GROUP 2 HERBICIDE

# MPOWER Kamikaze Imazethapyr Herbicide

# AGRICULTURAL

# **SOLUTION**

GUARANTEE: imazethapyr ... 240 g/L

REGISTRATION NO. 30127 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 3.3 L – Bulk

# Distributed by:

NewAgco Inc. 320-22nd Street East Saskatoon, Saskatchewan Canada S7K 0H1

Contact number: 1-877-362-3276

Medical personnel should contact NewAgco Inc. Emergency Response, toll free, day or night: (613)-996-6666.

READ THE LABEL AND BOOKLET BEFORE USING

KEEP OUT OF REACH OF CHILDREN

#### **PRECAUTIONS**

KEEP OUT OF REACH OF CHILDREN.

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.

May cause eye damage. May cause skin irritation. Use with adequate ventilation. Wear dust and/or splash-proof goggles or face shield and chemical-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. Wash in detergent and hot water before reuse. Wear freshly laundered clothes daily.

DO NOT APPLY BY AIR.

#### 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.

#### **ENVIRONMENTAL HAZARDS**

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

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 strip between the treated area and the edge of the water body.

### **STORAGE**

Keep 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.

#### **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 the disposal of unused, unwanted product, contact, the manufacture or the provincial regulatory agency. Contact the manufacturer and the provincial 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. The user assumes the risk to persons or property that arises from any such use of this product.

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### 1. GENERAL INFORMATION

MPOWER Kamikaze Imazethapyr Herbicide is a selective herbicide that can be applied as an early post-emergence treatment in field peas, and as a pre-plant incorporated or pre-emergent treatment in processing peas, and snow peas.

The application method depends upon the crop, anticipated weed spectrum and the preference of the applicator. With pre-emergent treatments, susceptible weeds emerge, are present as stunted plants and then die. When MPOWER Kamikaze Imazethapyr Herbicide is applied early post-emergence, absorption may occur through both the roots and foliage. Susceptible weeds stop growing and eventually die.

### 2. REGISTERED USES

#### 2.1 REGISTERED SOIL ZONES

MPOWER Kamikaze Imazethapyr is registered in the black and grey wooded soil zones of the Prairie Provinces on field peas. MPOWER Kamikaze Imazethapyr Herbicide is not registered for use in the brown and dark brown soil zones. MPOWER Kamikaze Imazethapyr is also registered for use in the eastern provinces of Canada on processing peas and snow peas.

### 2.2 REGISTERED CROPS

MPOWER Kamikaze Imazethapyr Herbicide is registered for use as an early post-emergence in field peas, processing peas, and snow peas.

### 3. DIRECTIONS FOR USE

#### 3.1 CROP USE RATES

Early Post-emergent Application		
Crop	Use Rate (mL/ha)	Water Volume (L/ha)
Field peas	210	100-400

Pre-emergent or Pre-plant Incorporated Application		
Crop	Use Rate	Water Volume
	(mL/ha)	(L/ha)
Processing peas	312	200

Pre-emergent or Pre-plant Incorporated Application		
Crop	Use Rate (mL/ha)	Water Volume (L/ha)
Snow peas	312	100-400

For field pea applications, a non-ionic surfactant containing at least 80% active ingredient (Agral® 90, Agsurf®) 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).

See crop specific section for additional details.

### 3.2 WEEDS CONTROLLED

	Application Timing		
Weeds	Processing & Snow Peas Pre-plant incorporated	Processing & Snow Peas Pre-emergent	Field Peas Early Post Emergent (up to and including the 4 leaf stage)
<b>Broadleaf weeds</b>			
Chickweed**			С
Cleavers**			С
Eastern Black	С	С	
Nightshade			
Hemp-nettle			C
Lamb's-quarters	С		
Ragweed, Common	S	$C^2$	
Redroot pigweed			С
Shepherd's purse**			С
Smartweed			С
Stinkweed**			С
Velvetleaf	$C^1$	$C^1$	
Volunteer canola			С
Wild buckwheat			S
Wild mustard**			С
Grasses			
Green foxtail			С
Wild oats*			S

C = Control S = Suppression

# 3.3 CROP SPECIFIC RECOMMENDATIONS

# 3.3.1 FIELD PEAS

Timing	Early post-emergence
Soil Zones	MPOWER Kamikaze Imazethapyr Herbicide is registered for use in black and grey wooded soils ONLY.
Rate	210 mL/ha + Adjuvant

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

<sup>&</sup>lt;sup>2</sup> The higher label rate is recommended for fields with a history of heavy infestations of this weed species.

<sup>\*</sup> For suppression of wild oats apply MPOWER Kamikaze Imazethapyr Herbicide between the 2-4 leaf stage of the weed.

<sup>\*\*</sup> Certain populations of these weed are known to be resistant to group 2. If you suspect this potential on your farm, follow recommendations in Resistance-Management Recommendations.

Weeds Controlled	See Section 3.2 for a complete list of weeds controlled.
Remarks	MPOWER Kamikaze Imazethapyr Herbicide, by early post-emergence application up to the 4-true leaf stage of the weeds, will control weeds listed in Section 3.2.
	Field peas up until the sixth (6th) trifoliate leaf stage.
	An interval of 60 days must follow the MPOWER Kamikaze Imazethapyr Herbicide application before field peas are harvested.
	Field peas treated with MPOWER Kamikaze Imazethapyr Herbicide may be fed to livestock 30 days after application.

#### 4. MIXING INSTRUCTIONS

- (1) Fill the spray tank one-half to three-quarters full with water.
- (2) Using a calibrated measuring device, add the required amount of MPOWER Kamikaze Imazethapyr Herbicide while agitating the spray solution.
- (3) While the solution remains agitating, add the required amount of non-ionic surfactant.
- (4) Fill the remainder of the tank with water.

# 5. RESTRICTIONS ON CROPPING

### **Field Peas:**

There is the possibility of residual soil activity from MPOWER Kamikaze Imazethapyr Herbicide 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 MPOWER Kamikaze Imazethapyr Herbicide application.

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

# **Processing Peas and Snow Peas:**

In cases of crop failure, replant only processing peas in the year of application.

Processing peas may be planted the season following a MPOWER Kamikaze Imazethapyr Herbicide herbicide application. Conduct a field bioassay (a test strip grown to maturity) the year BEFORE growing any other crop.

### 6. RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, MPOWER Kamikaze Imazethapyr Herbicide is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to MPOWER Kamikaze Imazethapyr Herbicide 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 MPOWER Kamikaze Imazethapyr Herbicide 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 NewAgco Inc. at 1-877-362-3276.

### 7. WARNINGS

- (1) DO NOT APPLY MPOWER Kamikaze Imazethapyr Herbicide on brown & dark brown soil zones
- (2) DO NOT over-apply MPOWER Kamikaze Imazethapyr Herbicide. Over application may result in injury particularly if the crop is under stress.
- (3) DO NOT let spray drift contaminate crops other than those being sprayed.

- (4) DO NOT apply 2 applications of MPOWER Kamikaze Imazethapyr Herbicide within the same year. ONLY ONE (1) application of MPOWER Kamikaze Imazethapyr Herbicide may be made during the season.
- (5) DO NOT apply MPOWER Kamikaze Imazethapyr Herbicide herbicide 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.
- (6) DO NOT tank-mix MPOWER Kamikaze Imazethapyr Herbicide.
- (7) 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.
- (8) DO NOT APPLY BY AERIAL APPLICATION GROUND APPLICATION ONLY.
- (9) 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.
- (10) 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
- (11) DO NOT apply MPOWER Kamikaze Imazethapyr Herbicide when crop is under stress condition s because crop injury may result.

# 8. Crop Pre-harvest Interval

Crop	Application to Harvest Interval (days)
Field Peas	60
Processing Peas	50
Snow Peas	60

® All other products listed are registered trademarks of their respective companies.

<sup>1</sup>Methods of growing plants which are resistant to certain acetohydroxyacid synthase (AHAS) herbicides are protected by Canadian Patent No. 1341465. The use of this product in the practice of patented methods could constitute patent infringement. The purchase of this product conveys no license to the purchaser to practice the patented methods.