

92.06.01

PATORAN (R) 50WP

COMMERCIAL

HERBICIDE

Formulation of metobromuron

Net Weight: 2.75 kg

Wettable Powder for selective pre-emergence weed control in potatoes, soybeans, dry common beans (white), common beans (dry, snap), lima and adzuki.

GUARANTEE: metobromuron 50 %

READ THE LABEL BEFORE USING

REGISTRATION NO.: 9,631
PEST CONTROL PRODUCTS ACT

CIBA-GEIGY CANADA LTD.
Agricultural Division
6860 Century Avenue
Mississauga, Ontario
L5N 2W5

BAG

NOTICE TO USER: This control product is to be used only in accordance with the directions on this label. It is an offence under the PEST CONTROL PRODUCTS ACT to use a control product under unsafe conditions.

NOTICE TO BUYER: Seller's guarantee shall be limited to the terms set out on the label and subject thereto, the buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition.

FIRST AID: If swallowed, induce vomiting. Obtain prompt medical attention.

If in eyes, flush with copious amounts of clear water for at least 15 minutes. Obtain prompt medical attention. If on skin, wash with soap and water.

PRECAUTIONS:

KEEP OUT OF THE REACH OF CHILDREN AND ANIMALS. May be harmful if swallowed. Wash hands with soap and water before eating, smoking or drinking. Do not contaminate food or feed. Avoid contact with skin. Wear clean clothing. Wash clothes before re-using.

DISPOSAL:

1. Rinse the emptied container thoroughly and 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 container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on the disposal of unused, unwanted product and the cleanup of spills, contact the regional office of Environmental Protection, Environment Canada.

PATORAN CONTAINS METOBROMURON

GENERAL INFORMATION:

For weed control apply Patoran (R) 50WP as a single application pre-emergent to both crops and weeds in POTATOES, SOYBEANS, DRY COMMON BEANS (white), COMMON BEANS (dry, snap), LIMA AND ADZUKI.

Weeds Controlled: Patoran when applied according to label directions, will control the following annual broadleaf weeds and suppress the following annual grasses.

Broadleaf Weeds: Pigweeds, lamb's-quarters, green smartweed, ragweed, lady's-thumb, shepherd's-purse, American nightshade, cudweed, corn spurry, groundsel, purslane, chickweed, mustards, stinkweed.

Grasses: Barnyard grass, crabgrass, green foxtail, witchgrass, annual blue grass.

TIMING OF APPLICATION:

Apply Patoran 50WP as a pre-emergent treatment only (after planting but prior to emergence of crop and weeds). Pre-emergent treatments act mainly through the roots of germinating weed seedlings and to a lesser extent through the leaves. Rainfall that gives sufficient moisture to germinate seeds or for growing crops is adequate to activate Patoran 50WP. If dry conditions persist, a shallow cultivation or rotary hoeing will control weed escapes and move the chemical into moist soil. Annual grasses are the first to escape Patoran 50WP and cultivation may be necessary to give complete control. Minimize exposure of untreated soil when cultivating. On beans, excessively heavy rainfall on light, sandy soils may leach Patoran 50WP into the root zone resulting in crop injury.

Alternatively, heavy, driving rain may cause "splash-up" injury to young seedlings. Rotary hoeing to break up crusted soil minimizes the risk of this injury.

METHODS OF APPLICATION:

Patoran 50WP may be applied either as an overall spray or as a band treatment. For band treatment a suitable press wheel mounted ahead of the nozzle should be used for levelling the band. FOR BAND APPLICATION USE PROPORTIONATELY LESS MATERIAL.

RATES OF APPLICATION:

Broadcast Application Rate of Patoran 50WP in kilograms per hectare:

CROP	SOIL TYPE		
	Light Sandy Soil	Heavier Mineral Soils	Muck
Potatoes	3.25-4.5*	4.5-5.5	5.5-6.75**
Soybean	3.25	3.25-4.5*	
Dry Common Beans (white)	2.75	3.25	5-6**
Common Beans (dry, snap) Lima, Adzuki	2.75	3.25	5-6**

* Use the higher rate where annual grasses are common.

** Use this rate in B.C. only.

Caution:

Do not apply Patoran 50WP to coarse textured soils low in organic matter. Use a rate of 2.25 kg/ha on the varieties Yellow Eye, Cranberry, White Kidney, Light-Red Kidney, Dark-Red Kidney and Provider. Do not use on the variety Slim Green. Beans should be planted 4 cm deep or crop injury may result.

NOTE: An even seeding depth of at least 4 cm is more easily achieved with a planter than a drill.

SEEDBED PREPARATION:

Prepare a firm, level seedbed free from lumps and surface trash. Do not use Patoran 50WP on loose, rough seedbeds.

Patoran 50WP - TANK MIXTURES/SPLIT APPLICATIONS (POTATOES, SOYBEANS, DRY COMMON BEANS - WHITE ONLY)

Patoran 50WP can be applied either as:

1. a pre-emergent spray in tank mix combinations with Dual (R) for control of annual grasses and broadleaves or,
2. a pre-emergent spray preceded by a preplant incorporated spray of Dual for control of nutsedge, annual grasses and broadleaf weeds.

CAUTION:

Do not tank mix Patoran 50WP with Dual on whitebeans. Do not soil incorporate Patoran 50WP and Dual. Do not apply Patoran 50WP or Dual if potatoes, soybeans and whitebeans have emerged. Tank mixtures or split applications of Patoran 50WP with Dual, as outlined above, are not registered for use on common (dry, snap), lima and adzuki beans.

Consult the Dual label for specific crop recommendations.

ADHERE TO THE DUAL LABEL FOR PRECAUTIONS, WARNINGS, RESTRICTIONS, TANK MIXING AND SPRAYING INSTRUCTIONS, ROTATIONAL CROPS AND DETAILED DIRECTIONS FOR USE.

MIXING AND SPRAYING INSTRUCTIONS:

PATORAN 50WP ALONE:

1. Fill spray tank 1/2 to 2/3 full with water.

2. With agitation system engaged, add the required amount of Patoran 50WP and then continue filling the tank with water.
3. Maintain sufficient agitation during mixing and spraying operations.

PATORAN 50WP TANK MIX WITH DUAL:

1. Fill spray tank 1/2 to 2/3 full with water.
2. With agitation system engaged, add the required amount of Patoran 50WP.
3. Continue filling the tank with water and then add Dual last.
4. Complete filling the tank with water maintaining sufficient agitation during mixing and spraying operations.

NOTE: Agitate Patoran and Patoran tank mixes strongly with water by mechanical or by-pass agitation. Avoid leaving spray mixture in tank without constant agitation. Sprayer equipment should be thoroughly flushed with clean water before and after use of Patoran 50WP and its tank mixes.

SPRAYER INFORMATION:

Use nozzle screens of 50 mesh size or larger. Keep by-pass lines on or near bottom of tank to minimize foaming.

Spray Pressure: 200 - 300 kPa

Spray Volume: 300 - 400 litres of water per hectare

POTATOES, SOYBEANS:

In addition to the weeds controlled by Patoran 50WP, tank mixes or split applications with Dual will control nutsedge and annual grasses. Consult the Dual label for these specific additional weeds controlled.

Timing of Application: Patoran 50WP can be applied either as:

1. a pre-emergent spray in tank mix combination with Dual or,
2. a pre-emergent spray preceded by a preplant incorporated spray of Dual.

POTATOES:

Pre-emergent applications must be made at planting or preferably after first hilling but prior to emergence of crop and weeds. After treatment, the soil

should be left undisturbed for as long as possible.

For rates and timings of application, see table below:

WEEDS CONTROLLED	TIMING	Rate Per Hectare			Soil Type
		Dual	+	Patoran 50WP	
Nutsedge, Annual Grasses and Broadleaf Weeds	ppi + pre	2.0-2.75 L* (ppi)	+	2.25-2.75 kg (pre)***	light sandy loam
			or	2.75-3.25 kg (pre)	medium loam
Annual Grasses and Broadleaf Weeds	pre	2.0-2.75L** (pre)	+	2.25-2.75 kg (pre)	light sandy loam
			or	2.75-3.25 kg (pre)	medium loam

* Use the high rate preplant incorporated where medium to heavy populations of nutsedge and/or annual grasses are present.

** Use the high rate pre-emergent where medium to heavy populations of annual grasses are present.

*** Use the high rate of Patoran 50WP where heavy broadleaf weed populations are present.

CAUTION:

Do not use these mixtures on the potato variety Superior. Do not apply these mixtures at ground crack or if potatoes have emerged.

Do not apply Patoran 50WP to coarse textured soil low in organic matter.

TANK MIX COMBINATION OF PATORAN PLUS GRAMOXONE LIQUID

(FOR POTATOES - ATLANTIC REGION ONLY)

For residual control of annual broadleaf weeds and annual grasses, including quack grass, apply Patoran 50WP at 2.25 - 3.25 kg/ha in a tank mix combination with Gramoxone Liquid at 1.25 - 4.25 L/ha in 250 - 500 L of water. Apply to emerged weeds and grasses up to and including ground crack, as application of this tank mix combination after potato tops have emerged may result in excessive crop injury. For control of quack grass, do not apply less than 2.75 L/ha of Gramoxone Liquid. For soils light in texture

and low in organic matter, use lower rate of Patoran 50WP and for heavier soils and soils high in organic matter use higher rates. Follow all mixing instructions, use precautions and warnings that appear on the Gramoxone Liquid label.

SOYBEANS:

Pre-emergent applications must be made immediately after sowing but prior to emergence of crop and weeds. After treatment, the soil should be left undisturbed for as long as possible. Soybeans must be planted at least 4 cm deep or crop injury may result.

For rates and timing of application, see table below:

WEEDS CONTROLLED	TIMING	Rate Per Hectare			Soil Type
		Dual	+	Patoran 50WP	
Nutsedge, Annual Grasses and Broadleaf Weeds	ppi + pre	1.75-2.75L* (ppi)	+	2.25-3.25 kg (pre)***	sandy loam/ silt loam
			or	2.75-3.25 kg (pre)	clay loam
Annual Grasses and Broadleaf Weeds	pre	1.75-2.75L** (pre)	+	2.25-3.25 kg (pre)	sandy loam/ silt loam
			or	2.75-3.25 kg (pre)	clay loam

* Use the high rate preplant incorporated where medium to heavy populations of nutsedge and/or annual grasses are present.

** Use the high rate pre-emergent where medium to heavy populations of annual grasses are present.

*** Use the high rate of Patoran 50WP where heavy broadleaf weed populations are present.

Caution:

Do not apply Dual/Patoran tank mixes if soybeans have emerged. Do not apply Dual to the soybean variety Vansoy.

Do not use Patoran/Dual mixtures on soybeans planted in deep furrows.

Do not apply Patoran 50WP on coarse textured soils low in organic matter.

DRY COMMON BEANS (WHITE)

In addition to the weeds controlled by Patoran 50WP, a split application with Dual will control nutsedge and many common annual grasses. Consult the Dual label for specific weeds controlled.

Timing of Application: Patoran 50WP must be applied as a pre-emergent spray preceded by a preplant incorporated spray of Dual. Pre-emergent applications must be made immediately after sowing but prior to emergence of crop and weeds. After treatment the soil should be left undisturbed for as long as possible. Do not apply Patoran 50WP on coarse textured soils low in organic matter. Dry common beans (white) must be seeded at least 4 cm deep or crop injury may result.

WEEDS CONTROLLED	TIMING	Rate Per Hectare			Soil Type
		Dual	+	Patoran 50WP	
Nutsedge, Annual Grasses and Broadleaf Weeds	ppi + pre	1.75-2.75L* (ppi)	+	2.25-2.75 kg (pre)***	sandy loam/ silt loam
			or	2.75 kg(pre)	clay loam

* Use the high rate where medium to heavy populations of nutsedge and/or annual grasses are present.

** Use the high rate of Patoran 50WP where heavy broadleaf weed populations are present.

CAUTION:

Do not apply Dual + Patoran as a pre-emergent spray. Whitebeans should be seeded at least 4 cm deep or crop injury may result.

Do not apply Patoran 50WP on coarse textured soils low in organic matter.

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