Container label

GROUP 2 HERBICIDE

ADAMA

PHANTOM® 240 SL

Herbicide Solution

COMMERCIAL (AGRICULTURAL)

ACTIVE INGREDIENT: Imazethapyr. 240 g/L

REGISTRATION NO. 30017 PEST CONTROL PRODUCTS ACT

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

NET CONTENTS: 1-1050 Litres

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

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)

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.

ENVIRONMENTAL PRECAUTIONS

Toxic to aquatic organisms.

Surface Runoff

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. 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.

STORAGE

- 1. Store this product away from food or feed.
- 2. Store the leftover product in original tightly closed container.
- 3. 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.
- 4. DO NOT ship or store the product near food, feed, seed and fertilizers.
- 5. 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/territorial requirements.

For information on the disposal of unused, unwanted product, contact the manufacture 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.

Phantom is a registered trademark of an ADAMA Group Company. All other trademarks are the property of their respective owners.

Booklet label

GROUP 2 HERBICIDE

ADAMA

PHANTOM® 240 SL

Herbicide Solution

COMMERCIAL (AGRICULTURAL)

ACTIVE INGREDIENT: Imazethapyr. 240 g/L

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

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- 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.
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- 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.
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- Wear freshly laundered clothes daily.
- DO NOT apply by air.

ENVIRONMENTAL PRECAUTIONS

Toxic to aquatic organisms.

Surface Runoff

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.

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NOTICE TO USER

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DIRECTIONS FOR USE

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.

PHANTOM 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 PHANTOM 240 SL is applied post-emergence, absorption may occur through both the roots and foliage. Susceptible weeds stop growing and eventually die.

APPLICATION INSTRUCTIONS

Do not enter or allow entry intro treated areas during the restricted-entry interval of 12 hours.

Apply only when the potential for drift to areas of human habitation and areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversion, application equipment and sprayer settings.

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.

DO NOT apply by air.

SPRAY BUFFER ZONES

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands) and sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands).

Method of Application	Cron	Spray Buffer Zones (metres) Required for the Protection of:		
	Сгор	Freshwater Habitat of Depths	Terrestrial Habitat	
Field sprayer	All crops	1	1	

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

The spray buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

TANK MIX

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.

EASTERN CANADA DIRECTIONS

Use PHANTOM 240 SL at 312 mL (75 g active) - 420 mL (100 g active) in 400 L of water per hectare. For post-emergent application to glyphosate tolerant soybeans, 210 mL (50 g active) - 312 mL (75 g active) per hectare may be applied in tankmix with glyphosate. 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 of the species *Phaseolus vulgaris* ^{1,2} Lima Beans (Ontario only) Processing Peas Snap Beans Snow Peas Soybeans

¹ Dry common bean varieties may vary in their tolerance to herbicides, including PHANTOM 240 SL. Since not all dry common bean varieties have been tested for tolerance to PHANTOM 240 SL, first use of PHANTOM 240 SL 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 PHANTOM 240 SL. ² Including, but not limited to: Dutch brown, kidney, yellow eye, cranberry, black and white beans.

MOISTURE REQUIREMENTS

As with most soil-applied herbicides, pre-emergent applications of PHANTOM 240 SL require moisture for activation. Soil-applied PHANTOM 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 PHANTOM 240 SL.

PLANT BACK RESTRICTIONS AND ROTATIONAL CROPS

In cases of crop failure, replant only soybeans, all types of dry common beans of the species *Phaseolus vulgaris*, 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 a PHANTOM 240 SL application. Soil preparation for re-planting should be no deeper than 10 cm.

Field corn, soybeans, winter wheat, spring wheat, spring barley, all types of dry common beans of the species *Phaseolus vulgaris*, lima beans, adzuki beans and processing peas may be planted the season following a PHANTOM 240 SL application. Conduct a field bioassay (a test strip grown to maturity) the year BEFORE growing any other crop.

CROP: SOYBEANS

Apply PHANTOM 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: PHANTOM 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.

	Application Timing					
	Early Pre-	Early Pre-	Pre-plant	Pre-	Early Post-	Late Post-
	plant	plant	Incorporated	Emergent	Emergent	Emergent
Weeds	(prior to	(emerged			(before	(maximum
	weed	weeds prior			weeds reach	U
	emergence)	to 2 true leaf			2 leaf stage)	parentheses)
		stage)				
Broadleaf weeds						
Lamb's quarters	С	PC	C^2	C	PC	
Redroot pigweed	С	С	С	C	С	C (12)
Smartweed	С			C		
Lady's thumb	С			C ³		
Wild mustard	С	С	С	С	С	
Velvetleaf	C1	C^1	C ¹	C ¹	C^1	C (8)
Ragweed, common	С	PC	PC^2	C ³	C^4	
Ragweed, giant					PC^5	PC (10)
Eastern black nightshade	PC	C	С	C	C	
Wild buckwheat		PC			С	
Cocklebur		C ¹			C ^{1, 4}	
Grasses						
Foxtail, green and yellow	С	C	C	С	C	C (4)
Barnyard grass	С	PC	PC^2	C ³	C^4	C (6)

Weed Control in Soybeans: PHANTOM 240 SL Alone

Old witchgrass	С			C ³	С	
Proso millet	PC	PC	PC	PC	PC	
Crabgrass, large					PC	
Perennials						
Yellow nutsedge					PC	

C = Control PC = Partial Control and Reduces Competition

- ¹ Some plants of velvetleaf and/or cocklebur that germinate deeper in the soil and emerge late may escape treatment.
- 2 Tank mixing is recommended for fields with a history of heavy infestations of this weed species.
- ³ The higher label rate or tank mixing is recommended for fields with a history of heavy infestations of this weed species.
- ⁴ The higher label rate is required for heavy infestations of this weed species.

⁵ The higher label rate is required.

HERBICIDE TANK MIX OPTIONS - SOYBEANS

Application Timing					
Early Pre-plant	Pre-plant Incorporated	Pre-emergent	Early and Late Post-emergent		
Х			X^2		
\mathbf{X}^{1}					
	X ¹	Х			
	Х				
		Х			
			\mathbf{X}^1		
			\mathbf{X}^1		
	Pre-plant X	Early Pre-plantPre-plantPre-plantIncorporatedXX1X1X1	Early Pre-plant IncorporatedPre-plant Pre-emergentXXX1XX1X1X2X1X1XX1X		

1 Refer to Tank Mix Options under the appropriate Application Timing in this label.

2 Glyphosate Tolerant Soybeans only (i.e., varieties with the Roundup Ready®). Refer to CROP: GLYPHOSATE TOLERANT gene SOYBEANS section.

3 Roundup Transorb® Liquid Herbicide, Roundup WeatherMax® with Transorb 2 Technology Liquid Herbicide or Roundup Ultra® Liquid Herbicide.

Timing	Early Pre-plant Application - Soybear	IS		
C C	Apply PHANTOM 240 SL up to 30 day	s before planting in conventional, reduced tillage		
	or no-till soybeans. PHANTOM 240 SL alone may be applied as a surface application			
	using this technique. Only one additiona	l working of the soil to prepare the seedbed is		
	recommended following the application.	This final seedbed preparation should not work		
	0 11	e will result in reduced concentration of herbicide		
		tion in weed control. DO NOT plow following the		
	application.			
Rate	Early Pre-plant – Prior to Weed	420 mL/ha		
	Emergence			
	Early Pre-plant – to Emerged Weeds	420 mL/ha + non-ionic surfactant. Nonionic		
	(before the weeds reach the 2 true leaf	surfactant MUST BE ADDED. Liquid fertilizer		
	stage).	added to the spray solution will provide quicker		
		burndown of weed		
Water Volume	lume 100-400 L/ha			
Surfactant/	For Early Pre-plant – to Emerged Weeds:			
Adjuvant	Non-ionic surfactant – 0.25% v/v (e.g. 2.5 L/1000 L of spray solution) Liquid fertilizer			
-	solution - 2 L/ha			

Weeds	See "Weed Control i	in Soybeans" table above.	
Controlled			
Remark	Plant only soybeans during the season of application.		
Tank Mix		may also be tank mixed with the herbicides listed in the "Herbicide	
Options	Tank Mix Options –	Soybeans" table.	
	For the combined tar	nk mix with Roundup and FirstRate, use the following:	
	Rates	PHANTOM 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	
	Comments: This tank mix provides control of emerged weeds found on the Roundup		
	herbicide label and residual control of germinating weeds found on the PHANTOM 240		
		bicide labels. Temporary crop injury may occur, however, yield will	
	not normally be affe	cted. Avoid sprayer overlap. Severe crop injury will occur.	

Timing	Pre-plant Incorporated Application - Soybeans				
		Incorporate PHANTOM 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	•	•	-	
	of flexible sweeps staggered and spa	•			
	rolling basket to ensure no soil is lef		1	, ,	
Rate	312 mL/ha				
Water Volum	ne 100-400 L/ha				
Weeds	See "Weed Control in Soybeans" tal	ble above.			
Controlled	5				
Remark	DO NOT apply PHANTOM 240 SL	as a pre-plant inc	orporated applica	tion more than one	
	year in sequence. Allow at least 24 r				
Tank Mix	For fields that contain heavy		plication Rate pe		
Options	lamb's-quarters, common ragweed and/or barnyard grass infestations or weeds other than those listed under "PHANTOM 240 SL Alone", tank mixing may be required to provide broad- spectrum weed control (see "Herbicide Tank Mix Options – Soybeans" table). For Sencor and Lexone herbicide, refer to the following table for rates: Soil Texture ¹	Sencor 75DF	Sencor 480 F	Lexone 75 DF	
	Medium (loam, silt loam, silt, sandy clay, sandy clay loam)	750 g	1.1 L	540 g	
	Heavy (silty clay, silty clay loam, clay and clay loam)	750 g	1.1 L	640 g	
	1 Do not use on light (loamy sand, s than 2% organic matter.	andy loam) textur	ed soils. Do not u	se on soil with less	
Timing	Pre-emergent Application - Soybe		1 1 11 6	.1 1	

0	Pre-emergent applications of PHANTOM 240 SL may be applied before the crop and
	weeds emerge.

Rate	312 - 420 mL/ha
Water Volume	100-400 L/ha
Weeds	See "Weed Control in Soybeans" table above.
Controlled	
Tank Mix	For fields that contain heavy infestations of common ragweed, old witchgrass, barnyard
Options	grass, lady's-thumb or weeds other than those listed under "PHANTOM 240 SL Alone",
	tank mixing may be required to provide broad-spectrum weed control (see "Herbicide
	Tank Mix Options – Soybeans" table).

Timing	Early and Late Post-emergent Applicat				
	Apply PHANTOM 240 SL early post-emergent after the crop has emerged and before the				
	weeds reach the 2 true leaf stage. PHANTOM 240 SL may also be applied late post-emergent after the crop has emerged fo				
		growth stages indicated in the "Weed Control in			
	5	ble. To minimize weed competition with the			
	crop, application should be made as early				
Rate	Early Post-emergent – (before the weeds				
	reach the 2 true leaf stage)	fertilizer			
	Late Post-emergent	420 mL/ha + non-ionic surfactant + liquid			
		fertilizer.			
	ne 100-400 L/ha				
Surfactant/	Non-ionic surfactant – 0.25% v/v (e.g. 2.5	1 5			
Adjuvant	Liquid fertilizer solution (10-34-0, 28-0-0				
Weeds	See "Weed Control in Soybeans" table ab	ove.			
Controlled					
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				
Tank Mix	PHANTOM 240 SL may also be tank mixed with the herbicides listed in the "Herbicide				
Options	Tank Mix Options – Soybeans" table.				
	Comments:				
	Use the 312 mL/ha rate of PHANTOM 240 SL when tank mixed with Basagran or				
	Basagran Forte herbicide.				
	For PHANTOM 240 SL plus Basagran herbicide, a non-ionic surfactant at the rate of				
	0.25% (v/v) and fertilizer solution (10-34-0, 28-0-0 or 32-0-0) at the rate of 2 L/ha MUST				
	BE ADDED to the spray solution.				
	For PHANTOM 240 SL plus Basagran Fo	orte herbicide, only fertilizer solution MUST BE			
	ADDED at the rate of 2 L/ha.				
	For PHANTOM 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	Post-emergent Application
	For broadleaf and grass weeds other than those listed in "Weed Control in Soybeans:
	PHANTOM 240 SL Alone" table, PHANTOM 240 SL may be tank mixed with

	Roundup ^{®1} herbicide and applied to Roundup Ready soybeans.
	. Refer to the Roundup herbicide labels for adjuvant recommendations.
	¹ Roundup Transorb Liquid Herbicide, Roundup WeatherMax with Transorb 2 Technology
	Liquid Herbicide or Roundup Ultra Liquid Herbicide.
Rate	210 - 312 mL/ha
Water Volume	100 - 400 L/ha
Alternative	PHANTOM 240 SL at 160 - 210 mL/ha
PHANTOM	Tankmixing PHANTOM 240 SL at 160 - 210 mL/ha with glyphosate will provide residual
240 SL Rate	control of late germinating eastern black nightshade, common lamb's quarters, redroot
	pigweed, velvetleaf, fall panicum and wild proso millet. Use 900 g a.e./ha of glyphosate ¹
	and apply up to and including the 3rd trifoliate leaf stage of Roundup Ready soybeans in
	100-200 litres per hectare of clean water. Use higher rate for heavier infestations.
	Consult the glyphosate label for weeds controlled by glyphosate. ¹ 900 g a.e. glyphosate/ha
	is equivalent to 2.5 L/ha of Roundup Transorb Liquid Herbicide or, or 1.67 L/ha of
	Roundup WeatherMax with Transorb 2 Technology Liquid Herbicide or Roundup Ultra
	Liquid Herbicide
Remarks	WARNING
	Apply PHANTOM 240 SL + Roundup herbicide tank mix ONLY to glyphosate tolerant
	soybeans, i.e. varieties with the Roundup Ready gene.
	SOYBEANS WHICH ARE NOT DESIGNATED AS GLYPHOSATE TOLERANT
	WILL BE DAMAGED OR DESTROYED BY THIS TREATMENT.

CROP: EDIBLE BEANS (including dry common beans of the species *Phaseolus vulgaris*^{1,2}, lima beans (Ontario only) and adzuki beans)

Apply PHANTOM 240 SL as a pre-emergent treatment in dry common beans of the species *Phaseolus vulgaris*, adzuki beans and lima beans (Ontario only), and as a pre-plant incorporated treatment in dry common beans of the species *Phaseolus vulgaris* and adzuki beans.

¹ Dry common bean varieties may vary in their tolerance to herbicides, including PHANTOM 240 SL. Since not all dry common bean varieties have been tested for tolerance to PHANTOM 240 SL, first use of PHANTOM 240 SL 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 PHANTOM 240 SL.

² Including, but not limited to: Dutch brown, kidney, yellow eye, cranberry, black and white beans

Weed Control in Edible Beans: PHANTOM 240 SL Alone

	Application Timing	
Weeds	Pre-	Pre-plant Incorporated (dry common beans of the species
	Emergent	Phaseolus vulgaris and adzuki beans only)
Broadleaf weeds		
Lamb's quarters	С	С
Redroot pigweed	С	С
Smartweed	С	С
Lady's thumb	C	С
Wild mustard	С	С

Velvetleaf	C^1	C^1
Ragweed, common	PC	PC
Eastern black nightshade	С	С
Grasses		
Foxtail, green and yellow	С	С
Proso millet	PC	PC
C = Control	DC = Dct	tial Control and Dadward Compatition

C = Control PC = Partial Control and Reduced Competition

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

Timing	Pre-emergent Application – Edible Beans
Rate	312 mL/ha
Water Volume	100-400 L/ha
Options	For fields that contain heavy infestations of broadleaf weeds other than those listed under "PHANTOM 240 SL Alone", tank mixing may be required to provide broad-spectrum weed control.
	Cranberry and Kidney Beans Tank mix PHANTOM 240 SL with 1.15 – 1.75 L/ha (1.05-1.60 kg ai/ha) of Dual® Magnum®/Dual II Magnum herbicide to control labelled broadleaf weeds and grasses in cranberry beans and kidney beans.

Timing	Pre-plant Incorporated Application (dry common beans of the species <i>Phaseolus</i>
	vulgaris and adzuki beans only)
Rate	312 mL/ha
Water Volum	ne 100-400 L/ha
Weeds	See "Weed Control in Edible Beans" table above.
Controlled	
Tanks Mix	White Beans
Options	Tank mix PHANTOM 240 SL with 1.25-2.4 L/ha of Treflan Liquid EC H erbicide to control a broader spectrum of weeds in white beans only. Consult the tank mix partner label for weeds controlled other than those listed for PHANTOM 240 SL alone.
	Dry Common Beans of the Species <i>Phaseolus vulgaris</i> ^{1,2} Tank mix PHANTOM 240 SL with $1.15 - 1.75$ L/ha (1.05 - 1.60 kg ai/ha) of Dual Magnum/Dual II Magnum herbicide to control labelled broadleaf weeds and grasses in dry common beans.
	¹ NOTE: Dry common bean varieties may vary in their tolerance to herbicides, including the tankmix of PHANTOM 240 SL plus Dual Magnum/Dual II Magnum. Since not all dry common bean varieties have been tested for tolerance to the tankmix of PHANTOM 240 SL plus Dual Magnum/Dual II Magnum, first use of this tankmix 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 the tankmix of PHANTOM 240 SL plus Dual Magnum/Dual II Magnum. ² CAUTION: Beans should be seeded at least 4 cm deep or crop injury may result.

CROP: PROCESSING PEAS

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

CROP: SNOW PEAS

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

CROP: SNAP BEANS

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

CROP: ALFALFA GROWN FOR SEED PRODUCTION

Timing	Post-emergent Application	
	Apply early post-emergent when weeds are less than 7.5 cm (3 in.) tall. Apply	
	only after the crop has only fully developed trifoliate leaf.	
Rate	312-420 mL/ha	
Water Volume	200 L/ha	
Surfactant/ Adjuvant	A non-ionic surfactant 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). Fertilizer solutions (10-34-0, 28-0-0 or 32-0-0) MUST BE ADDED to the spray solution at the rate of 2 L/ha to provide quicker burndown of weeds.	
Weeds Controlled	See "PHANTOM 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 PHANTOM 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.

RESTRICTIONS AND LIMITATIONS

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

Сгор	Application to Harvest Interval (days)
Soybeans	100
Dry Common Beans of the species <i>Phaseolus vulgaris</i> and Adzuki Beans	100
Lima Beans	90
Processing Peas	50
Snow Peas	60
Snap Beans	40

- 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 PHANTOM 240 SL may be made during the season.
- 7. DO NOT apply PHANTOM 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 PHANTOM 240 SL when crop is under stress conditions because crop injury may result.
- 10. Post-emergent application of PHANTOM 240 SL to soybeans may cause stunting. This condition is the result of stem inter-node shortening and does not cause yield reductions if PHANTOM 240 SL has been used at label rates and following label recommendations.
- 11. PHANTOM 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 PHANTOM 240 SL has been used at label rates and following label recommendations.

WESTERN CANADA DIRECTIONS

REGISTERED SOIL ZONES

PHANTOM 240 SL is only registered in the black and grey wooded soil zones of the Prairie Provinces. PHANTOM 240 SL is not registered for use in the brown and dark brown soil zones with the exception of dry beans and alfalfa (newly seeded purestand for forage or seed production) under irrigation.

REGISTERED CROPS

Phantom 240 SL is registered for use as an early post-emergence in the following crops:

Alfalfa (Newly seeded purestand for forage or seed production and established for seed production) Chickling Vetch / Grass Pea (seed production only) Dry Beans (Pinto, Pink, Red) Field Peas Soybeans (Manitoba only)

PLANT BACK RESTRICTIONS AND ROTATIONAL CROPS

There is the possibility of residual soil activity from PHANTOM 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 a PHANTOM 240 SL application:

0 - 12 months after application In case of crop failure, the following crops can	1 year after application The following crops can be planted in the	
be planted in the same season:	following season:	
	spring barley,	
	spring wheat,	
field peas,	lentils,	
imazethapyr and imazamox tolerant canola (e.g.	alfalfa,	
canola varieties with the Clearfield® trait)	field peas,	
	imazethapyr and imazamox tolerant canola (e.g.	
	canola varieties with the Clearfield trait)	
Conduct a field bioassay (a test strip grown to maturity) the year BEFORE growing any other		
crop than those listed above.		

RATES

Apply 210 mL (equivalent to 50 g active ingredient) in 100 to 400 litres of water 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

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

Chickweed Green foxtail Redroot pigweed Stinkweed Volunteer canola Wild mustard Cleavers Hemp-nettle Shepherd's purse Smartweed Wild buckwheat** Wild oats**

** Suppression only

DIRECTIONS FOR USE ON FIELD PEAS

Timing	Forly post americance
	Early post-emergence
Soil Zones	PHANTOM 240 SL when applied alone may be used on field peas in black and
_	grey wooded soils
Rate	210 mL/ha + adjuvant
Weeds Controlled	See BROADLEAF WEED and GRASS CONTROL EARLY POST-
	EMERGENCE APPLICATIONS.
Remarks	PHANTOM 240 SL is a selective herbicide that can be applied as an early post-
	emergence treatment in field peas.
	Apply in field peas up until the sixth (6th) trifoliate leaf stage.
	An interval of 60 days must follow the PHANTOM 240 SL application before
	field peas are harvested. Field peas treated with PHANTOM 240 SL may be fed
	to livestock 30 days after application.
	In some of one failure, only field need on incorethouse and incore to leave to
	In cases of crop failure, only field peas or imazethapyr and imazamox tolerant
	canola (e.g. canola varieties with the Clearfield trait) may be re-planted in the
	year of application.
Tank Mix option:	DAVAI® 80SL Herbicide at 200 mL/ha + PHANTOM 240 SL at 65 mL/ha +
	Merge® Adjuvant at 0.5% v/v, ADAMA Adjuvant 80 at 0.25% v/v, NORAC
	MSO at 0.5% v/v, Hasten® NT Ultra at 0.5% v/v or Agral 90 at 0.25% v/v
Area of Use	FOR USE IN THE PRAIRIE PROVINCES AND INTERIOR OF BRITISH
	COLUMBIA (INCLUDING THE PEACE RIVER REGION) ONLY
Weeds Controlled	Tame oat, yellow foxtail, green smartweed, lamb's quarters
Weeds Suppressed	Barnyard grass, volunteer barley, volunteer canola (non-Clearfield), wild
	buckwheat
Timing	Apply from the 1 - 6 true leaf stage of field peas after weeds
	have emerged.
	Apply when broadleaf weeds are from the cotyledon to 4-leaf stage
	and when grassy weeds are at the 1 - 4 true leaf or early tillering.
Pre-harvest Interval	60 days
Remarks	For field peas, initial transient crop yellowing may be observed after
	application but this is outgrown and should not affect yield.

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

Timing	Early post-emergence
Soil Zones	PHANTOM 240 SL may be used on pure stand alfalfa in the year of
	establishment in the black, grey wooded and irrigated brown soil zones.
Rate	210 mL/ha + adjuvant
Weeds Controlled	See BROADLEAF WEED and GRASS CONTROL EARLY POST-
	EMERGENCE APPLICATIONS.
Remarks	PHANTOM 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. PHANTOM 240 SL may be applied when the crop has developed at least one (1) fully expanded trifoliate leaf and up to and including the 4-leaf stage of susceptible weeds.
	Do not spray before all weeds have emerged.

PHANTOM 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.
Apply only in the year of establishment and only after the crop has one fully developed trifoliate leaf.
ONLY ONE (1) application of PHANTOM 240 SL may be made during the life of the alfalfa stand.
DO NOT graze or harvest for forage until 14 days after treatment.
Mature seed from treated plants should not be used for human consumption.

DIRECTIONS FOR USE ON ESTABLISHED ALFALFA FOR SEED PRODUCTION PURPOSES

Timing	Early post-emergence	
Soil Zones	PHANTOM 240 SL may be used on established alfalfa for seed production in	
	the black and grey wooded soil zones.	
Rate	210 mL/ha + adjuvant	
Weeds Controlled		
	Stinkweed, wild mustard, volunteer canola, redroot pigweed.	
	In addition, PHANTOM 240 SL provides suppression of green foxtail.	
Remarks	One application per year; post- emergent; ground application; apply before	
	alfalfa reaches 30 cm. Do not use PHANTOM 240 SL in the last year of the	
	alfalfa stand.	

DIRECTIONS FOR USE ON DRY BEANS

Timing	Early post-emergence	
Soil Zones	PHANTOM 240 SL when applied alone may be used on dry beans (Pinto, Pink,	
	Red) in the black, grey wooded and irrigated brown soil zones only.	
Rate	210 mL/ha + adjuvant	
Weeds Controlled	Hairy nightshade.	
Remarks	One application per year.	
	Ground sprayer; apply in 100 - 400 L water/ha; post-emergence	
	Apply up to the 2 nd trifoliate leaf stage of the dry bean	
	Apply up to 6 leaf stage of hairy nightshade	
	Pre-harvest interval (PHI) of 75 days.	
Tank Mix option:	DAVAI 80SL Herbicide at 200 mL/ha + PHANTOM 240 SL at 65 mL/ha +	
	Merge Adjuvant at 0.5% v/v, ADAMA Adjuvant 80 at 0.25% v/v, NORAC	
	MSO at 0.5% v/v, Hasten NT Ultra at 0.5% v/v or Agral 90 at 0.25% v/v	
Crop	Dry beans (including but not limited to Pinto, Pink and Red)	
Area of Use	FOR USE IN THE PRAIRIE PROVINCES AND INTERIOR OF BRITISH	
	COLUMBIA (INCLUDING THE PEACE RIVER REGION) ONLY	
Weeds Controlled	Tame oat, yellow foxtail, green smartweed, lamb's quarters	
Weeds Suppressed	Barnyard grass, volunteer barley, volunteer canola (non-Clearfield), wild	
	buckwheat	

Timing	Apply from emergence to the second trifoliate leaf after weeds have emerged.	
Pre-harvest Interval	75 days	
Remarks	For dry beans tolerance may vary between varieties. Test new varieties on a	
	small area for tolerance before widespread use.	

DIRECTIONS FOR USE ON CHICKLING VETCH / GRASS PEA (FOR SEED PRODUCTION ONLY)

Timing	Early post-emergence	
Soil Zones	PHANTOM 240 SL may be used on Chickling vetch/grass pea for seed	
	production in the black and grey wooded soil zones.	
Rate	210 mL/ha + adjuvant	
Weeds Controlled	See BROADLEAF WEED and GRASS CONTROL EARLY POST-	
	EMERGENCE APPLICATIONS.	
Remarks	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

Timin	P-day and an annual second sec	
Timing	Early post-emergence	
Soil Zones	PHANTOM 240 SL when applied alone may be used on soybeans in the black	
	and grey wooded soil zones of MANITOBA ONLY.	
Rate	210 mL/ha + adjuvant	
Weeds Controlled See BROADLEAF WEED and GRASS CONTROL EARLY POST-		
	EMERGENCE APPLICATIONS.	
Remarks	Apply as post-emergent application once per season at 1 to 3 leaves of soybean	
	growth; ground application only; PHI 85 days.	
Tank Mix option:	DAVAI 80SL Herbicide at 200 mL/ha + PHANTOM 240 SL at 65 mL/ha +	
	Merge Adjuvant at 0.5% v/v, ADAMA Adjuvant 80 at 0.25% v/v, NORAC	
	MSO at 0.5% v/v, Hasten NT Ultra at 0.5% v/v or Agral 90 at 0.25% v/v.	
Area of Use	FOR USE IN THE PRAIRIE PROVINCES AND INTERIOR OF BRITISH	
	COLUMBIA (INCLUDING THE PEACE RIVER REGION) ONLY	
Weeds Controlled	Tame oat, yellow foxtail, green smartweed, lamb's quarters	
Weeds Suppressed	Barnyard grass, volunteer barley, volunteer canola (non-Clearfield®), wild	
	buckwheat	
Timing	Apply from Emergence to 3 expanded trifoliate leaves after weeds have	
	emerged.	
Pre-harvest Interval	85 days	

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 PHANTOM 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. Continue agitation while filling the remainder of the spray tank with water.
- 8. Clean the spray tank after use.

RESTRICTIONS AND LIMITATIONS

- 1. DO NOT APPLY PHANTOM 240 SL BY AIR. APPLY WITH GROUND EQUIPMENT ONLY.
- DO NOT apply 2 applications of PHANTOM 240 SL within the same year. ONLY ONE
 (1) application of PHANTOM 240 SL may be made during the season.
- 3. DO NOT over apply PHANTOM 240 SL. Over application may result in injury particularly if the crop is under stress.
- 4. DO NOT let spray drift contaminate crops other than those being sprayed.
- 5. In cases of crop failure, only field peas or imazethapyr and imazamox tolerant canola (e.g. canola varieties with the Clearfield trait) may be re-planted in the year of application.
- 6. Crop Pre-harvest Interval.

Сгор	Application to Harvest Interval (days)
Soybeans	85
Dry Beans	75
Chickling Vetch / Grass Pea	60
Field Peas	60

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, PHANTOM 240 SL is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to PHANTOM 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 PHANTOM 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 treated 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 ADAMA Agricultural Solutions Canada Ltd. at 855-264-6262 or at adama.com/canada.

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