# **MPOWER<sup>®</sup> RX Herbicide**

GROUP

2

HERBICIDE

FOR SALE FOR USE ON WHEAT (SPRING, WINTER OR DURUM), BARLEY AND OATS, AND SEEDLING AND ESTABLISHED GRASS SPECIES FOR FORAGE AND SEED PRODUCTION ONLY

WETTABLE GRANULES

**COMMERCIAL - AGRICULTURAL** 

**ACTIVE INGREDIENT:** Thifensulfuron methyl 50% Tribenuron methyl 25% **Warning:** contains the allergen sulfites

REGISTRATION. NO.: 33520 PEST CONTROL PRODUCTS ACT

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

# WARNING - EYE AND SKIN IRRITANT

NET CONTENTS: 160 grams - 13.6 Kg

For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC 1-800-424-9300 / +1 703-527-3887

NewAgco, Inc. 320 22<sup>nd</sup> Street East Saskatoon (Sask.) S7K 0H1 Canada 1-844-269-3276 Distributed by: **AgraCity Crop & Nutrition Ltd** 320-22<sup>nd</sup> Street East Saskatoon (Sask.) S7K 0H1 Canada 1-844-269-3276

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# **PRECAUTIONS:**

- KEEP OUT OF REACH OF CHILDREN.
- Avoid breathing spray mist. Use with adequate ventilation.
- Avoid contact with skin, eyes and clothing.
- Do not contaminate any body of water.
- May be harmful if swallowed, inhaled or absorbed through skin.
- Causes eye and skin irritation.
- When using, do not eat, drink or smoke. Wash skin thoroughly with soap and water after handling.
- Remove contaminated clothing immediately after use. Store and wash contaminated clothing separately from household laundry before re-use.
- Do not apply by air.
- Wear goggles or face shield, coveralls, socks, suitable chemical resistant gloves and footwear during mixing and loading. Wear long-sleeved shirt, long pants, socks, and chemical-resistant gloves and footwear during application, clean-up and repair. Chemical-resistant gloves are not required while operating groundboom sprayers.
- Do not enter of allow entry into treated areas for 12 hours after application.

# FIRST AID:

# EYE CONTACT:

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.

# SKIN OR CLOTHING CONTACT:

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.

# INGESTION:

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.

# INHALATION:

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.

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

# TOXICOLOGICAL INFORMATION: Treat symptomatically.

# STORAGE:

Store product in original container only, away from other pesticides, fertilizer, food or feed. Not for use or storage in or around the home. Keep container closed

# **DISPOSAL:**

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
- 3. Make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial requirements.

#### If this is a refillable container:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

#### If this is a returnable container:

Do not reuse this container for any other purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

#### For all package types:

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.

# 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.

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# **PRECAUTIONS:**

- KEEP OUT OF REACH OF CHILDREN.
- · Avoid breathing spray mist. Use with adequate ventilation.
- · Avoid contact with skin, eyes and clothing.
- Do not contaminate any body of water.
- May be harmful if swallowed, inhaled or absorbed through skin.
- Causes eye and skin irritation.
- When using, do not eat, drink or smoke. Wash skin thoroughly with soap and water after handling.
- Remove contaminated clothing immediately after use. Store and wash contaminated clothing separately from household laundry before re-use.
- Do not apply by air.
- Wear goggles or face shield, coveralls, socks, suitable chemical resistant gloves and footwear during mixing and loading. Wear long-sleeved shirt, long pants, socks, and chemical-resistant gloves and footwear during application, clean-up and repair. Chemical-resistant gloves are not required while operating groundboom sprayers.
- Do not enter of allow entry into treated areas for 12 hours after application.

# FIRST AID:

# EYE CONTACT:

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.

# SKIN OR CLOTHING CONTACT:

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.

# **INGESTION:**

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.

# INHALATION:

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.

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

TOXICOLOGICAL INFORMATION: Treat symptomatically.

# IMPORTANT

Injury to or loss of desirable trees or vegetation may result from failure to observe the following:

Do not apply, drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Do not use on lawns, walks, driveways, recreational grounds or similar areas. Prevent drift of spray to desirable plants. Do not contaminate any body of water, including irrigation water that may be used on other crops.

DO NOT APPLY BY AIR.

Carefully observe sprayer clean-up instructions, as spray tank residues may damage crops other than wheat, barley or oats.

APPLY WITH A SURFACTANT REGISTERED FOR USE WITH MPOWER RX.

# **Table of Contents**

MPOWER RX	4
IMPORTANT	5
Table of Contents	6
GENERAL INFORMATION	6
DIRECTIONS FOR USE	7
MPOWER RX	
TANK MIXES WITH MPOWER RX	
MPOWER RX PLUS MCPA	
MPOWER RX PLUS 2,4-D	
MPOWER RX PLUS ASSERT	
MPOWER RX + ASSERT+ MCPA ESTER 500	
MPOWER RX + PUMA SUPER	
MPOWER RX + MCPA ESTER 500 + PUMA SUPER	12
MPOWER RX + PUMA 120 SUPER OR HELLCAT	13
MPOWER RX + PUMA 120 SUPER OR HELLCAT + MCPA Ester 500	13
MPOWER RX + HORIZON 240 EC or AURORA14	
MPOWER RX + MCPA ESTER 500 + HORIZON 240 EC or AURORA15	
MPOWER RX + ACCORD + HORIZON 240 EC or AURORA	
MPOWER RX + LONTREL 360 or CLOBBER HERBICIDE + 2,4-D ESTER or MCPA ESTER16	
MPOWER RX + CURTAIL M	17
MPOWER RX + ACCORD	
MPOWER RX + ACCORD + PUMA 120 SUPER or HELLCAT	
MPOWER RX + ATTAIN HERBICIDE TANK MIX	20
MPOWER RX + LONTREL 360 or CLOBBER HERBICIDE	
MPOWER RX + BANVEL II HERBICIDE	
MPOWER RX + HORIZON 240 EC HERBICIDE or AURORA + BANVEL II	
HERBICIDE	21
MPOWER RX + 2,4-D AMINE OR ESTER + EVEREST SOLUPAK 70 DF OR EVEREST 70 WDG O	)r
HIMALAYA22	
MIXING INSTRUCTIONS:	
APPLICATION INSTRUCTIONS:	
SPRAYER CLEANUP:	
USE PRECAUTIONS:	
RESISTANCE-MANAGEMENT RECOMMENDATIONS:	
STORAGE:	
DISPOSAL:	
NOTICE TO USER:	27

# **GENERAL INFORMATION**

MPOWER RX is recommended for selective postemergence control or suppression of broadleaf weeds in wheat (spring, winter or durum), barley and oats not underseeded to legumes or grasses. MPOWER RX is a 75% active ingredient herbicide formulated as a dry flowable dispersible granule. MPOWER RX is to be mixed with water and a recommended surfactant and applied as a uniform broadcast spray. It is noncorrosive, nonflammable, nonvolatile and does not freeze.

MPOWER RX MUST be applied with a recommended surfactant, early postemergence, to the main flush of actively growing broadleaf weeds. Recommended surfactants are AGRAL 90, AG-SURF, and CITOWETT PLUS.

Warm, moist growing conditions promote active weed growth and enhance the activity of MPOWER RX by allowing maximum foliar uptake and contact activity. Weeds hardened off by cold weather or drought stress may not be adequately controlled or suppressed and regrowth may occur. APPLY MPOWER RX WITH GROUND EQUIPMENT ONLY. For best results, ensure thorough spray coverage of target weeds. See "Postemergence Applications" section of this label for complete use details.

MPOWER RX stops growth of susceptible weeds rapidly. However, typical symptoms (discolouration) of dying weeds may not be noticeable for 1 to 3 weeks after application, depending upon growing conditions and weed susceptibility. Degree of control and duration of effect are dependent on weed sensitivity, weed size, crop competition, growing conditions at and following treatment, and spray coverage.

The following crops may be planted two months after an application of MPOWER RX: canola, flax, lentils and alfalfa.

# DIRECTIONS FOR USE

- DO NOT re-enter treated fields until 12 hours after application.
- Apply only when the potential for drift to areas of human habitation or areas of human activity (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) medium classification. Boom height must be 60 cm or less above the crop or ground.

#### Buffer zones:

The 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, pastures, rangelands, riparian areas,, and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

	Buffer zone (metres) required for the protection of:		
Method of Application	Torroctrial babitat	Aquatic habitats	of water depths:
Application	Terrestrial habitat	<1m	>1m
Field sprayer*	15	1	0

\*For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labelled buffer zone can be

reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labelled buffer zone can be reduced by 30%.

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

NOTE: Applicators may recalculate a site-specific buffer zone by combining information on current weather conditions and spray configuration for the following applications: all airblast applications, and for field and aerial applications which specify the following droplet size category wording on the product label: 'DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification.' To access the Buffer Zone Calculator, please visit the Pest Management Regulatory Agency web site.

# **ENVIRONMENTAL HAZARDS:**

- TOXIC to plants. Observe buffer zones specified under DIRECTIONS FOR USE.
- TOXIC to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.
- To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to: heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted or fine textured such as clay).
- · Avoid application of this product 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

#### **MPOWER RX**

#### Wheat (Spring, winter and durum), Barley and Oats

Apply 20 grams of MPOWER RX per hectare with a surfactant which is recommended for use with MPOWER RX at 2.0 litres per 1,000 litres of spray volume (see "Mixing Instructions" section of this label). Apply postemergence when the crop is in the two-leaf to flag leaf (shot blade) stage of growth, (prior to head emergence) but before the crop canopy will prevent thorough coverage of target weeds. For best results apply to emerged, young, actively growing weeds that are less than 10 cm tall or across. Thorough coverage of target weeds is essential.

#### WEEDS CONTROLLED:

Annual smartweed (green smartweed, lady's thumb) Ball mustard	Narrow-leaved hawk's-beard Redroot pigweed
Chickweed <sup>2</sup>	Russian thistle
Corn spurry	Shepherd's purse
Cow cockle	Stinkweed
Flixweed	Tartary buckwheat
Groundsel, common	Volunteer
	rapeseed <sup>6</sup>
Hemp-nettle	Volunteer
	sunflower
Kochia	Wild buckwheat <sup>3</sup>
Lamb's-quarters	Wild mustard

#### WEEDS SUPPRESSED:

Canada thistle<sup>1</sup> Cleavers

(1 to 3 whorls) Round-leaved mallow<sup>4</sup> Scentless chamomile Sow thistle<sup>1</sup> Stork's-bill (2-6 leaf) Toadflax<sup>5</sup>

Weed suppression is a visual reduction in weed competition (reduced population and/or vigour) as compared to an untreated check. Degree of suppression will vary with size of weed and environmental conditions prior to and following treatment.

# **Specific Weed Recommendations:**

- 1. Canada thistle, Sow thistle: Apply MPOWER RX plus recommended surfactant postemergence when the majority of the thistles have emerged and are actively growing. For best top growth control, apply when thistles are no larger than 15 cm tall, before bud stage, and before crop canopy prevents thorough coverage of thistles. A single application will effectively inhibit the ability of emerged thistles to compete with the crop. Later emerging thistles will not be controlled.
- 2. Chickweed: Apply MPOWER RX plus recommended surfactant when the chickweed is small (1-6 leaf) and actively growing but before crop canopy prevents thorough coverage of weeds. Chickweed emerging after application will not be controlled.
- 3. Wild Buckwheat: Apply MPOWER RX plus surfactant to actively growing wild buckwheat in the cotyledon 3 leaf stage. Under stress conditions such as dry weather control may be reduced. Large plants may regrow after treatment.
- 4. Round-leaved Mallow: Apply MPOWER RX plus a surfactant to actively growing round leaved mallow in the 2-6 leaf stage (10-12 cm in height). MPOWER RX will keep mallow stunted but may not reduce the overall populations.
- 5. Toadflax: Apply MPOWER RX plus recommended surfactant when toadflax is no taller than 15 cm in height. A control program for this weed includes both frequent tillage and chemical application.
- 6. Volunteer rapeseed: MPOWER RX alone will not control imazamox and imazethapyr tolerant canola, (e.g. Clearfield canola)

NOTE: Avoid making applications to weeds when rainfall is threatening. Rainfall within 4 hours will result in reduced weed control of MPOWER RX.

# TANK MIXES WITH MPOWER RX

In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact AgraCity Crop & Nutrition Ltd. at 1-844-269-

3276 or <u>www.agracity.com</u> for information before mixing any pesticide or fertilizer that is not specifically recommended on this label.

# **MPOWER RX PLUS MCPA**

Wheat (Spring, winter and durum), Barley and Oats

Apply MPOWER RX at 20 grams per hectare plus MCPA Amine or Ester 500 at 0.7 - 1.1 litres per hectare (or acid equivalent to deliver 350 - 560 grams active ingredient per hectare) plus a recommended surfactant at 2 litres per 1,000 litres of spray volume (see "Mixing Instructions" section of the label). Apply the tank mix from the full 3-leaf stage to just before the flag leaf stage of wheat (spring, durum, winter), barley and oats. This tank mix will control:

# WEEDS CONTROLLED:

Annual smartweed <sup>†</sup>	Prickly lettuce
Ball mustard	Ragweed <sup>††</sup>
Burdocks (seedling)	Redroot pigweed
Chickweed	Russian pigweed <sup>††</sup>
Cocklebur <sup>††</sup>	Russian thistle
Corn spurry	Shepherd's purse
Cow cockle	Stinkweed
False ragweed <sup>††</sup>	Tartary buckwheat
Flixweed	Tumble mustard
Giant ragweed <sup>++</sup>	Volunteer rapeseed
Hare's-ear mustard	Wild buckwheat
Hemp-nettle	Plantain (common)
Indian mustard	Wild mustard
Kochia <sup>††</sup>	Wild radish
Lamb's-quarters	Wormseed mustard
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† Green smartweed and lady's thumb

**††** Use a minimum of 400 grams MCPA active ingredient per hectare.

+++ Including imazamox and imazethapyr tolerant canola (e.g., Clearfield canola).

# WEEDS SUPPRESSED:

Canada thistle Round-leaved mallow Scentless chamomile Sow thistle Stork's-bill (2-6 leaf) (MCPA Ester only)

Follow "Specific Weed Recommendations" for Canada and sow thistle, wild buckwheat, round-leaved mallow and chickweed.

# WEEDS CONTROLLED BY MPOWER RX PLUS MCPA (0.56 L/HA)

Weeds controlled or suppressed by MPOWER RX alone plus volunteer imazamox and imazethapyr tolerant canola (e.g., Clearfield canola)(2-4 leaf stage).

Consult the MCPA label for additional application instructions and use precautions.

# **MPOWER RX PLUS 2,4-D**

#### Wheat or Barley - Do Not Use On Oats

Apply MPOWER RX at 20 grams per hectare tank mixed with 2,4-D and a recommended surfactant. Rates and formulation of 2,4-D include:

- 1. 2,4-D Amine 500 at 0.84 1.1 litres per hectare or
- 2. 2,4-D Ester LV700 at 0.6 0.8 litres per hectare or
- 3. 2,4-D Ester LV600 at 0.7 0.9 litres per hectare or
- 4. Acid equivalent.

A recommended surfactant at 2 litres per 1,000 litres of spray volume must be added (see "Mixing Instructions" section of the label). Apply the tank mix from the full 3-leaf stage to just before the flag leaf stage of wheat (spring, durum, winter) and barley. DO NOT USE ON OATS.

# WEEDS CONTROLLED:

Annual smartweed <sup>†</sup>	Prickly lettuce
Ball mustard	Redroot pigweed
Burdocks (seedling)	Russian pigweed
Chickweed	Russian thistle
Cocklebur	Shepherd's purse
Common ragweed	Stinkweed
Corn spurry	Stork's-bill
Cow cockle	(2-6 leaf)
False ragweed	(2,4-D ester only)
Flixweed	Sweet clover
Giant ragweed	Tartary buckwheat
Hare's-ear mustard	Tumble mustard
Hemp-nettle	Volunteer rapeseed
Indian mustard	Wild buckwheat
Kochia	Wild mustard
Lamb's-quarters	Wild radish
Plantain (common)	Wormseed mustard
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†green smartweed and lady's thumb

the including imazamox and imazethapyr tolerant canola varieties (e.g., Clearfield canola). Consult the 2,4-D label for appropriate use rates

# WEEDS SUPPRESSED:

Canada thistle Round-leaved mallow Scentless chamomile Sow thistle Toadflax (2,4-D Ester only) Follow "Specific Weed Recommendations" for Canada and sow thistle, chickweed, wild buckwheat and round-leaved mallow.

Consult the 2,4-D label for additional application instructions and use precautions.

#### MPOWER RX PLUS ASSERT 300 Herbicide

#### Spring Wheat and Spring Barley Only

For Use in the Prairie Provinces and Peace River Region of British Columbia Only.

Apply MPOWER RX at 20 grams per hectare plus ASSERT 300 Herbicide at 1.3 to 1.6 litres of product per hectare for the control of broadleaf weeds controlled by MPOWER RX, and wild oats.

Use the low rate of ASSERT 300 Herbicide when the majority of wild oats are in the 1 - 3 leaf stage and the higher rate if wild oats are in the 4 leaf stage. Application can be made from the 2-leaf up to and including the 6-leaf stage of the crop.

Consult the ASSERT 300 Herbicide label for additional application instructions; use precautions and recropping information.

Use the spray preparation within 12 hours or product degradation may occur.

#### MPOWER RX + ASSERT 300 Herbicide + MCPA ESTER 500

#### Spring Wheat and Spring Barley Only

#### For Use in the Prairie Provinces and Peace River Region of British Columbia Only

Apply MPOWER RX at 20 grams per hectare plus ASSERT 300 Herbicide at 1.3 - 1.6 litres of product per hectare plus MCPA Ester 500 at 0.7 - 1.1 litres per hectare (or acid equivalent to deliver 350 - 560 grams active ingredient per hectare) for the control of broadleaf weeds controlled by MPOWER RX plus MCPA, and wild oats. Apply at the 4-leaf to 6-leaf stage of the crop.

SOIL ZONES	ASSERT 300 Herbicide RATE
Black and Grey Wooded	1.6 L/ha
Brown and Dark Brown	1.3 L/ha if the majority of the wild oats are in the 1-3 leaf stage. Apply Assert 300
	Herbicide at the 1.6 L/ha if the wild oats are in the 4-leaf stage.

Consult the ASSERT 300 Herbicide label for additional application instructions, use precautions and recropping information.

Use the spray preparation within 12 hours or product degradation may occur.

# **MPOWER RX + PUMA SUPER**

For Use On Spring Wheat (Including Durum) And Barley In The Prairie Provinces And Peace River Region Of British Columbia Only. APPLY:

MPOWER RX	at 20 grams per hectare
Plus	
PUMA SUPER	at 0.5 Or 1.0 Litres per hectare

A non-ionic surfactant is NOT required when MPOWER RX is tank-mixed with PUMA SUPER.

Apply the MPOWER RX + PUMA SUPER tankmix to spring and durum wheat at the 1 to 6-leaf plus 3 tillers stage or to barley at the 1 to 5-leaf plus 2 tillers stage. Apply the tankmix to annual grasses in the 1-6 leaf stage (up to emergence of third tiller). Consult the PUMA SUPER label for additional information on appropriate weed staging, application instructions, environmental and use precautions.

# WEEDS CONTROLLED:

Green Foxtail	(PUMA SUPER at 0.5 or 1.0 L/ha)
Wild Oats	(PUMA SUPER at 1.0 L/ha)
Barnyard Grass	(PUMA SUPER at 1.0 L/ha)

This tankmix will also control or suppress the broadleaf weeds listed for MPOWER RX alone at 20 grams/ha.

# MPOWER RX + MCPA ESTER 500 + PUMA SUPER

# For Use On Spring Wheat (Including Durum) And Barley In The Prairie Provinces And Peace River Region Of British Columbia Only.

APPLY:

MPOWER RX	at 20 grams per hectare	
Plus		
MCPA ESTER 500	at 0.84 Litres per hectare	
Plus		
PUMA SUPER	at 0.5 OR 1.0 Litres per hectare	

A non-ionic surfactant is NOT required when MPOWER RX is tank-mixed with MCPA ESTER 500 + PUMA SUPER. Use ONLY MCPA ESTER 500 in this tankmix and only at the recommended rate or a decrease in wild oat control may be observed.

Apply the MPOWER RX + MCPA ESTER 500 + PUMA SUPER tankmix to spring and durum wheat at the 1 to 6-leaf plus 3 tillers stage or to barley at the 1 to 5-leaf plus 2 tillers stage. Apply to annual grasses in the 1-6 leaf stage (up to emergence of third tiller). Consult the MCPA ESTER 500 and PUMA SUPER labels for additional information on appropriate weed staging, application instructions, environmental and use precautions.

# WEEDS CONTROLLED:

Green Foxtail	(PUMA SUPER at 0.5 or 1.0 L/ha)
Wild Oats	(PUMA SUPER at 1.0 L/ha)
Barnyard Grass	(PUMA SUPER at 1.0 L/ha)

This tankmix will also control or suppress the broadleaf weeds listed for MPOWER RX at 20 grams/ha + MCPA ESTER 500 at 0.84 Litres/ha.

# MPOWER RX + PUMA 120 SUPER or HELLCAT

# For Use On Spring Wheat (Including Durum) And Barley In The Prairie Provinces And Peace River Region Of British Columbia Only.

APPLY:

MPOWER RX	at 20 grams per hectare	
Plus		
PUMA 120 SUPER or HELLCAT	at 770 mL/Ha or 385 mL/Ha	

A non-ionic surfactant is NOT required when MPOWER RX is tank mixed with PUMA 120 SUPER or HELLCAT.

Apply the MPOWER RX + PUMA 120 SUPER or HELLCAT tankmix to spring and durum wheat at the 1 to 6-leaf plus 3 tillers stage or to barley at the 1 to 5-leaf plus 2 tillers stage. Apply the tankmix to annual grasses in the 1-6 leaf stage (up to emergence of third tiller). Consult the PUMA 120 SUPER or HELLCAT label for additional information on appropriate weed staging, application instructions, environmental and use precautions.

# WEEDS CONTROLLED:

Green Foxtail (PUMA 120 SUPER or HELLCAT at 385 mL/Ha) Wild Oats, Green Foxtail, (PUMA 120 SUPER or HELLCAT at 770 mL/ha) Yellow Foxtail, Barnyard Grass Broadleaf weeds controlled or suppressed by MPOWER RX alone.

# MPOWER RX + PUMA 120 SUPER or HELLCAT + MCPA Ester 500

For Use On Spring Wheat (Including Durum) And Barley In The Prairie Provinces And Peace River Region Of British Columbia Only.

APPLY:

MPOWER RX	at 20 grams per hectare
	Plus
PUMA 120 SUPER or HELLCAT	at 770 mL/Ha or 385 mL/Ha

	Plus
MCPA Ester 500	0.84 <b>or</b> 0.56 L/Ha

A non-ionic surfactant is NOT required when MPOWER RX is tank mixed with PUMA 120 SUPER or HELLCAT and MCPA Ester 500.

Use ONLY MCPA ESTER 500 in this tank mix and only at the recommended rate or a decrease in wild oat control may be observed.

Apply the MPOWER RX + PUMA 120 SUPER or HELLCAT + MCPA Ester 500 tank mix to spring and durum wheat at the 1 to 6-leaf plus 3 tillers stage or to barley at the 1 to 5-leaf plus 2 tillers stage. Apply the tank mix to annual grasses in the 1-6 leaf stage (up to emergence of third tiller). Consult the MCPA Ester 500 and PUMA 120 SUPER or HELLCAT label for additional information on appropriate weed staging, application instructions, environmental and use precautions.

# WEEDS CONTROLLED:

Green Foxtail (PUMA 120 SUPER or HELLCAT at 385 mL/Ha Wild Oats, Green Foxtail, (PUMA 120 SUPER or HELLCAT at 770 mL/ha) Yellow Foxtail, Barnyard Grass

Broadleaf weeds controlled or suppressed by MPOWER RX alone Broadleaf weeds controlled by MCPA Ester 500 at 0.84 L/Ha,

OR

Volunteer imazamox and imazethapyr tolerant canola (e.g., Clearfield canola) (2-4 leaf stage) when MCPA Ester 500 is applied at 0.56 L/ha.

# MPOWER RX + HORIZON 240 EC or AURORA Spring Wheat (Including Durum) Only

For Use in The Prairie Provinces And Peace River Region Of British Columbia Only.

For control of wild oats, apply MPOWER RX at 20 grams per hectare with HORIZON 240 EC or AURORA at 230 mL per hectare and 800 mL per hectare of SCORE or CHEM SPRAY at the 2 leaf to flag leaf stage of the crop. Add MPOWER RX to the spray tank first, followed by HORIZON 240 EC or AURORA, and add SCORE or CHEM SPRAY Adjuvant last. A non-ionic surfactant is NOT required when MPOWER RX is tank mixed with HORIZON 240 EC or AURORA plus the SCORE or CHEM SPRAY adjuvant.

For control of wild oats and green foxtail, apply MPOWER RX at 20 grams per hectare with HORIZON 240 EC or AURORA at 290 mL per hectare and 1 L per hectare of SCORE or CHEM SPRAY at the 2 leaf to flag leaf stage of the crop. Add MPOWER RX to the spray tank first, followed by HORIZON 240 EC or AURORA, and add Score or CHEM SPRAY Adjuvant last. A non-ionic surfactant is NOT required when MPOWER RX is tank mixed with HORIZON 240 EC or AURORA plus the SCORE or CHEM SPRAY adjuvant.

Consult the HORIZON 240 EC or AURORA label for additional application instructions and use precautions.

WEEDS CONTROLLED: Wild Oats Green Foxtail

This tankmix will also control or suppress the broadleaf weeds listed for MPOWER RX alone at 20 grams per hectare.

# MPOWER RX + MCPA ESTER 500 + HORIZON 240 EC or AURORA

Or Use On Spring Wheat (Including Durum) Only In The Prairie Provinces And Peace River Region Of British Columbia.

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MPOWER RX	at 20 grams per hectare	
Plus		
MCPA Ester 500	at 0.84 - 1.1 L per hectare <b>OR</b> at 0.56 L per hectare	
Plus		
HORIZON 240 EC or AURORA	at 230 mL per hectare	
Plus		
SCORE or CHEM SPRAY Adjuvant	at 0.8% v/v	

Apply at the 3 to flag leaf stage of the crop, to actively growing wild oats in the 1 to 6 leaf stage, prior to emergence of the 4<sup>th</sup> tiller, and to green foxtail in the 1 to 5 leaf stage, prior to emergence of the 3<sup>rd</sup> tiller. Consult the MCPA Ester 500 and HORIZON 240 EC or AURORA labels for additional application instructions and use precautions.

# WEEDS CONTROLLED:

Green Foxtail<sup>†</sup>

Wild Oats

PLUS broadleaf weeds controlled by MPOWER RX and broadleaf weeds controlled by MCPA Ester 500 at 0.84-1.1 L per hectare or volunteer imazamox and imazethapyr tolerant canola (e.g. Clearfield canola) (2-4 leaf stage) when MCPA Ester 500 is applied at 0.56 L per hectare.

† NOTE: A reduction in control of green foxtail may be observed with the tankmix of MPOWER RX + HORIZON or AURORA + MCPA Ester 500

# MPOWER RX + ACCORD DF Herbicide + HORIZON 240 EC or AURORA

# Or Use On Spring Wheat (Including Durum) Only In The Prairie Provinces And Peace River Region Of British Columbia.

APPLY:

MPOWER RX	at 20 grams per hectare

Plus		
ACCORD DF Herbicide	at 67 grams per hectare	
Plus		
HORIZON 240 EC or AURORA	at 230 mL per hectare	
Plus		
SCORE or CHEM SPRAY Adjuvant	at 0.8% v/v	

Make application when the crop is in the 2-5 leaf stage, to actively growing wild oats in the 1 to 6 leaf stage, prior to emergence of the 4<sup>th</sup> tiller, and to green foxtail in the 1 to 5 leaf stage, prior to emergence of the 3<sup>rd</sup> tiller. Thorough coverage of foliage is important for consistent weed control. Prior to use, consult the ACCORD DF Herbicide label for additional rotational cropping restrictions, application instructions, use precautions and other restrictions. Do not graze the treated crops or cut for hay within 77 days.

# WEEDS CONTROLLED:

Green foxtail
Wild oats
Cleavers (1-3 whorl)
PLUS broadleaf weeds controlled or suppressed by MPOWER RX

# MPOWER RX + LONTREL 360 or CLOBBER HERBICIDE + 2,4-D ESTER or MCPA ESTER

For Use On Spring Wheat (Excluding Durum) And Barley Only. For Use in Western Canada Only.

APPLY:

MPOWER RX	at 20 grams per hectare	
plus		
LONTREL 360 or		
CLOBBER HERBICIDE	at 0.21 litres per hectare	
	plus	
MCPA Ester (500 g/L)	at 0.84 litres per hectare	
	or	

2,4-D Ester (600 g/L)	at 0.7 litres per hectare
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Add a recommended non-ionic surfactant such as AGRAL 90, AG-SURF or CITOWETT PLUS at a rate of 0.2% of the final spray volume (i.e., 2.0 litres per 1000 litres of spray solution). See "Mixing Instructions" section of the label.

# WEEDS CONTROLLED:

Canada thistle<sup>†</sup> Lady's thumb Perennial sow thistle Stinkweed Volunteer canola Wild buckwheat Wild mustard † Provides seasonal control of Canada thistle

#### WEEDS SUPPRESSED:

Cleavers

PLUS: all other broadleaf weeds controlled or suppressed by MPOWER RX alone at 20 grams per hectare.

Refer to the MCPA Ester or 2,4-D Ester labels for additional broadleaf weeds controlled at the rates recommended above.

Consult the LONTREL or CLOBBER HERBICIDE and 2,4-D Ester or MCPA Ester labels for additional application instructions, use precautions, and other label restrictions.

DO NOT USE ON OATS.

# MPOWER RX + CURTAIL M

For Use On Spring Wheat (Excluding Durum) And Spring Barley Only. For Use in the Prairie Provinces and Peace River Region of British Columbia Only.

APPLY:

MPOWER RX	20 grams per hectare
plus	
CURTAIL M	1.5 litres per hectare
plus	
a recommended surfactant	at 2 litres per 1,000 litres of spray volume

See "Mixing Instructions" section of the label for proper mixing/application instructions. Ensure that MPOWER RX is completely in suspension in the spray tank before adding CURTAIL M.

Apply the tank mix from the full 3-leaf stage of spring wheat and spring barley. Consult the CURTAIL M label for additional application instructions and use precautions.

# WEEDS CONTROLLED:

Canada thistle<sup>†</sup> Wild buckwheat<sup>††</sup>

PLUS all other broadleaf weeds controlled or suppressed by MPOWER RX alone at 20 grams per hectare. † Canada thistle: Apply MPOWER RX plus CURTAIL M plus a recommended surfactant postemergence after all the thistles have emerged, and are actively growing. For best control, apply when thistles are no larger than 15 cm tall, before bud stage and before canopy prevents thorough coverage of thistles. Later emerging thistles will not be controlled.

††Wild buckwheat: Apply MPOWER RX plus CURTAIL M plus a recommended surfactant to actively growing wild buckwheat in the cotyledon to 5 leaf stage. Under stress conditions such as dry weather, control may be reduced. Large plants may regrow after treatment.

# MPOWER RX + ACCORD DF HERBICIDE

# SPRING WHEAT (Including Durum) AND SPRING BARLEY (grown for feed purposes only. Not Underseeded To Forages.

For Use in the Prairie Provinces and Peace River Region of British Columbia

 APPLY:

 MPOWER RX
 at 20 grams per hectare

 plus

 ACCORD DF Herbicide
 At 67 OR at 135-165 grams per hectare

 plus

 MERGE adjuvant
 at 1.0% v/v (10 litres per 1000 litres spray volume)

A non-ionic surfactant is NOT required when MPOWER RX is tank mixed with ACCORD DF Herbicide plus the MERGE adjuvant.

Make application when crop is in the 2-5 leaf stage. Use the 165 grams per hectare rate of ACCORD DF Herbicide when green foxtail is the target weed. Thorough coverage of foliage is important for consistent weed control. Do not apply this tank mixture more often than once every two years. Prior to use, consult the ACCORD DF Herbicide label for additional rotational cropping restrictions, application instructions, use precautions and other restrictions. Do not graze the treated crops or cut for hay within 77 days of application.

WEEDS CONTROLLED	APPLICATION TIMING
WHEN	
ACCORD DF HERBICIDE IS	

USED AT 135-165 GRAMS/HA	
Green Foxtail	1-5 leaf, 2 tillers
Barnyard Grass	1-5 leaf
Volunteer Flax	1-8 cm
Cleavers	1-4 whorls
Annual Sowthistle	1-4 leaf
PLUS: Weeds controlled or suppressed by MPOWER RX alone	

Refer to the ACCORD DF Herbicide label for additional information on appropriate weed staging at application.

Do not graze the treated crops or cut for hay within 77 days (spring wheat, durum) or 80 days (spring barley) of application.

WEEDS CONTROLLED WHEN ACCORD DF Herbicide IS USED AT 67 GRAMS/HA	APPLICATION TIMING
Cleavers	1-3 whorls
Annual Sowthistle	1-4 leaf
PLUS: Weeds controlled or suppressed by MPOWER RX alone	

# MPOWER RX + ACCORD DF HERBICIDE + PUMA 120 SUPER or HELLCAT

# SPRING WHEAT (Including Durum) AND SPRING BARLEY (grown for feed purposes only). Not Underseeded To Forages.

For Use in the Prairie Provinces and Peace River Region of British Columbia

MPOWER RX	20 grams per hectare
Accord DF Herbicide	67 grams per hectare
Puma 120 Super or HELLCAT	0.77 Litres per hectare

Merge adjuvant is NOT required when MPOWER RX and Accord DF Herbicide are tank mixed with Puma 120 Super or HELLCAT.

Apply the MPOWER RX + Accord DF Herbicide + Puma 120 Super or HELLCAT tank mix to spring and durum wheat at the 2 to 5-leaf stage or to barley at the 2 to 4-leaf stage. Apply the tank mix to annual grasses in the 1-6 leaf stage (up to emergence of third tiller), or to cleavers in the 1-4 whorl. Consult the Accord DF Herbicide and Puma 120 Super or

HELLCAT labels for additional information on appropriate weed staging, application instructions, environmental and use precautions.

# WEEDS CONTROLLED:

Weeds controlled or suppressed by MPOWER RX alone
Green Foxtail
Wild Oats
Barnyard Grass
Cleavers

Do not graze the treated crops or cut for hay within 77 days (spring wheat, durum) or 80 days (spring barley) of application.

# **MPOWER RX + ATTAIN HERBICIDE TANK MIX**

# For Use On Spring Wheat (Excluding Durum), And Spring Barley Only, Not Underseeded to Legumes. In The Prairie Provinces and Peace River Region of British Columbia Only.

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MPOWER RX	at 20 grams per hectare
plus	<u></u>
ATTAIN Herbicide Tank Mix	Attain A (fluroxypyr) at 0.30 L/ha
	Attain B(2,4-D ester) at 0.50 L/ha
plus	
Adjuvants: AGRAL 90, AGSURF, or CITOWETT	at 2L/1000 litres of spray solution

Apply from the 4-leaf to flag-leaf stage of spring wheat or spring barley and seedling stage to 4-leaf/whorls of weed.

Mixing order is MPOWER RX, then Attain A then Attain B then adjuvant. Refer to MIXING DIRECTIONS section for general instructions. Use a spray volume of 100 L/ha.

Do not permit lactating dairy animals to graze fields within 7 days of application. Do not harvest forage or cut hay within 30 days after application. Withdraw meat animals from treated fields at least 3 days before slaughter. Do not harvest the treated mature crop within 60 days after application. Consult the Attain Herbicide Tank Mix labels for additional application instructions and use precautions.

# WEEDS CONTROLLED:

Weeds controlled or suppressed by MPOWER RX alone

# MPOWER RX + LONTREL 360 or CLOBBER HERBICIDE

For Use On Spring Wheat (Excluding Durum), And Spring Barley Only In The Prairie Provinces and Peace River Region of British Columbia Only.

APPLY:

MPOWER RX	at 20 grams per hectare			
plu	IS			
LONTREL 360 or CLOBBER HERBICIDE	at 0.21 litres per hectare			
plu	IS			
a recommended surfactant	at 2 litres per 1000 litres of spray volume			

See "Mixing Instructions" section of the label for proper mixing/application instructions. Ensure that MPOWER RX is completely in suspension in the spray tank before adding LONTREL 360 or CLOBBER HERBICIDE.

Apply the tankmix from the full 3 leaf stage to the flag leaf stage of spring wheat and barley. Consult the LONTREL 360 or CLOBBER HERBICIDE label for additional application instructions and use precautions.

# WEEDS CONTROLLED:

Canada Thistle (seasonal control)<sup>†</sup> Wild Buckwheat<sup>††</sup>

PLUS: All other broadleaf weeds controlled or suppressed by MPOWER RX alone at 20 grams/ha.

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Canada Thistle (seasonal control): Apply MPOWER RX plus LONTREL 360 or CLOBBER HERBICIDE plus a recommended surfactant postemergent, after all the thistles have emerged, and are actively growing. For best control, apply when thistles are no larger than 15 cm tall, before bud stage and before crop canopy prevents thorough coverage of thistles. Later emerging thistles will not be controlled.

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Wild Buckwheat: Apply MPOWER RX plus LONTREL 360 or CLOBBER HERBICIDE plus a recommended surfactant to actively growing wild buckwheat in the cotyledon to 5-leaf stage. Under stress conditions such as dry weather, control may be reduced. Large plants may regrow after treatment.

# **MPOWER RX + BANVEL II HERBICIDE**

For Use On Spring Wheat (Excluding Durum), And Spring Barley Only. Not Underseeded To Forages. In The Prairie Provinces and Peace River Region of British Columbia Only.

Apply from the 2-5 leaf stage of spring wheat or spring barley and seedling stage to 8 leaf stage of kochia.

MPOWER RX	20 grams/hectare
Banvel II Herbicide	0.110 litres/hectare
Adjuvants: Agral 90, Ag-surf or Citowett Plus	2 litres/1000 litres of spray solution

Mixing order is MPOWER RX then Banvel II Herbicide then adjuvant. Refer to the MIXING DIRECTIONS section for general instructions. Use minimum volume of 55 L/ha.

Do not permit lactating dairy animals to graze fields within 7 days after application. Consult the Banvel II Herbicide label for additional application instructions and use precautions.

WEEDS CONTROLLED:

Broadleaf weeds controlled or suppressed by MPOWER RX

Kochia, including Group 2 resistant kochia

# MPOWER RX + HORIZON 240 EC HERBICIDE or AURORA + BANVEL II Herbicide

For Use On Spring Wheat (Excluding Durum). Not Underseeded To Forages. In the Prairie Provinces and Peace River Region of British Columbia Only.

Apply from the 2-5 leaf stage of spring wheat or spring barley and seedling stage to 8 leaf stage of kochia.

MPOWER RX	20 grams/hectare
Horizon 240 EC Herbicide or AURORA	0.230 L/Ha
Banvel II Herbicide	0.110 L/Ha
Adjuvant: Score or CHEM SPRAY	0.8 L/Ha

Mixing order is MPOWER RX then Banvel II Herbicide then Horizon 240 EC or AURORA then Score or CHEM SPRAY. Refer to the MIXING DIRECTIONS section for general instructions. Use minimum volume of 55 L/ha.

Do not permit lactating dairy animals to graze fields within 7 days after application. Consult the Horizon 240 EC or AURORA and Banvel II Herbicide labels for additional application instructions and use precautions.

# WEEDS CONTROLLED:

Broadleaf weeds controlled or suppressed by MPOWER RX

Kochia, including Group 2 resistant kochia
Wild oats
Green foxtail

# MPOWER RX + 2,4-D AMINE OR ESTER + EVEREST SOLUPAK 70 DF OR EVEREST 70 WDG OR HIMALAYA

# For Use On Spring Wheat (Including Durum) Only In The Prairie Provinces and Peace River Region of British Columbia Only

Apply one of the following tank mixes from the 1 to 6-leaf (1 to 4 leaves on main stem, plus 2 tillers) growth stage of the crop. For wild oats, green foxtail and volunteer tame oats, apply from the 1 to 6-leaf (1 to 4 leaves on main stem, plus 2 tillers):

TANK MIX COMPONENTS AND APPLICATION RATES							
Component 1		Component 2		Component 3		Component 4	WEEDS CONTROLLED - Broadleaf weeds controlled or suppressed by MPOWER RX alone plus:
MPower RX	20 g/ha	Everest 70 WDG or HIMALAYA		Agral 90 or Agsurf	0.25% v/v		Wild oats, green foxtail, volunteer tame oats. Use 43 g/ha when wild oat infestations are greater than 100 plants/m2 or when plants are not actively growing due to poor environmental conditions.

MPower RX	20 g/ha	Everest 70 WDG or HIMALAYA or Everest Solupak 70 DF	0	2,4-D Amine or Ester	up to 560 g ae/ha	Agral 90 or Agsurf	0.25% v/v	Wild oats, green foxtail and volunteer tame oats. Use 43 g/ha when wild oat infestations are greater than 100 plants/m2 or when plants are not actively growing due to poor environmental conditions.
MPower RX	20 g/ha	Everest 70 WDG or HIMALAYA or Everest Solupak 70 DF	g/ha	2,4-D Amine or Ester	up to 560 g ae/ha	Agral 90 or Agsurf	0.25% v/v	Wild oats and volunteer tame oats only. Use 28.5 g/ha when wild oat populations are below 100 plants/m2 and when plants are actively growing.
MPower RX	20 g/ha	Everest 70 WDG or HIMALAYA or Everest Solupak 70 DF	g/ha	2,4-D Amine or Ester	up to 560 g ae/ha	Agral 90 or Agsurf	0.25% v/v	Green foxtail only

Mixing order is Everest Solupak 70 DF or Everest 70 WDG or HIMALAYA then MPower RXMPOWER RX then 2,4-D Amine or Ester then adjuvant. Refer to MIXING DIRECTIONS section for general instructions.

Observe minimum interval to harvest of 80 days after treatment. For black, dark brown and gray-wooded soil zones only, field peas may be grown the year following Everest Solupak application in fields where precipitation has been normal or above normal (10 year average) during the growing season, and where organic matter content is above 4% and pH below 7.5. Recrop spring wheat only in brown soil zone. Consult the 2,4-D Amine or Ester and Everest Solupak 70 DF or Everest 70 WDG or HIMALAYA labels for additional information on rotational cropping restrictions, application instructions, use precautions and other restrictions.

# NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR SPECIAL USE APPLICATIONS:

The DIRECTIONS FOR USE for this product for the use described below were developed by persons other than AgraCity and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. AgraCity itself makes no representation or warranty with respect to product performance (efficacy) and crop tolerance (phytotoxicity) of this product when used on the crops listed. Accordingly, the User assume all liability arising, and agree to hold AgraCity harmless from any claims based on efficacy or phytotoxicity in connection with this use.

SEEDLING AND ESTABLISHED GRASS SPECIES FOR FORAGE AND SEED PRODUCTION

For broadleaf weed control, apply 20 grams of MPOWER RX per hectare with a surfactant recommended for use with MPOWER RX at 2.0 litres per 1,000 litres of spray volume. (See "Mixing Instructions" section of the label.)

Apply postemergence to the following Seedling or Established Grasses for Forage or Seed Production:

Meadow Bromegrass	Pubescent Wheatgrass
Smooth Bromegrass	Tall Wheatgrass
Creeping Red Fescue	Slender Wheatgrass
Tall Fescue	Streambank Wheatgrass
Orchard Grass	Northern Wheatgrass
Crested Wheatgrass	Western Wheatgrass
Intermediate Wheatgrass	

Apply postemergence to the following Established Grasses for Forage or Seed Production:

Kentucky Bluegrass

MPOWER RX will control the broadleaf weeds listed for MPOWER RX alone. For best results apply to emerged, young, actively growing weeds that are less than 10 cm tall or across. Thorough coverage of target weeds is essential.

Apply with ground equipment only. Make only one application per growing season. The above grasses may not be grazed by or fed to livestock within 7 days of application.

Please refer to the appropriate sections of this label for additional use precautions, application and/or mixing instructions.

In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include, but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact AgraCity Crop & Nutrition Ltd. At 1-844-269-3276 for information before mixing any pesticide or fertilizer that is not specifically recommended on this label. The user assumes the risk of losses that result from the use of tank mixes that do not appear on this label or that are not specifically recommended by AgraCity Crop & Nutrition Ltd.

# MIXING INSTRUCTIONS:

- 1. Select a spray volume that will ensure thorough coverage and uniform spray pattern. Use a minimum of 55-L spray volume per hectare. If tankmixing with other herbicides, always consult the label of the tank mix partner(s) for minimum spray volume requirements and apply the tank mixture using a water volume recommended for all products.
- 2. Fill the spray tank 1/4 1/3 full with fresh water and start agitation.
- 3. Add the required amount of MPOWER RX to the tank. Make sure all of the MPOWER RX is in suspension before proceeding to the next step. Continuous agitation is recommended throughout the entire mixing procedure to ensure products are completely dissolved and/or in suspension.
- 4. If using MPOWER RX alone, a recommended surfactant such as AGRAL 90, AG-SURF or CITOWETT PLUS must be added to the spray mixture at a rate of 2 litres per 1000 litres of spray solution.
- 5. Specific Tank Mix Instructions:

If tank-mixing with MCPA, 2,4-D, CURTAIL M, or LONTREL 360 or CLOBBER HERBICIDE, add the required amount of MCPA, 2,4-D, CURTAIL M, or LONTREL 360 or CLOBBER HERBICIDE to the tank while maintaining agitation. Once the herbicide is completely in suspension, add a recommended surfactant such as AGRAL 90, AG-SURF or CITOWETT PLUS at 2 L per 1000 L spray solution. Anti-foaming agents may be required.

If tank-mixing with PUMA SUPER or MCPA + PUMA SUPER, add the required amount of PUMA SUPER and/or MCPA while maintaining agitation. DO NOT ADD A SURFACTANT.

If tank mixing with ASSERT 300 Herbicide or ASSERT 300 Herbicide /MCPA: once MPOWER RX is completely in suspension, add the required amount of Spray Water pH Adjuster and agitate until dissolved. Add the required amount of ASSERT 300 Herbicide while maintaining agitation. If adding MCPA, add it to the tank last. Addition of surfactant is not required with this mixture.

When mixing with LONTREL 360 CLOBBER HERBICIDE + 2,4-D Ester or MCPA Ester, mix MPOWER RX first in fresh water, then add the required amount of LONTREL 360 or CLOBBER HERBICIDE followed by MCPA or 2,4-D. Add the recommended non-ionic surfactant such as AGRAL 90, AG-SURF or CITOWETT® PLUS last, at a rate of 2 litres per 1000 litres spray solution.

If tank-mixing with HORIZON 240 EC/ AURORA, or HORIZON 240 EC/ AURORA + MCPA Ester, add the required amount of HORIZON 240 EC or AURORA and/or MCPA Ester after MPOWER RX is completely in suspension, and maintain agitation. Add the SCORE or CHEM SPRAY adjuvant at the appropriate rate last. DO NOT ADD AN ADDITIONAL NON-IONIC SURFACTANT.

When tank-mixing with ACCORD DF Herbicide, add the required amount of MPOWER RX and ACCORD to the tank. Add the MERGE adjuvant at the appropriate rate last. Do not add an additional non-ionic surfactant.

- 6. Continue to fill tank and maintain agitation for at least 5 minutes to ensure thorough mixing.
- 7. On repeat loads, ensure that the amount of spray solution left in the tank from the previous load is less than 10% of the volume about to be mixed.
- 8. Use the spray preparation of MPOWER RX within 24 hours or product degradation may occur. Use spray preparation containing ASSERT 300 Herbicide within 12 hours or product degradation may occur. If spray solution is left standing without agitation, thoroughly agitate and re-suspend any settled MPOWER RX before resuming the spraying operation.

The volumetric measuring guide to measure MPOWER RX is to be used only as a guide. For precise measurement use scales calibrated in grams.

# **APPLICATION INSTRUCTIONS:**

Apply the spray mixture uniformly with properly calibrated ground equipment only. Ensure thorough coverage and a uniform spray pattern. Flat fan nozzles are recommended (minimum 55 litres spray volume per hectare). Use 50 mesh filter screens or larger (metal or nylon). A spray pressure of 210-275 kPa is recommended. Continuous agitation is required to keep MPOWER RX in suspension. Apply uniformly. Avoid overlapping and shut off spray boom while starting, turning, slowing or stopping to prevent crop injury from over application.

# **SPRAYER CLEANUP:**

To avoid subsequent injury to crops other than wheat, barley or oats, immediately after spraying and prior to spraying other crops, thoroughly remove all traces of MPOWER RX from mixing and spray equipment as follows:

- 1. Drain tank; then flush tank, boom and hoses with clean water for a minimum of ten minutes. Visually inspect tank to ensure removal of all visible residues of MPOWER RX. If necessary, repeat Step 1. DO NOT CLEAN SPRAYER NEAR WELL OR WATER SOURCE OR NEAR TO DESIRABLE VEGETATION.
- 2. Fill the tank with clean water, then add 1 litre household AMMONIA (containing minimum of 3% ammonia) per 100 litres of water. Flush solution through boom and hoses, and then add more water to completely fill tank. Allow to sit for 15 minutes with agitation. Again flush the hoses, boom and nozzles with the cleaning solution and drain tank.
- 3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
- 4. Repeat Step 2.
- 5. Thoroughly rinse the tank with clean water for a minimum of 5 minutes, flushing water through the hoses and boom.

# CAUTION:

Do not use ammonia with chlorine bleach. Using ammonia with chlorine bleach will release a gas with a musty chlorine odour which may cause eye, nose, throat, and lung irritation. Do not clean equipment in an enclosed area.

# **USE PRECAUTIONS:**

# **RESISTANCE-MANAGEMENT RECOMMENDATIONS:**

For resistance management, MPOWER RX is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to MPOWER RX 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 RX 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 AgraCity representative at 1-844-269-3276.
- Applications to wheat, barley or oats that are stressed by severe weather conditions, frost, low fertility, drought, water logged soil (soils at or near field capacity), disease or insect damage may result in crop injury. Drought, disease or insect damage following application may also result in crop injury.
- Do not apply to irrigated land where tail water will be used to irrigate cropland.
- Do not contaminate irrigation water.
- Do not apply to crops underseeded to legumes or grasses as injury to forage may result.
- Do not remove soil from treated fields for use on lawns, in gardens or for back fill.
- MPOWER RX should be applied only with water as a carrier. Other carriers may accelerate breakdown of the product and reduce its effectiveness.
- Do not exceed a total of 20 g of MPOWER RX per hectare per crop year.
- Do not plant to any crop until two months after application.
- Wheat, barley or oats may not be grazed by or fed to livestock within 7 days of application.
- Under certain conditions (such as heavy rainfall, prolonged cool weather, frost conditions, wide fluctuations in day/night temperatures) temporary lightening in crop colour and occasionally a slight reduction in crop height may occur.
- Do not use on highly variable soils that have large gravelly or sandy areas, eroded knolls, or calcium deposits.
- Limit use of MPOWER RX to currently licensed varieties of wheat (spring, durum, winter), barley and oats. Consult
  AgraCity prior to use on unlicensed varieties for crop tolerance information.
  DO NOT USE ON LEGER BARLEY AND BELVEDERE WHEAT

Overspray or drift to important wildlife habitats such as shelterbelts, wetlands, sloughs or dry slough borders and woodlots should be avoided.

# STORAGE:

Store product in original container only, away from other pesticides, fertilizer, food or feed. Not for use or storage in or around the home. Keep container closed.

# DISPOSAL:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
- 3. Make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial requirements.

# If this is a refillable container:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

# If this is a returnable container:

Do not reuse this container for any other purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

# For all package types:

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.

# 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.

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