION NO. 31156 PEST CONTROL PRODUCTS ACT

READ THE LABEL AND THIS BROCHURE BEFORE USING

KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: 1-1050 Litres

IN CASE OF SPILLS, POISONING OR FIRE TELEPHONE EMERGENCY  
RESPONSE NUMBER 1-800-667-3852 (24 HOURS A DAY).

**Production Agriscience Canada Company**

P. O. Box 730  
7398 Queen's Line  
Chatham, Ontario  
N7M 5L1  
519-352-6350

## **DIRECTIONS FOR USE**

### **GENERAL INFORMATION**

Imazethapyr 240 SL is a selective herbicide that can be applied as an early pre-plant, pre-plant incorporated, pre-emergent or post-emergent treatment in various crops. The application method depends upon the crop, anticipated weed spectrum and the preference of the applicator. With early pre-plant and pre-emergent treatments, susceptible weeds emerge, are present as stunted plants and then die. When Imazethapyr 240 SL is applied post-emergence, absorption may occur through both the roots and foliage. Susceptible weeds stop growing and eventually die.

### **Eastern Canada Directions**

Use Imazethapyr 240 SL at 312 mL (75 g active) – 420 mL (100 g active) in 400 L of water per hectare. See appropriate rate tables for specific application rates for each crop.

NOTE: A NONIONIC SURFACTANT CONTAINING AT LEAST 80% ACTIVE INGREDIENT (e.g. Agral 90, AG-Surf) at the rate of 0.25% (v/v) MUST BE ADDED to the spray solution (2.5 L of surfactant per 1000 L of spray solution).

### **REGISTERED CROPS**

Adzuki Beans  
Alfalfa Grown for Seed Production  
Dry Common Beans (black, Dutch brown, kidney, white, yellow eye and cranberry beans only)  
Lima Beans (Ontario only)  
Processing Peas  
Snap Beans  
Snow Peas  
Soybeans

### **MOISTURE REQUIREMENTS**

As with most soil-applied herbicides, pre-emergent applications of Imazethapyr 240 SL require moisture for activation. Soil-applied Imazethapyr 240 SL requires sufficient water within 7 days of application to moisten the soil to a depth of 5 cm for activation. If adequate moisture is not received within 7 to 10 days of application, perform a shallow inter-row cultivation 5-8 cm deep using a roller or S-tine cultivator to control escaped weeds until the field receives adequate moisture. For early pre-plant applications (soybeans only), more than 7-10 days may elapse before the receipt of adequate precipitation to activate the herbicide and reduce the risk of weed escapes. Growers preferring surface applications of herbicides may choose this type of application of Imazethapyr 240 SL.

### **PLANT BACK RESTRICTIONS AND ROTATIONAL CROPS**

In cases of crop failure, replant only soybeans, kidney beans, cranberry beans, Dutch brown beans, black beans, yellow eye beans, white beans, lima beans, adzuki beans and processing peas in the year of application. Winter wheat may also be re-planted in cases of crop failure or as a rotational crop 100 days following an Imazethapyr 240 SL application. Soil preparation for re-planting should be no deeper than 10 cm.

Field corn, soybeans, winter wheat, spring wheat, spring barley, kidney beans, cranberry beans, Dutch brown beans, black beans, yellow eye beans, white beans, lima beans, adzuki beans and processing peas may be planted the season following an Imazethapyr 240 SL application. Conduct a field bioassay (a test strip grown to maturity) the year BEFORE growing any other crop.

### **APPLICATION INSTRUCTIONS**

#### **CROP: SOYBEANS**

Apply Imazethapyr 240 SL as an early pre-plant, pre-plant incorporated, pre-emergent or postemergent treatment in soybeans.

For fields that contain weeds other than those listed in the “Weed Control in Soybeans: Imazethapyr 240 SL Alone” table, tank mix for broad-spectrum weed control (see “Herbicide Tank Mix Options – Soybeans”). The choice of product for tank mixing will depend on the specific weed(s) to be controlled. Consult the labels of the tank mix products to determine which product will provide control of the specific weeds present in the field.

### Weed Control in Soybeans: Imazethapyr 240 SL Alone

Weeds	Application Timing					
	Early Pre-plant (prior to weed emergence)	Early Pre-plant (emerged weeds prior to 2 leaf stage)	Pre-plant Incorporated	Pre-Emergent	Early Post-emergent (before weeds reach 2 leaf stage)	Post-emergent (maximum leaf stage)
<b>Broadleaf weeds</b>						
Lamb’s quarters	C	PC	C <sup>2</sup>	C	PC	
Redroot pigweed	C	C	C	C	C	C(12)
Smartweed	C			C		
Lady’s thumb	C			C <sup>3</sup>		
Wild mustard	C	C	C	C	C	
Velvetleaf	C <sup>1</sup>	C <sup>1</sup>	C <sup>1</sup>	C <sup>1</sup>	C <sup>1</sup>	C(8)
Ragweed, common			PC <sup>2</sup>	C <sup>3</sup>		
Ragweed		PC			C <sup>4</sup>	
Eastern black nightshade	PC	C	C	C	C	
Wild buckwheat		PC			C	
Cocklebur		C <sup>1</sup>			C <sup>1,4</sup>	
<b>Grasses</b>						
Foxtail, green and yellow	C	C	C	C	C	C(4)
Barnyard grass	C	PC	PC <sup>2</sup>	C <sup>3</sup>	C <sup>4</sup>	C(6)
Old witchgrass	C			C <sup>3</sup>	C	
Proso millet	PC	PC	PC	PC	PC	
Crabgrass, large					PC	
<b>Perennials</b>						
Yellow nutsedge					PC	

C = Control PC = Partial Control and Reduces Competition

<sup>1</sup> Some plants of velvetleaf and/or cocklebur that germinate deeper in the soil and emerge late may escape treatment.

<sup>2</sup> Tank mixing is recommended for fields with a history of heavy infestations of this weed species.

<sup>3</sup> The higher label rate or tank mixing is recommended for fields with a history of heavy infestations of this weed species.

<sup>4</sup> The higher label rate is required for heavy infestations of this weed species.

### Herbicide Tank Mix Options - Soybeans

Tank Mix Option	Application Timing			
	Early Pre-plant	Pre-plant Incorporated	Pre-Emergent	Post-emergent
Gramoxone	X <sup>1</sup>			
Roundup <sup>4</sup> or Glyphos	X <sup>1</sup>			X <sup>1,3</sup>
Roundup + FirstRate	X <sup>2</sup>			
Sencor/Lexone		X <sup>1,2</sup>	X <sup>1</sup>	
Treflan/Rival/Trifluralin or Edge		X <sup>1</sup>		

Lorox/Afolan/Linuron			X <sup>1</sup>	
Basagran				X <sup>1,2</sup>
Basagran Forte				X <sup>1,2</sup>

<sup>1</sup> Refer to the label of the specific tank mix product for information regarding: rates, recommendations, precautions and restrictions.

<sup>2</sup> Refer to Tank Mix Options under the appropriate Application Timing in this label.

<sup>3</sup> Glyphosate Tolerant Soybeans only (i.e., varieties with the Roundup Ready). Refer to CROP: GLYPHOSATE TOLERANT gene SOYBEANS section.

<sup>4</sup> Roundup Original Liquid Herbicide, Roundup Transorb Liquid Herbicide or Roundup WeatherMax with Transorb 2 Technology Liquid Herbicide.

Timing	<b>Early Pre-plant Application - Soybeans</b> Apply Imazethapyr 240 SL up to 30 days before planting in conventional, reduced tillage or no-till soybeans. Imazethapyr 240 SL alone may be applied as a surface application using this technique. Only one additional working of the soil to prepare the seedbed is recommended following the application. This final seedbed preparation should not work the soil deeper than 10 cm. Deeper tillage will result in reduced concentration of herbicide in the weed germination zone and reduction in weed control. DO NOT plow following the application.				
Rate	Early Pre-plant – Prior to Weed Emergence	420 mL/ha			
	Early Pre-plant – to Emerged Weeds (before the weeds reach the 2 true leaf stage).	420 mL/ha + non-ionic surfactant. Nonionic surfactant MUST BE ADDED. Liquid fertilizer added to the spray solution will provide quicker burndown of weed			
Water Volume	100-400 L/ha				
Surfactant/ Adjuvant	For Early Pre-plant – to Emerged Weeds: Non-ionic surfactant – 0.25% v/v (e.g. 2.5 L/1000 L of spray solution) Liquid fertilizer solution - 2 L/ha				
Weeds Controlled	See “Weed Control in Soybeans” table above.				
Remark	Plant only soybeans during the season of application.				
Tank Mix Options	Imazethapyr 240 SL may also be tank mixed with the herbicides listed in the “Herbicide Tank Mix Options – Soybeans” table. Always follow the most conservative rates, recommendations, precautions and restrictions on the tank mix labels. For the combined tank mix with Roundup and FirstRate, use the following:				
	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Rates</td> <td>Imazethapyr 240 SL – 312 mL/ha Roundup – 2.5 L/ha (0.900 kg ai/ha) FirstRate – 21 g/ha (0.0175 kg ai/ha)</td> </tr> <tr> <td>Water Volume</td> <td>100-400 L/ha</td> </tr> </table> <p><b>Comments:</b> This tank mix provides control of emerged weeds found on the Roundup herbicide label and residual control of germinating weeds found on the Imazethapyr 240 SL and FirstRate herbicide labels. Temporary crop injury may occur, however, yield will not normally be affected. Avoid sprayer overlap. Severe crop injury will occur.</p>		Rates	Imazethapyr 240 SL – 312 mL/ha Roundup – 2.5 L/ha (0.900 kg ai/ha) FirstRate – 21 g/ha (0.0175 kg ai/ha)	Water Volume
Rates	Imazethapyr 240 SL – 312 mL/ha Roundup – 2.5 L/ha (0.900 kg ai/ha) FirstRate – 21 g/ha (0.0175 kg ai/ha)				
Water Volume	100-400 L/ha				

Timing	<b>Pre-plant Incorporated Application - Soybeans</b> Incorporate Imazethapyr 240 SL evenly throughout the top 5 cm of the soil profile. Incorporation may be achieved with a double pass using discs or cultivator operated at 8 to 12 kph with the second pass at an angle to the first. Cultivators must have 3 or 4 rows of flexible sweeps staggered and spaced less than 15 cm apart followed by a drag or rolling basket to ensure no soil is left unturned.
--------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Rate	312 mL/ha												
Water Volume	100-400 L/ha												
Weeds Controlled	See "Weed Control in Soybeans" table above.												
Remark	DO NOT apply Imazethapyr 240 SL as a pre-plant incorporated application more than one year in sequence. Allow at least 24 months between pre-plant incorporated applications.												
Tank Mix Options	<p>For fields that contain heavy lamb's-quarters, common ragweed and/or barnyard grass infestations or weeds other than those listed under "Imazethapyr 240 SL Alone", tank mixing may be required to provide broad-spectrum weed control (see "Herbicide Tank Mix Options – Soybeans" table). Follow the most conservative rates, recommendations, precautions and restrictions on the tank mix labels. For Sencore and Lexone herbicide, refer to the following table for rates:</p> <table border="1" data-bbox="370 667 1412 892"> <thead> <tr> <th rowspan="2">Soil Texture<sup>1</sup></th> <th colspan="2">Application Rate (g/ha)</th> </tr> <tr> <th>Sencore 75DF</th> <th>Lexone 75 DF</th> </tr> </thead> <tbody> <tr> <td>Medium (loam, silt loam, silt, sandy clay, sandy clay loam)</td> <td>750</td> <td>540</td> </tr> <tr> <td>Heavy (silty clay, silty clay loam, clay and clay loam)</td> <td>750</td> <td>640</td> </tr> </tbody> </table> <p><sup>1</sup> Do not use on light (loamy sand, sandy loam) textured soils. Do not use on soil with less than 2% organic matter.</p>		Soil Texture <sup>1</sup>	Application Rate (g/ha)		Sencore 75DF	Lexone 75 DF	Medium (loam, silt loam, silt, sandy clay, sandy clay loam)	750	540	Heavy (silty clay, silty clay loam, clay and clay loam)	750	640
Soil Texture <sup>1</sup>	Application Rate (g/ha)												
	Sencore 75DF	Lexone 75 DF											
Medium (loam, silt loam, silt, sandy clay, sandy clay loam)	750	540											
Heavy (silty clay, silty clay loam, clay and clay loam)	750	640											

Timing	<b>Pre-emergent Application - Soybeans</b> Pre-emergent applications of Imazethapyr 240 SL may be applied before the crop and weeds emerge.	
Rate	312 - 420 mL/ha	
Water Volume	100-400 L/ha	
Weeds Controlled	See "Weed Control in Soybeans" table above.	
Tank Mix Options	For fields that contain heavy infestations of common ragweed, old witchgrass, barnyard grass, lady's-thumb or weeds other than those listed under "Imazethapyr 240 SL Alone", tank mixing may be required to provide broad-spectrum weed control (see "Herbicide Tank Mix Options – Soybeans" table). Follow the most conservative rates, recommendations, precautions and restrictions on the tank mix labels.	
Timing	<b>Early and Late Post-emergent Application - Soybeans</b> Apply Imazethapyr 240 SL early post-emergent after the crop has emerged and before the weeds reach the 2 true leaf stage. Imazethapyr 240 SL may also be applied late post-emergent after the crop has emerged for control of certain weed species up to the growth stages indicated in the "Weed Control in Soybeans: Imazethapyr 240 SL Alone" table. To minimize weed competition with the crop, application should be made as early as possible after weed emergence.	
Rate	Early Post-emergent – (before the weeds reach the 2 true leaf stage)	312-420 mL/ha + non-ionic surfactant + liquid fertilizer
	Late Post-emergent	420 mL/ha + non-ionic surfactant + liquid Fertilizer.
Water Volume	100-400 L/ha	
Surfactant/ Adjuvant	Non-ionic surfactant – 0.25% v/v (e.g. 2.5 L/1000 L of spray solution) Liquid fertilizer solution (10-34-0, 28-0-0 or 32-0-0) - 2 L/ha	

Weeds Controlled	See "Weed Control in Soybeans" table above.
Remark	Addition to the spray solution of a non-ionic surfactant plus liquid fertilizer is essential for post-emergent application, improving uptake of the product by weeds resulting in improved herbicidal activity. Avoid applications when weeds and/or crop are under growth stress. Stunting of the crop may result following post-emergence application. This condition is the result of stem inter-node shortening but will not result in yield reduction.
Tank Mix Options	Imazethapyr 240 SL may also be tank mixed with the herbicides listed in the "Herbicide Tank Mix Options – Soybeans" table. Always follow the most conservative rates, recommendations, precautions and restrictions on the tank mix labels. <b>Comments:</b> Use the 312 mL/ha rate of Imazethapyr 240 SL when tank mixed with Basagran or Basagran Forte herbicide. For Imazethapyr 240 SL plus Basagran herbicide, a non-ionic surfactant at the rate of 0.25% (v/v) and fertilizer solution at the rate of 2 L/ha MUST BE ADDED to the spray solution. For Imazethapyr 240 SL plus Basagran Forte herbicide, only fertilizer solution MUST BE ADDED at the rate of 2 L/ha.

**CROP: GLYPHOSATE TOLERANT SOYBEANS  
(i.e., varieties with the Roundup Ready gene)**

Timing	<b>Post-emergent Application</b> For broadleaf and grass weeds other than those listed in "Weed Control in Soybeans: Imazethapyr 240 SL Alone" table, Imazethapyr 240 SL may be tank mixed with Roundup herbicide and applied to Roundup Ready soybeans. Follow the rates, application timings, recommendations, precautions and restrictions on the Roundup herbicide label. Refer to the Roundup herbicide label for adjuvant recommendations.
Rate	312 mL/ha
Water Volume	100-400 L/ha
Remarks	<b>WARNING</b> Apply Imazethapyr 240 SL + Roundup herbicide tank mix ONLY to glyphosate tolerant soybeans, i.e. varieties with the Roundup Ready gene. <b>SOYBEANS WHICH ARE NOT DESIGNATED AS GLYPHOSATE TOLERANT WILL BE DAMAGED OR DESTROYED BY THIS TREATMENT.</b>

**CROP: EDIBLE BEANS (including kidney beans, cranberry beans, Dutch brown beans, black beans, lima beans (Ontario only), yellow eye beans, white beans and adzuki beans)**

Apply Imazethapyr 240 SL as a pre-emergent treatment in kidney beans, cranberry beans, Dutch brown beans, black beans, yellow eye beans, white beans, adzuki beans and lima beans (Ontario only), and as a pre-plant incorporated treatment in white beans, kidney beans, cranberry beans and adzuki beans.

**Weed Control in Edible Beans: Imazethapyr 240 SL Alone**

Weeds	Application Timing	
	Pre-Emergent	Pre-plant Incorporated (kidney beans, cranberry beans, white beans and adzuki beans only)
<b>Broadleaf weeds</b>		
Lamb's quarters	C	C
Redroot pigweed	C	C
Smartweed	C	C

Lady's thumb	C	C
Wild mustard	C	C
Velvetleaf	C <sup>1</sup>	C <sup>1</sup>
Ragweed, common	PC	PC
Eastern black nightshade	C	C
<b>Grasses</b>		
Foxtail, green and yellow	C	C
Proso millet	PC	PC

C = Control                      PC = Partial Control and Reduced Competition

<sup>1</sup> Some plants of velvetleaf that germinate deeper in the soil and emerge late may escape treatment.

Timing	<b>Pre-emergent Application – Edible Beans</b>
Rate	312 mL/ha
Water Volume	100-400 L/ha
Tanks Mix Options	For fields that contain heavy infestations of broadleaf weeds other than those listed under "Imazethapyr 240 SL Alone", tank mixing may be required to provide broad-spectrum weed control. <b>Cranberry and Kidney Beans</b> Tank mix Imazethapyr 240 SL with 1.15 – 1.75 L/ha (1.05-1.60 kg ai/ha) of Dual Magnum herbicide to control labelled broadleaf weeds and grasses in cranberry beans and kidney beans. Refer to the Dual Magnum herbicide label for additional recommendations, precautions and restrictions not specified on this label.

Timing	<b>Pre-plant Incorporated Application (kidney beans, cranberry beans, white beans; adzuki beans in Eastern Canada only)</b>
Rate	312 mL/ha
Water Volume	100-400 L/ha
Tanks Mix Options	<b>White Beans</b> Tank mix Imazethapyr 240 SL with 1.25-2.4 L/ha of Treflan herbicide to control a broader spectrum of weeds in white beans only. Follow recommendations, precautions and restrictions on the Treflan herbicide label. Consult the tank mix partner label for weeds controlled other than those listed for Imazethapyr 240 SL alone. <b>Cranberry and Kidney Beans</b> Tank mix Imazethapyr 240 SL with 1.15 – 1.75 L/ha (1.05-1.60 kg ai/ha) of Dual Magnum herbicide to control labelled broadleaf weeds and grasses in cranberry beans and kidney beans. Refer to the Dual Magnum herbicide label for additional recommendations, precautions and restrictions not specified on this label.

**CROP: PROCESSING PEAS**

Timing	<b>Pre-emergent or Pre-plant Incorporated Application</b>
Rate	312 mL/ha
Water Volume	200 L/ha
Weeds Controlled	See "Imazethapyr 240 SL Alone: Weed Control in Soybeans"

**CROP: SNOW PEAS**

Timing	<b>Pre-emergent or Pre-plant Incorporated Application</b>
Rate	312 mL/ha
Water Volume	100-400 L/ha
Weeds Controlled	See "Imazethapyr 240 SL Alone: Weed Control in Soybeans"

**CROP: SNAP BEANS**

Timing	<b>Pre-emergent or Pre-plant Incorporated Application</b>
Rate	312 mL/ha
Water Volume	200 L/ha
Weeds Controlled	See "Imazethapyr 240 SL Alone: Weed Control in Soybeans"

**CROP: ALFALFA GROWN FOR SEED PRODUCTION**

Timing	<b>Pre-emergent or Pre-plant Incorporated Application</b>
Rate	312-420 mL/ha
Water Volume	200 L/ha
Surfactant/ Adjuvant	A non-ionic surfactant at the rate of 0.25% (v/v) <b>MUST BE ADDED</b> to the spray solution (e.g., 2.5 L of surfactant per 1000 L of spray solution). Fertilizer Solutions <b>MUST BE ADDED</b> to the spray solution at the rate of 2 L/ha to provide quicker burndown of weeds.
Weeds Controlled	See "Imazethapyr 240 SL Alone: Weed Control in Soybeans"

**MIXING INSTRUCTIONS**

1. Ensure the spray tank is clean before use. Follow the clean-out recommendations stated on the label of the product that was previously used.
2. Fill the spray tank one-half full to three-quarters full of water and start agitation.
3. Using a calibrated measuring device, add the required amount of tank mix partner (refer to the tank mixture section of each crop for tank mixtures).
4. Mix thoroughly.
5. Using a separate calibrated measuring device, add the required amount of Imazethapyr 240 SL to the tank while agitating the spray solution.
6. While the solution remains agitating, add the required amount of non-ionic surfactant if required.
7. If required, add the required amount of liquid fertilizer (28-0-0, 10-34-0 or 32-0-0) to the spray solution.
8. Continue agitation while filling the remainder of the spray tank with water.
9. Clean the spray tank after use.

**ENVIRONMENTAL PRECAUTIONS**

Imazethapyr 240 SL is toxic to aquatic organisms.

DO NOT apply this product directly to aquatic habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches, and wetlands), estuaries, or marine habitats.

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

**RESTRICTIONS AND LIMITATIONS**

1. DO NOT APPLY IMAZETHAPYR 240 SL BY AIR. APPLY WITH GROUND EQUIPMENT ONLY.
2. DO NOT over apply Imazethapyr 240 SL. Over application may result in injury particularly if the crop is under stress.
3. Crop Pre-harvest Interval

Crop	Application to Harvest Interval (days)
Soybeans	100
Dry Beans <sup>1</sup>	100
Lima Beans	90
Processing Peas	50
Snow Peas	60
Snap Beans	40

<sup>1</sup> kidney, adzuki, Dutch brown, black, yellow eye, white and cranberry beans

4. CAUTION: Do not graze treated crops or cut for hay, sufficient data are not available to support such use.
5. DO NOT let spray drift contaminate crops in adjacent fields.



6. ONLY ONE (1) application of Imazethapyr 240 SL may be made during the season.
7. DO NOT apply Imazethapyr 240 SL as a pre-plant incorporated application in all crops more than one year in sequence. Allow at least 24 months between pre-plant incorporated applications.
8. Emerged weeds in pre-emergent applications which reach the 2 - 3 true leaf stage might be considered as escapes. Shallow cultivation or application of a post-emergent herbicide is recommended. DO NOT cultivate deeply.
9. DO NOT apply Imazethapyr 240 SL when crop is under stress conditions because crop injury may result.
10. Post-emergent application of Imazethapyr 240 SL to soybeans may cause stunting. This condition is the result of stem inter-node shortening and does not cause yield reductions if Imazethapyr 240 SL has been used at label rates and following label recommendations.
11. Imazethapyr 240 SL may cause stunting or delayed maturity in white beans and kidney beans. Stunting is the result of stem inter-node shortening and should not cause yield reductions if Imazethapyr 240 SL has been used at label rates and following label recommendations.
12. Over-spray or drift to important wildlife habitats such as shelterbelts, water-bodies, wetlands, woodlots, vegetated ditch-banks, hedgerows and other cover on the edge of fields should be avoided. Leave a 15-meter buffer zone between the last spray swath and the edge of any of these habitats.

## WESTERN CANADA DIRECTIONS

### DIRECTIONS FOR USE ON FIELD PEAS

Imazethapyr 240 SL is a selective herbicide that can be applied as an early post-emergence treatment in field peas. When Imazethapyr 240 SL is applied early post-emergence, absorption may occur through both the roots and foliage. Susceptible weeds stop growing and eventually die.

**SOIL ZONES:** Black and grey wooded soils

**CROPS:** Field peas up until the sixth (6th) trifoliate leaf stage

### ROTATIONAL CROPS

There is the possibility of residual soil activity from Imazethapyr 240 SL the year following application. Research studies have shown the following crops can be safely grown in black and grey wooded soil zones the year following an Imazethapyr 240 SL application:

Spring barley, spring wheat, lentils, alfalfa, field peas

Conduct a field bioassay (a test strip grown to maturity) the year BEFORE growing any other crop than those listed above.

### RATES

Apply 50 g active (a.e.) in 100 to 400 litres of water per hectare. Equivalent to 210 mL of product per hectare.

**NOTE: A NONIONIC SURFACTANT CONTAINING AT LEAST 80% ACTIVE INGREDIENT (e.g. Agral 90, AG-Surf) at the rate of 0.25% (v/v) MUST BE ADDED to the spray solution (2.5 L of surfactant per 1000 L of spray solution).**

### BROADLEAF WEED and GRASS CONTROL POST-EMERGENCE APPLICATIONS

Imazethapyr 240 SL, by early post-emergence application up to the 4 true leaf stage of the weeds, will control:

Chickweed	Cleavers
Green foxtail	Hemp-nettle
Redroot pigweed	Shepherd's purse
Stinkweed	Smartweed

Volunteer canola  
Wild mustard

Wild buckwheat\*\*  
Wild oats\*

\* For control of wild oats apply Imazethapyr 240 SL between the 2-4 leaf stage of the weed.

\*\* Suppression only

### **MIXING INSTRUCTIONS**

Fill the spray tank one-half to three-quarters full with water. Using a calibrated measuring device, add the required amount of Imazethapyr 240 SL while agitating the spray solution. While the solution remains agitating, add the required amount of non-ionic surfactant. Fill the remainder of the tank with water.

### **WARNINGS**

An interval of 60 days must follow the Imazethapyr 240 SL application before field peas are harvested.

Field peas treated with Imazethapyr 240 SL may be fed to livestock 30 days after application. DO NOT over-apply Imazethapyr 240 SL. Over application may result in injury particularly if the crop is under stress.

DO NOT let spray drift contaminate crops other than those being sprayed.  
ONLY ONE (1) application of Imazethapyr 240 SL may be made during the season.  
DO NOT tank-mix Imazethapyr 240 SL.

In cases of crop failure, only field peas may be re-planted in the year of application.

**DO NOT APPLY BY AERIAL APPLICATION - GROUND APPLICATION ONLY.**

Over-spray or drift to important wildlife habitats such as shelterbelts, water bodies, wetlands and woodlots, vegetated ditch banks, hedgerows & other cover on the edge of the field should be avoided. Leave a 15-meter buffer zone between the last spray swath and the edge of any of these habitats.

### **DIRECTIONS FOR USE ON NEWLY SEEDED PURE STAND ALFALFA FOR FORAGE OR SEED PRODUCTION**

Imazethapyr 240 SL is a selective herbicide that can be applied as an early post-emergence treatment in newly seeded pure stand alfalfa in the year of establishment. Imazethapyr 240 SL may be applied when the crop has developed at least one (1) fully expanded trifoliolate leaf and up to and including the 4 leaf stage of susceptible weeds. Do not spray before all weeds have emerged. When Imazethapyr 240 SL is applied early post-emergence, absorption may occur through both the roots and foliage. Susceptible weeds stop growing and eventually die.

### **CROPS**

Imazethapyr 240 SL may be used on pure stand alfalfa in the year of establishment in the black, grey wooded and irrigated brown soil zones.

### **USE**

Imazethapyr 240 SL is intended for use on pure stand alfalfa in the year of establishment, on stands that will remain for 3 or more years

### **ROTATIONAL CROPS**

In the event of crop failure, only field peas may be replanted during the same season as the Imazethapyr 240 SL application. Do not apply 2 applications of Imazethapyr 240 SL within the same year.

If necessary, spring wheat, lentils, field peas or alfalfa may be planted the season following an Imazethapyr 240 SL application in the black, grey wooded and irrigated brown soil zones. Barley may also be planted in the black and grey wooded soil zones the season following application. Conduct a field bioassay (a test strip grown to maturity) BEFORE growing any other crop.

## RATES

Apply 50 grams active (a.e.) in 100 to 400 litres of water per hectare.  
Equivalent to 210 mL of product per hectare.

**NOTE: For early post-emergence applications a NONIONIC SURFACTANT CONTAINING AT LEAST 80% ACTIVE INGREDIENT (Agral 90, AG-Surf) at the rate of 0.25% (v/v) MUST BE ADDED to the spray solution (e.g., 2.5 L of surfactant per 1000 L of spray solution).**

## BROADLEAF WEED and GRASS CONTROL

### EARLY POST-EMERGENCE APPLICATIONS

Imazethapyr 240 SL, by early post-emergence application (up to and including the 4 leaf stage of susceptible weeds) will control:

**Broadleaf weeds:** Redroot pigweed, Wild mustard, Stinkweed, Volunteer canola and Green smartweed

In addition, Imazethapyr 240 SL provides partial control of and reduces competition from:  
Common groundsel, Green foxtail, Shepherd's purse

### MIXING INSTRUCTIONS

Fill the spray tank one-half to three-quarters full with water. Using a calibrated measuring device, add the required amount of Imazethapyr 240 SL while agitating the spray solution. While the solution remains agitating, add the required amount of non-ionic surfactant. Fill the remainder of the tank with water.

### WARNINGS

**Apply only in the year of establishment and only after the crop has one fully developed trifoliate leaf.**

DO NOT over-apply Imazethapyr 240 SL. Over application may result in injury particularly if the crop is under stress.

DO NOT let spray drift contaminate crops other than those being sprayed.

ONLY ONE (1) application of Imazethapyr 240 SL may be made during the life of the alfalfa stand.

DO NOT tank-mix Imazethapyr 240 SL.

In cases of crop failure, only field peas may be re-planted in the year of application.

DO NOT graze or harvest for forage until 14 days after treatment.

Mature seed from treated plants should not be used for human consumption.

Over-spray or drift to important wildlife habitats such as shelterbelts, water bodies, wetlands, woodlots, vegetated ditch banks, hedgerows and other cover should be avoided. Leave a 15meter buffer zone between the last spray swath and the edge of any of these habitats.

DO NOT APPLY BY AERIAL APPLICATION - GROUND EQUIPMENT ONLY.

### DIRECTIONS FOR USE ON ESTABLISHED ALFALFA FOR SEED PRODUCTION PURPOSES

CROP	WEEDS CONTROLLED	RATE	DIRECTIONS
Established alfalfa for seed production	Stinkweed, wild mustard, volunteer canola, redroot pigweed and suppression of green foxtail	50 g a.e./ha	One application per year; post-emergent; ground application; apply before alfalfa reaches 30 cm. Do not use Imazethapyr 240 SL in the last year of the alfalfa stand.

**DIRECTIONS FOR USE ON DRY BEANS (PINTO, PINK, RED)**

CROP	PEST	RATE	DIRECTIONS
Dry beans – pinto, pink, red	Hairy nightshade	50 g a.e./ha	One application per year; ground sprayer; apply in 100 - 400 L water/ha; post-emergence; apply up to the 2nd trifoliolate leaf stage of the dry bean; up to 6 leaf stage of hairy nightshade; black, grey wooded and irrigated brown soil zones only; PHI of 75 days.

**DIRECTIONS FOR USE ON CHICKLING VETCH (FOR SEED PRODUCTION ONLY)**

CROP	PEST	RATE	DIRECTIONS
Chickling vetch/ grass pea	Labelled weeds	50 g a.e./ha	One application per year; post-emergent; ground application; PHI 60 days; apply at the 5-7 leaf stage of chickling vetch/grass pea.

**DIRECTIONS FOR USE ON SOYBEANS (MANITOBA ONLY)**

CROP	PEST	RATE	DIRECTIONS
Soybeans	Annual grass and broadleaf weeds	50 g a.e./ha plus non-ionic surfactant at 0.25% v/v	Apply as post-emergent application once per season at 1 to 3 leaves of soybean growth; ground application only; PHI 85 days.

**RESISTANCE MANAGEMENT RECOMMENDATIONS:**

For resistance management, Imazethapyr 240 SL is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to Imazethapyr 240 SL and other Group 2 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance:

- Where possible, rotate the use of Imazethapyr 240 SL or other Group 2 herbicides within a growing season (sequence) or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as the more resistance-prone partner.
- Herbicide use should be based on an integrated weed management program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical control methods), cultural (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Monitor weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.

- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact your local Production Agriscience Canada Company representative or the Production Agriscience Canada Company hotline at 1-800-667-3852.

## **PRECAUTIONS**

- KEEP OUT OF REACH OF CHILDREN.
- This product may be harmful if swallowed, inhaled or absorbed through the skin.
- Do not contaminate food or feed products.
- Avoid contact with eyes, skin and clothing.
- Avoid breathing vapour or spray mist. Use with adequate ventilation.
- May cause eye damage. May cause skin irritation.
- Wear dust and/or splash-proof goggles or face shield and chemically resistant gloves when mixing, loading and during application, clean-up and repair.
- Wear long-sleeved shirt and long-legged pants when handling.
- Do not eat, drink or smoke when using.
- Wash hands and face before eating, drinking, smoking and using the toilet.
- Wash thoroughly with soap and water after handling.
- Take a shower IMMEDIATELY after work.
- Store and wash all protective clothing separately from normal laundry.
- Clean protective equipment (gloves, goggles, face shield) upon removal with soapy water.
- Clean spray equipment thoroughly after use. Wash in detergent and hot water before reuse.
- Wear freshly laundered clothes daily.
- DO NOT APPLY BY AIR.

## **STORAGE**

- Store the leftover product in original tightly closed container.
- Keep product from freezing. DO NOT store below 0°C. If the product is exposed to temperatures below 0°C during shipment or storage, make sure the product has thawed completely, and shake the container vigorously.
- DO NOT ship or store the product near food, feed, seed and fertilizers.
- Store the product in cool, dry, locked, well-ventilated areas without floor drain.

## **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.

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.

## **FIRST AID**

**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.

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

## **TOXICOLOGICAL INFORMATION**

Treat symptomatically.

## **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.

100118

Label Code: CN-31156-001-E - rev

Specimen Label Notes

Branding update