

## BADGE

### EMULSIFIABLE SELECTIVE WEEDKILLER

Contains Bromoxynil and MCPA

For use in

WHEAT (spring, durum & winter), BARLEY, OATS,  
FLAX (including low linolenic varieties), CORN, FALL RYE,  
CANARY SEED (*Phalaris canariensis*), SEEDLING GRASSES, ESTABLISHED GRASSES

### AGRICULTURAL

#### GUARANTEE:

Bromoxynil (present as esters) ..... 225 a.e. g/L  
MCPA (present as the 2-ethylhexyl ester) 225 g a.e./L

**REGISTRATION NO. 16164**  
**PEST CONTROL PRODUCTS ACT**



**WARNING**

**POISON**

**READ THE LABEL AND BOOKLET BEFORE USING**

**KEEP OUT OF REACH OF CHILDREN**

**MAKHTESHIM-AGAN OF NORTH AMERICA INC.**

4515 Falls of Neuse Road, Suite 300

Raleigh, NC 27609

1 919 256-9300

IN CASE OF SPILLS, POISONING OR FIRE TELEPHONE EMERGENCY RESPONSE  
NUMBER COLLECT Makhteshim-Agan at 1 800 535-5053 (24 HOURS A DAY).

**NET CONTENTS: 4 Litres to 1050 Litres**  
**10 L TREATS 8 HECTARES**

**PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN. Avoid contact with skin, eyes and clothing. Store the container tightly closed away from seeds, fertilizer, plants and foodstuffs. Wash concentrate from skin or eyes immediately. Avoid working in spray mist. After use wash hands and other exposed skin.

Do not make more than one application per year to wheat, barley, oats, flax and corn.

Do not use in residential areas, which are defined as sites where bystanders may be present during or after spraying, including homes, schools, parks, playgrounds, playing fields and public buildings. Wear a long-sleeved shirt, long pants, socks, shoes and chemical resistant nitrile gloves (e.g. Edmont Sol-Vex #37-155/#37-145 or Pioneer A-15) which are in good condition when mixing/loading, spraying and during clean-up and repair. In addition, wear a chemical-resistant apron during mixing/loading activities. Aerial applicators and applicators using a closed cab are not required to wear chemical-resistant gloves.

For hand harvesting of corn (field and sweet), re-entry is not permitted until 15 days after application. As such, a preharvest interval (PHI) of 15 days after application is required.

For grasses grown for seed, a maximum of 2 applications is permitted per season with a minimum retreatment interval of 21 days.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

DO NOT apply this product in a way that this product will contact workers or other persons, either directly or through drift. Only handlers wearing personal protective equipment may be in the area being treated during application.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit the CropLife Canada's web site at: [www.croplife.ca](http://www.croplife.ca)

**Surface runoff**

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, fine-textured, or low in organic matter such as clay).

Avoid applying this product when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip (buffer zone) between the treated area and the edge of the water body.

### Leaching

The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g. sand, loamy sand and sandy loam soils) and/or the depth to the water table is shallow.

For aerial application: Aerial applicators must wear long pants and a long-sleeved shirt. Wear coveralls over a long-sleeved shirt, long pants, socks, shoes and chemical resistant nitrile gloves (e.g. Edmont Sol-Vex #37-155/#37-145 or Pioneer A-15) which are in good condition during mixing/loading, clean-up and repair activities.

This product contains a petroleum distillate which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning equipment.

Avoid contamination of ponds, streams, rivers and other water sources.

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

**PRE-HARVEST GRAZING INTERVALS:** Do not use treated crops for grazing of livestock or green feed until 30 days after application of BADGE EMULSIFIABLE SELECTIVE WEEDKILLER. Do not cut treated crops for forage until 30 days after application of BADGE EMULSIFIABLE SELECTIVE WEEDKILLER. **Withdraw meat animals from treated fields at least 3 days before slaughter.**

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

### FIRST AID:

Remove person from contaminated area, remove contaminated clothing. Keep patient warm, comfortable, at rest. Take the container label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**IF SWALLOWED:** Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.

**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.

**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.

### TOXICOLOGICAL INFORMATION:

Medical personnel should contact Makhteshim Agan medical information services toll-free 1 877 250-9291. This product contains an aromatic hydrocarbon solvent.

High concentrations of MCPA may cause severe irritation to the eyes. Symptoms of overexposure to MCPA could include slurred speech, twitching, jerking and spasms, drooling, low blood pressure and unconsciousness. Treat symptomatically.

**ENVIRONMENTAL HAZARDS:**

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

**STORAGE CONDITIONS:**

This BADGE EMULSIFIABLE SELECTIVE WEEDKILLER formulation will solidify at temperatures below -20°C but will become usable at temperatures above 0°C. Insecticides and fungicides should be segregated from herbicides so as to prevent the possibility of cross-contamination.

**DISPOSAL:**

**RECYCLABLE CONTAINER 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.

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

**REFILLABLE CONTAINER DISPOSAL:** 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.

**DISPOSAL OF UNUSED, UNWANTED PRODUCT:**

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 cleanup 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.

## **DIRECTIONS FOR USE:**

**TIMING:** For best results, spray when weeds are in the seedling stage. Apply in good growing conditions. Application **must** be made before the crop shields the weeds.

**SPRAYER:** Wash the tank and clean all filters, screens and tips. Select nozzle tips to apply the recommended volume per hectare. Flood jet type tips are not recommended. Adjust boom height to ensure uniform coverage of the weeds. For ground applications, spray at 5 – 10 Kph. Ensure that all tips are in good condition and spraying the same volume.

## **DIRECTIONS FOR USE:**

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.

Aerial application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply when wind speed is greater than 16 km/h at flying height at the site of application. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wingspan or rotorspan.

## **FOR AERIAL APPLICATION (wheat, barley and oats only):**

### **Aerial Application Instructions**

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

### **Use Precautions**

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the National Aerial Pesticide Application Manual, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

### **Operator Precautions**

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted. **Aerial applicators must wear long pants and a long-sleeved shirt. Aircraft must be closed cab. Mixer/loader and applicator must be different individuals. No human flaggers permitted.**

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

### **Product Specific Precautions**

Read and understand the entire label before opening this product. If you have questions, call Makhteshim-Agan 1-919 256-9300 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

1. Weeds must be treated at the *recommended* growth stages while actively growing. Weed stage should be checked prior to spraying.
2. BADGE EMULSIFIABLE SELECTIVE WEEDKILLER must be applied in volume rates of not *less than* 20 L/ha. For best results when there is a heavy crop canopy, or when the majority of the weeds are cow cockle, smartweed, hempnettle, pigweed or Canada thistle a volume rate of 40 L/ha is recommended.
3. The 1.25 L/ha rate of BADGE EMULSIFIABLE SELECTIVE WEEDKILLER must *not* be reduced.
4. Effective swath width (as determined by boom width and spray pattern overlaps) must be accurately maintained. Conduct tests to determine the effective swath width of *your* aircraft. (For example, the effective swath width may be less than one-half of the overall swath.)
5. Flat-fan or hollow cone nozzles are recommended.
6. Nozzles should be positioned to compensate for prop-wash and wing-tip vortex effects. Nozzles should not be placed within 1 m of wing tips.

- Orient nozzles (measured from direction of flight) to achieve desired minimum droplet density with maximum coverage.

Volume Rate	Nozzle Type	Nozzle Orientation
20 L/ha	Flat Fan	90°
	Hollow Cone	135°
30 L/ha	Flat Fan	90° – 135°
	Hollow Cone	135°
40 L/ha	Flat Fan	135°
	Hollow Cone	135° – 180°

- Efficient track-marking is essential (“Automatic Flagmen” markers should only be used as a back-up system).
- Avoid spraying in temperatures greater than 25°C.
- Spray only when wind is blowing away from a sensitive crop.
- Do not spray in a dead calm and when wind speed exceeds 8 Kph.

**MIXING:** Half fill the tank with clean water. Add the required amount of BADGE EMULSIFIABLE SELECTIVE WEEDKILLER and agitate thoroughly. Fill the tank and agitate again before use.

#### **HERBICIDE RESISTANCE MANAGEMENT RECOMMENDATIONS:**

For resistance management, please note that BADGE EMULSIFIABLE SELECTIVE WEEDKILLER is a Group 4 and 6 herbicide. Any weed population may contain or develop plants naturally resistant to BADGE EMULSIFIABLE SELECTIVE WEEDKILLER and other Group 4 and 6 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 BADGE EMULSIFIABLE SELECTIVE WEEDKILLER or other Group 4 and 6 herbicides 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.
- Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- 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 Makhteshim-Agan of North America Inc. representative, or call Makhteshim-Agan of North America Inc. at 1 919 256-9300.

**Buffer zones:**

Use of the following spray methods or equipment DO NOT require a buffer zone: hand-held or backpack sprayer and spot treatment.

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, 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.

Method of Application	Crop		Buffer Zones (metres) Required for the Protection of:				
			Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial Habitat
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer*	All crops		1	1	1	1	4
Aerial	Oats	Fixed wing	15	2	1	1	60
		Rotary wing	15	1	1	1	50
	Barley and wheat	Fixed wing	20	5	1	1	60
		Rotary wing	20	3	1	1	50

\* 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 other tank-mix ingredients and observe the largest (most restrictive) buffer zone of the products included in the tank mixture.

**WHEAT (Spring, Durum & Winter)**  
**(not underseeded to legumes)**

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER USED ALONE:**

**SPRAY VOLUME & PRESSURE:** Apply in NOT LESS than 50 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** Spring and durum wheat may be treated from the 2-leaf until the early flag leaf stage. Winter wheat may be treated from the 2 to 4-leaf stage in the fall or from the time growth commences to the early flag leaf stage in the spring.

**APPLICATION RATE:** 1.25 L/ha

**WEEDS CONTROLLED**

**Seedlings up to 4-leaf stage**

Green smartweed  
Pale smartweed  
Lady's-thumb  
Cow cockle\*  
Redroot pigweed  
Flixweed  
Bluebur  
Shepherd's-purse  
Kochia\*\*  
Russian thistle\*\*  
Scentless chamomile\*\*\*  
Volunteer sunflower  
Volunteer rapeseed (including Canola)  
Night flowering catchfly  
Cocklebur  
Velvetleaf\*\*\*\*  
Ball mustard  
American nightshade

**Seedlings up to 6-leaf stage**

Wild tomato

**Seedlings up to 8-leaf stage**

Wild buckwheat  
Tartary buckwheat  
Common buckwheat  
Stinkweed  
Wild mustard  
Wormseed mustard  
Lamb's-quarters  
Common ragweed  
Common groundsel

**Perennials: Top-growth checked**

Canada thistle  
Perennial sow-thistle

*\*In normal conditions cow cockle will be controlled up to the 4-leaf stage. Plants beyond this stage are unlikely to be controlled.*

*\*\*Spray before plants are 5 cm high.*

*\*\*\*Spring annuals only.*

*\*\*\*\*Spray before plants are 8 cm high.*

WHEAT (CONT'D)

## **BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + MCPA**

**SPRAY VOLUME & PRESSURE:** Apply in NOT LESS than 50 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** Spring and durum wheat may be treated from the 2-leaf until the early flag leaf stage.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with 275 g active ingredient MCPA per hectare.

**NOTE:** MCPA-K is preferred for hempnettle although other formulations may be used. Refer to the MCPA label for precautions and limitations. Add MCPA to the spray tank first, agitate, then add BADGE EMULSIFIABLE SELECTIVE WEEDKILLER.

### **WEEDS CONTROLLED**

As listed for BADGE EMULSIFIABLE SELECTIVE WEEDKILLER alone plus these additional weeds.

#### **Seedlings up to 4-leaf stage**

Hempnettle\*

#### **Seedlings up to 8-leaf stage**

Volunteer rapeseed (including Canola)

*\*Hempnettle is unlikely to be controlled beyond the 4-leaf stage. Plants emerging after application, which is often the case on peat- type soils, will not be controlled.*

## **BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + AVENGE 200-C (spring wheat and durum wheat)**

AVENGE 200-C is a registered trademark of Amvac Chemical Corporation.

Follow all precautions, limitations and timing recommendations on the AVENGE 200-C label.

**SPRAY VOLUME & PRESSURE:** Apply in 100 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** Spring wheat and durum wheat may be treated from the 2 to 6-leaf stage. Wild oats must be in the 3 to 5-leaf stage and broadleaf weeds in the seedling stage as indicated.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with AVENGE 200-C at 3.5 – 4.25 L/ha **OR** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha plus 275 g active ingredient MCPA ester per hectare tank-mixed with AVENGE 200-C at 3.5 – 4.25 L/ha.

**NOTE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER should be added to the spray tank first, agitated, then add AVENGE 200-C. AVENGE 200-C can only be applied to certain varieties of spring wheat and durum wheat. Refer to the AVENGE 200-C label.

### **WEEDS CONTROLLED**

As listed for BADGE EMULSIFIABLE SELECTIVE WEEDKILLER used alone or in combination with MCPA *plus* wild oats.

WHEAT (CONTD)

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER  
+ ACHIEVE\* LIQUID HERBICIDE  
(Spring Wheat and Durum Wheat)**

\*Achieve Liquid Herbicide and \*\*Turbocharge are registered trademarks of companies within the Zeneca group.

Follow all mixing and spraying precautions, limitations and timing recommendations on the Achieve Liquid Herbicide label. **DO NOT APPLY BY AIR.**

**SPRAY VOLUME & PRESSURE:** Apply in 100 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** Applications of BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Achieve Liquid Herbicide tank mixtures should be made to spring wheat from the 2-leaf until the early flag leaf stage of growth (total leaves including tillers) (Zadoks or BBCN growth stage of 11,20 to 14,21) and when wild oats are at the 1 - 6 leaf stage of growth (total leaves including tillers) (Zadoks or BBCN growth stage of 11,20 to 14,22) and when green foxtail (wild millet) is at the 1 - 5 leaf stage of growth (Zadoks or BBCN growth stage of 11,20 to 14,21). Refer to the illustration on the Achieve Liquid Herbicide label.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with Achieve Liquid Herbicide at 0.5 L/ha. When using this tank mixture, add Turbocharge\*\* to the spray tank at a concentration of 0.5% v/v (i.e. 0.5 L of Turbcharge per 100 L of spray solution).

**WEEDS CONTROLLED:**

As listed on the BADGE EMULSIFIABLE SELECTIVE WEEDKILLER alone plus wild oats and green foxtail (wild millet).

**NOTE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Achieve Liquid Herbicide tank mixtures can be used in all varieties of spring wheat (including hard red spring, Canada prairie spring, soft white spring, and utility) and durum.

Only apply this mixture to spring wheat that is **NOT UNDERSEEDED TO LEGUMES.**

*WHEAT (CONTD)*

## **BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + ALLY**

ALLY is a registered trademark of E.I. DuPont de Nemours and Company.

**NOTE:** Refer to the ALLY label for all precautions, including limitations on soil pH, crop rotations and sprayer cleanup.

**SPRAY VOLUME & PRESSURE:** Apply in NOT LESS than 100 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** Spring wheat and durum wheat (not underseeded with other crops) may be treated from the 2-leaf to early flag leaf stage.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with ALLY at 7.5 g/ha plus a surfactant as required on the ALLY label. Add ALLY to the required water volume in the tank first, agitate, then add BADGE EMULSIFIABLE SELECTIVE WEEDKILLER, agitate, then add the surfactant. On repeat tank loads, prepare an ALLY/water slurry and add it to the required water volume in the tank prior to adding the BADGE EMULSIFIABLE SELECTIVE WEEDKILLER.

### **WEEDS CONTROLLED:**

As listed for BADGE EMULSIFIABLE SELECTIVE WEEDKILLER alone at the recommended rate, plus hempnettle up to the 8 leaf stage (4 pairs of leaves), and chickweed up to 7 cm high. For best results, apply to the first main flush of young, actively growing weeds. DO NOT APPLY THIS TANK MIX BY AIR.

WHEAT (CONTD)

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + HORIZON\* 240 EC + Surfactant or  
BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Horizon W. O.**

**(Spring Wheat and Durum Wheat only)**

**For use in Manitoba, Saskatchewan, Alberta plus the  
Peace River Region of British Columbia**

\*Horizon is a registered trademark of Syngenta.

Follow all mixing and spraying precautions, limitations and timing recommendations on the Horizon 240 EC and Horizon W. O. labels. **DO NOT APPLY THE BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + HORIZON W. O. TANK MIX BY AIR.**

**SPRAY VOLUME & PRESSURE:** Apply in 100 liters of water per hectare at a pressure of 275 kPa.

**WEEDS CONTROLLED:**

As listed for BADGE EMULSIFIABLE SELECTIVE WEEDKILLER alone at the recommended rate, plus wild oats and green foxtail (wild millet)

**TIMING (Crop):** Do not apply the BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Horizon 240 EC + Surfactant or BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Horizon W. O. tank mixture before crop emergence is complete. Applications of the BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Horizon 240 EC + Surfactant or BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Horizon W. O. tank mixture should be made in the 2 to flag leaf stage.

**TIMING: (Weeds)**

*Wild Oats:* 1 to 6 leaf stage on main stem, prior to emergence of 4th tiller.

*Green Foxtail and Yellow Foxtail (wild millet, pigeon grass):* 1 to 5 leaf stage on main stem. For optimum control apply prior to emergence of the 3rd tiller and while foxtail is actively growing.

**GROUND APPLICATION RATE: For wild oat and green foxtail (wild millet) control:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with 230 mL/ha of BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Horizon 240 EC + Surfactant or BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Horizon W. O. and 0.8% v/v or 800 mL/100 L of Score Adjuvant.

**AERIAL APPLICATION:** Only Horizon 240 EC tank mixed with BADGE EMULSIFIABLE SELECTIVE WEEDKILLER may be applied aerially. Use at the above application rate, and refer to and observe the additional instructions and precautions for aerial application on the Horizon 240 EC label.

**MIXING INSTRUCTIONS:** Fill spray tank ½ full with water, followed by BADGE EMULSIFIABLE SELECTIVE WEEDKILLER. Agitate for 2-3 minutes then add Horizon 240 EC or Horizon W.O. and agitate for 2-3 minutes. Then add Score adjuvant, agitate 1-2 minutes, add the remaining water and maintain constant agitation.

**NOTE:**The BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Horizon 240 EC + surfactant or BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Horizon W. O. tank mixtures can be used on all varieties of spring and durum wheat.

WHEAT (CONTD)

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER  
+ EVEREST\* 70 DF + Surfactant (Spring Wheat)  
For Use Only in Manitoba, Saskatchewan, Alberta and  
Peace River Region of British Columbia**

\* Everest is a registered trademark of Arysta Life Science North America, LLC.

Follow all mixing and spraying precautions, limitations and timing recommendations on the Everest 70 DF label. DO NOT APPLY BY AIR.

**SPRAY VOLUME & PRESSURE:** Apply in a spray volume of 100 litres of water per hectare at a pressure of 275 kPa.

**WEEDS CONTROLLED:**

As listed for BADGE EMULSIFIABLE SELECTIVE WEEDKILLER alone at the recommended rate, plus wild oats and green foxtail (wild millet)

**TIMING (Crop):** Do not apply the BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Everest 70 DF tank mixture before crop emergence is complete. Applications of the BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Everest 70 DF tank mixture should be made to spring wheat that has a minimum of one leaf to a maximum of four leaves on the main stem, plus two tillers (1 leaf to 6 total leaves). Application beyond this stage may result in yield losses due to weed competition.

**TIMING (Weeds):**

**Wild Oats:** 1 to 4 leaves on the main stem, plus 2 tillers (1 leaf to 6 total leaves). No larger than 4-leaf, 2 tillers.

**Green Foxtail (Wild Millet):** 1 to 4 leaves on the main stem, plus 2 tillers (1 leaf to 6 total leaves). No larger than 4-leaf, 2 tillers.

**APPLICATION RATE:**

**For Green Foxtail (Wild Millet) control:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with 21.5 g/ha of Everest 70 DF and 0.25% v/v or 0.25 L/100 L of Agral 90 or Ag-Surf.

**For Green Foxtail (Wild Millet) and Wild Oat control:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with 43 g/ha of Everest 70 DF and 0.25% v/v or 0.25 L/100 L of Agral 90 or Ag-Surf.

**MIXING INSTRUCTIONS:** Fill spray tank 1/3 to 1/2 full with water, followed by Everest 70 DF then BADGE EMULSIFIABLE SELECTIVE WEEDKILLER, and surfactant, and remainder of the water.

**NOTE:** The BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Everest 70 DF tank mixture can be used in all varieties of spring wheat (including hard red spring, Canada prairie spring, soft white spring).

Only apply this mixture to spring wheat that is NOT UNDERSEEDED TO LEGUMES.

The following crops may be planted 11 months after application of BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Everest 70 DF depending on soil zone. **In the Black, Dark Brown and Gray-Wooded Soil Zones:** Spring wheat, barley, canola, field peas. Field peas may be grown the year following in fields where annual 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. **In the Brown Soil Zone:** only Spring Wheat.

WHEAT (CONTD)

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER  
+ REFINE EXTRA\* HERBICIDE DRY FLOWABLE 75% + Surfactant  
BADGE EMULSIFIABLE SELECTIVE WEEDKILLER  
+ REFINE EXTRA\* TOSS-N-GO DRY FLOWABLE 75% + Surfactant  
(winter wheat, spring wheat and Durum wheat)**

\* Refine Extra is a registered Trademarks of E.I. du Pont de Nemours and Company.

Follow all mixing and spraying precautions, limitations and timing recommendations on the Refine Extra Herbicide Dry Flowable 75% and Refine Extra Toss-N-Go Dry Flowable 75% labels. DO NOT APPLY BY AIR.

**SPRAY VOLUME & PRESSURE:** Apply in NOT LESS than 100 litres of water per hectare at a pressure of 275 kPa.

**WEEDS CONTROLLED:**

As listed for BADGE EMULSIFIABLE SELECTIVE WEEDKILLER alone at the recommended rate, plus hemp-nettle up to the 6-leaf stage (3 pairs of leaves), and chickweed up to the 6 leaf stage (3 pairs of leaves).

**TIMING (Crop):**

***Spring Wheat (not underseeded with other crops):*** Apply from the 2 leaf to early flag leaf stage.

**TIMING (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.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with 6.7 g/ha of Refine Extra Herbicide Dry Flowable 75% **or** 6.7 g/ha of Refine Extra Toss-N-Go Dry Flowable 75% plus Agral 90 **or** Agsurf **or** Citowett Plus at a rate of 2 litres per 1000 litres of spray solution.

**MIXING INSTRUCTIONS:** Add Refine Extra Herbicide Dry Flowable 75% or Refine Extra Toss-N-Go Dry Flowable 75% to the required water volume in the tank first, agitate, then add BADGE EMULSIFIABLE SELECTIVE WEEDKILLER, agitate, then add the surfactant. On repeat tank loads, prepare a Refine Extra/water slurry and add it to the required water volume in the tank prior to adding BADGE EMULSIFIABLE SELECTIVE WEEDKILLER.

WHEAT (CONTD)

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + PUMA\* 120  
(Spring Wheat and Durum Wheat)**

**For use in Manitoba, Saskatchewan, Alberta plus the  
Peace River Region of British Columbia**

\*Puma and Puma Super are registered trademarks of Bayer Inc.

Follow all mixing and spraying precautions, limitations and timing recommendations on the Puma 120 label. DO NOT APPLY BY AIR.

**SPRAY VOLUME & PRESSURE:** Apply in 100 liters of water per hectare at a pressure of 275 kPa.

**TIMING:** Applications of BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Puma 120 tank mixtures should be made to spring wheat and durum wheat from the 2-6 leaf stage of growth on the main stem plus 3 tillers. Application beyond the 6 leaf stage of spring and durum wheat may result in crop injury. Apply when annual grassy weeds are in the 1-6 leaf stage of growth.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with Puma 120 as directed on the Puma 120 label directions.

**WEEDS CONTROLLED:**

As listed on the BADGE EMULSIFIABLE SELECTIVE WEEDKILLER alone plus wild oats, green foxtail (wild millet) and yellow foxtail.

**NOTE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Puma 120 tank mixtures can be used in all varieties of spring wheat (including hard red spring, Canada prairie soft, soft white spring, and utility) and durum.

Do not apply within 15 metres of a body of water or wetland area.

Rainfall within 1 hour of application may reduce effectiveness of tank-mix.

WHEAT (CONTD)

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + AXIAL 100 EC  
HERBICIDE**

**(SPRING WHEAT ONLY)**

For use in the Prairie Provinces and Peace River, Okanagan and Creston Flats Regions of British Columbia only.

AXIAL and \*\*ADIGOR are registered trademarks of a Syngenta Group company.

Follow all mixing and spraying precautions, limitations and timing recommendations on the AXIAL 100 EC Herbicide label. DO NOT APPLY BY AIR.

**SPRAY VOLUME & PRESSURE:** Apply in 50-100 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** Spring wheat may be treated at 1 leaf to flag leaf stage, and when annual grasses are at the 1 to 6-leaf stage, prior to 4<sup>th</sup> tiller.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with Axial 100EC Herbicide at 600 mL/ha plus ADIGOR adjuvant at 700 mL/ha.

**WEEDS CONTROLLED:**

As listed for Badge Emulsifiable Selective Weedkiller label alone plus wild oats, green foxtail, yellow foxtail, volunteer oats, volunteer canary seed (*Phalaris canariensis*) and proso millet.

**NOTE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + AXIAL 100EC HERBICIDE can be used in all varieties of spring wheat. One application per year is permitted. Observe a minimum interval to harvest of 60 days after treatment for grain and straw and of 30 days after treatment for hay and minimum of 7 days before grazing livestock on treated crops. Do not apply if rain is expected within 1 hour after spraying.

**WHEAT (winter)**  
**(underseeded to red clover)**  
**For use in Ontario, Quebec and the Maritime Provinces only**

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER USED ALONE**

**SPRAY VOLUME & PRESSURE:** Apply in NOT LESS than 200 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** Apply in the spring when the red clover is in the 1st to 3rd trifoliate leaf stage and when the winter wheat provides a protective canopy over the red clover. The winter wheat may be treated from the 2-leaf until the early flag leaf stage.

**APPLICATION RATE:** 1.25 L/ha

**NOTE:** Use of this product may cause temporary leaf scorch or foliar burn in adverse growing conditions, especially if applied before or during periods of hot and humid weather conditions. Do not apply if the red clover is under stress. Avoid overlapping as severe crop injury may occur.

**WEEDS CONTROLLED:**

As listed under BADGE EMULSIFIABLE SELECTIVE WEEDKILLER used alone.

Rainfall within 1 hour of application may reduce effectiveness of tank-mix.

**BARLEY**  
**(not underseeded to legumes)**

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER USED ALONE**

**SPRAY VOLUME & PRESSURE:** Apply in NOT LESS than 50 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** The crop may be treated from the 2-leaf until the early flag leaf stage.

**APPLICATION RATE:** 1.25 L/ha

**WEEDS CONTROLLED**

**Seedlings up to 4-leaf stage**

Green smartweed  
Pale smartweed  
Lady's-thumb  
Cow Cockle\*  
Redroot pigweed  
Flixweed  
Bluebur  
Shepherd's-purse  
Kochia \*\*  
Russian thistle\*\*  
Scentless chamomile\*\*\*  
Volunteer sunflower  
Volunteer rapeseed (including Canola)  
Night flowering catchfly  
Cocklebur  
Velvetleaf\*\*\*\*  
Ball mustard  
American nightshade

**Seedlings up to 6-leaf stage**

Wild tomato

**Seedlings up to 8-leaf stage**

Wild buckwheat  
Tartary buckwheat  
Common buckwheat  
Stinkweed  
Wild mustard  
Wormseed mustard  
Lamb's-quarters  
Common ragweed  
Common groundsel

**Perennials: Top-growth checked**

Canada thistle  
Perennial sow-thistle

*\*In normal conditions cow cockle will be controlled up to the 4-leaf stage. Plants beyond this stage are unlikely to be controlled.*

*\*\*Spray before plants are 5 cm high.*

*\*\*\*Spring annuals only.*

*\*\*\*\*Spray before plants are 8 cm high.*

BARLEY (CONTD)

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + MCPA**

**SPRAY VOLUME & PRESSURE:** Apply in NOT LESS than 50 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** The crop may be treated from the 2-leaf until the early flag leaf stage.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with 275 g active ingredient MCPA per hectare.

**NOTE:** MCPA-K is preferred for hempnettle although other formulations may be used. Refer to the MCPA label for precautions and limitations. Add MCPA to the spray tank first, agitate, then add BADGE EMULSIFIABLE SELECTIVE WEEDKILLER.

**WEEDS CONTROLLED**

As listed for BADGE EMULSIFIABLE SELECTIVE WEEDKILLER alone plus these additional weeds.

**Seedlings up to 4-leaf stage**  
Hempnettle\*

**Seedlings up to 8-leaf stage**  
Volunteer rapeseed (including Canola)

*\*Hempnettle is unlikely to be controlled beyond the 4-leaf stage. Plants emerging after application, which is often the case on peat-type soils, will not be controlled.*

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + AVENGE 200-C**

AVENGE 200-C is a registered trademark of Amvac Chemical Corporation.

Follow all precautions, limitations and timing recommendations on the Avenge 200-C label.

**SPRAY VOLUME & PRESSURE:** Apply in 100 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** The crop may be treated from the 2 to 6-leaf stage. Wild oats must be in the 3 to 5-leaf stage and broadleaf weeds in the seedling stage as indicated.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with Avenge 200-C at 3.5 – 4.25 L/ha **OR** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha plus 275 g active ingredient MCPA ester per hectare tank-mixed with Avenge 200-C at 3.5 – 4.25 L/ha.

**NOTE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER should be added to the spray tank first, agitated, then add AVENGE 200-C.

**WEEDS CONTROLLED**

As listed for BADGE EMULSIFIABLE SELECTIVE WEEDKILLER used alone or in combination with MCPA *plus* wild oats.

BARLEY (CONT'D)

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER  
+ ACHIEVE\* Liquid Herbicide  
(Spring Barley only)**

**For use in Manitoba, Saskatchewan, Alberta plus  
the Peace River Region of British Columbia.**

\*Achieve Liquid Herbicide and \*\*Turbocharge are registered trademarks of companies within the Zeneca Group.

Follow all mixing and spraying precautions, limitations and timing recommendations on the Achieve Liquid Herbicide label. DO NOT APPLY BY AIR.

**SPRAY VOLUME & PRESSURE:** Apply in 100 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** Applications of BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Achieve Liquid Herbicide tank mixtures should be made to spring barley from the 2-leaf until the early flag leaf stage of growth (total leaves including tillers) (Zadoks or BBCN growth stage of 11,20 to 14,21) and when wild oats are at the 1 - 6 leaf stage of growth (total leaves including tillers) (Zadoks or BBCN growth stage of 11,20 to 14,22) and when green foxtail (wild millet) is at the 1 - 5 leaf stage of growth (Zadoks or BBCN growth stage of 11,20 to 14,21). Refer to the illustration on the Achieve Liquid Herbicide label.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with Achieve Liquid Herbicide at 0.5 L/ha. When using this tank mixture, add Turbocharge\*\* to the spray tank at a concentration of 0.5% v/v (i.e. 0.5 L of Turbocharge per 100 L of spray solution).

**WEEDS CONTROLLED**

As listed on the BADGE EMULSIFIABLE SELECTIVE WEEDKILLER alone plus wild oats and green foxtail (wild millet).

**NOTE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + Achieve Liquid Herbicide tank mixtures can be used in all 2 or 6 row varieties of barley (malting and general purpose varieties including semi-dwarf and hulless). Only apply this mixture to spring barley that is NOT UNDERSEEDED TO LEGUMES.

*BARLEY (CONTD)*

## **BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + ALLY**

Ally is a registered trademark of E.I. DuPont de Nemours and Company.

**NOTE:** Refer to the Ally label for all precautions, including limitations on soil pH, crop rotations and sprayer cleanup.

**SPRAY VOLUME & PRESSURE:** Apply in NOT LESS than 100 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** Barley (not underseeded with other crops) may be treated from the 2-leaf to early flag leaf stage.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with ALLY at 7.5 g/ha plus a surfactant as required on the Ally label. Add Ally to the required water volume in the tank first, agitate, then add BADGE EMULSIFIABLE SELECTIVE WEEDKILLER, agitate, then add the surfactant. On repeat tank loads, prepare an Ally/water slurry and add it to the required water volume in the tank prior to adding the BADGE EMULSIFIABLE SELECTIVE WEEDKILLER.

### **WEEDS CONTROLLED**

As listed for BADGE EMULSIFIABLE SELECTIVE WEEDKILLER alone at the recommended rate, plus hempnettle up to the 8 leaf stage (4 pairs of leaves), and chickweed up to 7 cm high. For best results, apply to the first main flush of young, actively growing weeds. Do not apply this tank mix by air.

BARLEY (CONTD)

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER  
+ REFINE EXTRA\* HERBICIDE DRY FLOWABLE 75% + Surfactant  
BADGE EMULSIFIABLE SELECTIVE WEEDKILLER  
+ REFINE EXTRA\* TOSS-N-GO DRY FLOWABLE 75% + Surfactant  
(spring barley)**

\* Refine Extra is a registered Trademarks of E.I. du Pont de Nemours and Company.

Follow all mixing and spraying precautions, limitations and timing recommendations on the Refine Extra Herbicide Dry Flowable 75% and Refine Extra Toss-N-Go Dry Flowable 75% labels. DO NOT APPLY BY AIR.

**SPRAY VOLUME & PRESSURE:** Apply in NOT LESS than 100 litres of water per hectare at a pressure of 275 kPa.

**WEEDS CONTROLLED:**

As listed for BADGE EMULSIFIABLE SELECTIVE WEEDKILLER alone at the recommended rate, plus hemp-nettle up to the 6-leaf stage (3 pairs of leaves), and chickweed up to the 6 leaf stage (3 pairs of leaves).

**TIMING (Crop): *Spring Barley:*** Apply from the 2 leaf to early flag leaf stage.

**TIMING (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.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with 6.7 g/ha of Refine Extra Herbicide Dry Flowable 75% **or** 6.7 g/ha of Refine Extra Toss-N-Go Dry Flowable 75% plus Agral 90 or Agsurf or Citowett Plus at a rate of 2 litres per 1000 litres of spray solution.

**MIXING INSTRUCTIONS:** Add Refine Extra Herbicide Dry Flowable 75% or Refine Extra Toss-N-Go Dry Flowable 75% to the required water volume in the tank first, agitate, then add BADGE EMULSIFIABLE SELECTIVE WEEDKILLER, agitate, then add the surfactant. On repeat tank loads, prepare a Refine Extra/water slurry and add it to the required water volume in the tank prior to adding BADGE EMULSIFIABLE SELECTIVE WEEDKILLER.

**NOTE:** Only apply this mixture to spring barley that is NOT UNDERSEEDED TO LEGUMES.

**OATS**  
**(not underseeded to legumes)**

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER USED ALONE**

**SPRAY VOLUME & PRESSURE:** Apply in NOT LESS than 50 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** The crop may be treated from the 2-leaf until the early flag leaf stage.

**APPLICATION RATE:** 1.25 L/ha

**WEEDS CONTROLLED**

**Seedlings up to 4-leaf stage**

Green smartweed  
Pale smartweed  
Lady's-thumb  
Cow Cockle\*  
Redroot pigweed  
Flixweed  
Bluebur  
Shepherd's-purse  
Kochia\*\*  
Russian thistle\*\*  
Scentless chamomile\*\*\*  
Volunteer sunflower  
Volunteer rapeseed (including Canola)  
Night flowering catchfly  
Cocklebur  
Velvetleaf\*\*\*\*  
Ball mustard  
American nightshade

**Seedlings up to 6-leaf stage**

Wild tomato

**Seedlings up to 8-leaf stage**

Wild buckwheat  
Tartary buckwheat  
Common buckwheat  
Stinkweed  
Wild mustard  
Wormseed mustard  
Lamb's-quarters  
Common ragweed  
Common groundsel

**Perennials: Top-growth checked**

Canada thistle  
Perennial sow-thistle

*\*In normal conditions cow cockle will be controlled up to the 4-leaf stage. Plants beyond this stage are unlikely to be controlled.*

*\*\*Spray before plants are 5 cm high.*

*\*\*\*Spring annuals only.*

*\*\*\*\*Spray before plants are 8 cm high.*

OATS (CONTD)

## **BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + MCPA**

**SPRAY VOLUME & PRESSURE:** Apply in NOT LESS than 50 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** The crop may be treated from the 2-leaf until the early flag leaf stage.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with 275 g active ingredient MCPA per hectare.

**NOTE:** MCPA-K is preferred for hempnettle although other formulations may be used. Refer to the MCPA label for precautions and limitations. Add MCPA to the spray tank first, agitate, then add BADGE EMULSIFIABLE SELECTIVE WEEDKILLER.

### **WEEDS CONTROLLED**

As listed for BADGE EMULSIFIABLE SELECTIVE WEEDKILLER alone plus these additional weeds.

#### **Seedlings up to 4-leaf stage**

Hempnettle\*

#### **Seedlings up to 8-leaf stage**

Volunteer rapeseed (including Canola)

*\*Hempnettle is unlikely to be controlled beyond the 4-leaf stage. Plants emerging after application, which is often the case on peat- type soils, will not be controlled.*

# CORN

## (Field & Sweet)

### BADGE EMULSIFIABLE SELECTIVE WEEDKILLER USED ALONE

**SPRAY VOLUME & PRESSURE:** Apply in 200 – 300 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** Corn should be treated with a broadcast post-emergence application at the recommended rate FROM THE 4 to 6-LEAF STAGE. Damage to corn will result if sprayed beyond the 6-leaf stage.

**APPLICATION RATE:** 1.25 L/ha

**NOTE:** Temporary crop injury in the form of leaf scorching may occur in adverse growing conditions (especially if applied during or after periods of cool and wet, or hot and humid weather conditions). Cultivation after application is not recommended. DO NOT ADD OIL OR SURFACTANT. Do not spray corn by aircraft.

### WEEDS CONTROLLED

#### Seedlings up to 4-leaf stage

Green smartweed  
Pale smartweed  
Lady's-thumb  
Cow Cockle\*  
Redroot pigweed  
Flixweed  
Bluebur  
Shepherd's-purse  
Kochia\*\*  
Russian thistle\*\*  
Scentless chamomile\*\*\*  
Volunteer sunflower  
Volunteer rapeseed (including Canola)  
Night flowering catchfly  
Cocklebur  
Velvetleaf\*\*\*\*  
Ball mustard  
American nightshade

#### Seedlings up to 6-leaf stage

Wild tomato

#### Seedlings up to 8-leaf stage

Wild buckwheat  
Tartary buckwheat  
Common buckwheat  
Stinkweed  
Wild mustard  
Wormseed mustard  
Lamb's-quarters  
Common ragweed  
Common groundsel

#### Perennials: Top-growth checked

Canada thistle  
Perennial sow-thistle

*\*In normal conditions cow cockle will be controlled up to the 4-leaf stage. Plants beyond this stage are unlikely to be controlled.*

*\*\*Spray before plants are 5 cm high.*

*\*\*\*Spring annuals only.*

*\*\*\*\*Spray before plants are 8 cm high.*

CORN (CONTD)

## **BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + ATRAZINE**

**SPRAY VOLUME & PRESSURE:** Apply in 200 – 300 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** Corn should be treated FROM THE 4 to 6-LEAF STAGE. Damage to corn will result if sprayed beyond the 6-leaf stage.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with 1.1 – 2.25 kg active ingredient per hectare. Add atrazine to the spray tank first, mix well, then add BADGE EMULSIFIABLE SELECTIVE WEEDKILLER.

**NOTE:** Temporary crop injury in the form of leaf scorching may occur in adverse growing conditions (especially if applied during or after periods of cool and wet, or hot and humid weather conditions). Cultivation after application is not recommended. DO NOT ADD OIL OR SURFACTANT, OR USE ATRAZINE FORMULATIONS CONTAINING OIL. Refer to the atrazine label for instructions, precautions and limitations, especially on crop restrictions the following year. DO NOT SPRAY CORN BY AIRCRAFT.

### **WEEDS CONTROLLED**

As listed for BADGE EMULSIFIABLE SELECTIVE WEEDKILLER used alone *plus* weeds as indicated on the atrazine label.

**FALL RYE**  
**(not underseeded to legumes)**

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER USED ALONE**

**SPRAY VOLUME & PRESSURE:** Apply in NOT LESS than 50 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** Fall rye may be treated from the time growth commences to the early flag leaf stage in the spring.

**APPLICATION RATE:** 1.25 L/ha

**WEEDS CONTROLLED**

**Seedlings up to 4-leaf stage**

Green smartweed  
Pale smartweed  
Lady's-thumb  
Cow Cockle\*  
Redroot pigweed  
Flixweed  
Bluebur  
Shepherd's-purse  
Kochia\*\*  
Russian thistle\*\*  
Scentless chamomile\*\*\*  
Volunteer sunflower  
Volunteer rapeseed (including Canola)  
Night flowering catchfly  
Cocklebur  
Velvetleaf\*\*\*\*  
Ball mustard  
American nightshade

**Seedlings up to 6-leaf stage**

Wild tomato

**Seedlings up to 8-leaf stage**

Wild buckwheat  
Tartary buckwheat  
Common buckwheat  
Stinkweed  
Wild mustard  
Wormseed mustard  
Lamb's-quarters  
Common ragweed  
Common groundsel

**Perennials: Top-growth checked**

Canada thistle  
Perennial sow-thistle

*\*In normal conditions cow cockle will be controlled up to the 4-leaf stage. Plants beyond this stage are unlikely to be controlled.*

*\*\*Spray before plants are 5 cm high.*

*\*\*\*Spring annuals only.*

*\*\*\*\*Spray before plants are 8 cm high*

## FLAX (including low linolenic acid varieties)

### BADGE EMULSIFIABLE SELECTIVE WEEDKILLER USED ALONE

**SPRAY VOLUME & PRESSURE:** Apply in NOT LESS than 50 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** Flax may be treated from the time it is 5 cm high up to the early flower bud stage but for *best results apply* BADGE EMULSIFIABLE SELECTIVE WEEDKILLER *when flax is 5 to 10 cm high*. Some leaf burn and check to growth may follow spraying.

Observe a minimum interval to harvest of 60 days after application of BADGE EMULSIFIABLE SELECTIVE WEEDKILLER. **Spraying in the evening may reduce risk of flax injury.**

**WARNING:** Do not spray unthrifty crops or when plants are under stress. Do not spray in periods of hot, humid weather. Do not spray flax by aircraft.

**APPLICATION RATE:** 1.25 L/ha

### WEEDS CONTROLLED

**Due to flax's less competitive nature, weeds should be sprayed in as early a leaf stage as possible, up to the recommended leaf stage.**

#### Seedlings up to 4-leaf stage

Green smartweed  
Pale smartweed  
Lady's-thumb  
Cow Cockle\*  
Flixweed  
Bluebur  
Shepherd's-purse  
Kochia\*\*  
Russian thistle\*\*  
Scentless chamomile\*\*\*  
Volunteer sunflower  
Volunteer rapeseed (including Canola)  
Night flowering catchfly  
Cocklebur  
Velvetleaf\*\*\*\*  
Ball mustard  
American nightshade

#### Seedlings up to 6-leaf stage

Wild tomato

#### Seedlings up to 8-leaf stage

Wild buckwheat  
Tartary buckwheat  
Common buckwheat  
Stinkweed  
Wild mustard  
Wormseed mustard  
Lamb's-quarters  
Common ragweed  
Common groundsel

#### Perennials: Top-growth checked

Canada thistle  
Perennial sow-thistle

*\*In normal conditions cow cockle will be controlled up to the 4-leaf stage. Plants beyond this stage are unlikely to be controlled.*

*\*\*Spray before plants are 5 cm high.*

*\*\*\*Spring annuals only. \*\*\*\*Spray before plants are 8 cm high.*

*FLAX (CONTD)*

## **BADGE EMULSIFIABLE SELECTIVE WEEDKILLER + SELECT ON FLAX (including low linolenic acid varieties)**

SELECT and AMIGO are registered trademarks of Arysta Life Science Corporation LLC.

Follow all precautions, limitations and timing recommendations on the Select label.

**SPRAY VOLUME & PRESSURE:** Apply in 55 – 110 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** Flax may be treated from 5 cm high up to the early bud stage. For best results, apply this tank-mix when flax is 5-10 cm high and weeds are in the seedling stage. Leaf burn and check to crop growth may follow spraying. When using this tank-mix, it is important that application be made at the recommended stage of weed growth, particularly where smartweed is present. If broadleaf weeds and grasses are not within the recommended stage at the same time, then separate applications should be made.

**WARNING:** Do not spray unthrifty crops or when flax is under stress due to drought or excess soil moisture. Do not spray in hot, humid weather conditions. Do not spray flax by aircraft. This treatment may cause leaf burn, retarded growth and delayed maturity of the crop.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with 0.19 L/ha Select. Amigo adjuvant must be added as per the SELECT label directions. Add BADGE EMULSIFIABLE SELECTIVE WEEDKILLER to the spray tank half filled with water, agitate, add Select, continue agitation, add Amigo and remaining amount of water, continue to agitate.

### **WEEDS CONTROLLED**

As listed for BADGE EMULSIFIABLE SELECTIVE WEEDKILLER alone on flax plus these additional weeds.

Wild oats  
Barnyard grass  
Volunteer barley  
Volunteer oats

Yellow & green foxtail  
Volunteer wheat  
Volunteer corn

FLAX (CONTD)

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER  
+ Poast\* Ultra Herbicide + Surfactant  
(Flax including low linolenic acid varieties)**

\* Poast is a registered trademark of BASF.

Follow all mixing and spraying precautions, limitations and timing recommendations on the Poast Ultra Herbicide label.

**SPRAY VOLUME & PRESSURE:** Thoroughly clean all screens to prevent nozzle clogging, especially when water volumes of 50 to 100 L/ha are used. In general, use water volumes of 50 to 100 L/ha, and a minimum of 240 kPa pressure. For applications to dense weed infestations use 100 to 200 L of water per hectare at pressures of 275 to 425 kPa. For quackgrass control use 100 to 200 L of water per hectare at pressures of 275 to 425 kPa.

**WARNING:** Do not spray unthrifty crops or when flax is under stress due to drought or excess soil moisture. Do not spray in hot, humid weather conditions. Do not spray flax by aircraft. This treatment may cause leaf burn, retarded growth and delayed maturity of the crop.

**WEEDS CONTROLLED:**

As listed for BADGE EMULSIFIABLE SELECTIVE WEEDKILLER alone at the recommended rate, annual and perennial grasses listed on the Poast Ultra Herbicide label.

**TIMING (Crop):** Refer to Poast Ultra Herbicide label.

**TIMING (Weeds):** Refer to Poast Ultra Herbicide label.

**APPLICATION RATE:** BADGE EMULSIFIABLE SELECTIVE WEEDKILLER at 1.25 L/ha tank-mixed with 0.32-0.47 L/ha of Poast Ultra Herbicide and Merge adjuvant at 0.5-1 L/ha.

**MIXING INSTRUCTIONS:** Fill spray tank  $\frac{1}{2}$  full with water and start agitation system. Add Poast Ultra Herbicide. Then add BADGE EMULSIFIABLE SELECTIVE WEEDKILLER, Merge adjuvant and the balance of the water.

**CANARY SEED** (*Phalaris canariensis*)  
**(for seed production)**

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER USED ALONE**

**SPRAY VOLUME & PRESSURE:** Apply in NOT LESS than 50 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** The crop may be treated from the 3 to 5-leaf stage.

**APPLICATION RATE:** 1.25 L/ha

**WEEDS CONTROLLED**

**Seedlings up to 4-leaf stage**

Green smartweed  
Pale smartweed  
Lady's-thumb  
Cow Cockle\*  
Redroot pigweed  
Flixweed  
Bluebur  
Shepherd's-purse  
Kochia\*\*  
Russian thistle\*\*  
Scentless chamomile\*\*\*  
Volunteer sunflower  
Volunteer rapeseed (including Canola)  
Night flowering catchfly  
Cocklebur  
Velvetleaf\*\*\*\*  
Ball mustard  
American nightshade

**Seedlings up to 6-leaf stage**

Wild tomato<

**Seedlings up to 8-leaf stage**

Wild buckwheat  
Tartary buckwheat  
Common buckwheat  
Stinkweed  
Wild mustard  
Wormseed mustard  
Lamb's-quarters  
Common ragweed  
Common groundsel

**Perennials: Top-growth checked**

Canada thistle  
Perennial sow-thistle

*\*In normal conditions cow cockle will be controlled up to the 4-leaf stage. Plants beyond this stage are unlikely to be controlled.*

*\*\*Spray before plants are 5 cm high.*

*\*\*\*Spring annuals only.*

*\*\*\*\*Spray before plants are 8 cm high.*

**SEEDLING GRASSES**  
**(not underseeded to legumes)**

**NOTE:** Grasses grown for seed production in the year of establishment only.

**CROPS:** Brome grass, Crested wheat grass, Intermediate wheat grass, Slender wheat grass, Tall wheat grass, Russian wild rye, Timothy, Orchard grass, Creeping red fescue, Meadow fescue, Meadow foxtail, Seedling tall fescue, Seedling meadow bromegrass, Streambank wheatgrass, and Reed canary grass.

**CAUTION:** Do not graze or harvest for green feed until 56 days after treatment.

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER USED ALONE**

**SPRAY VOLUME & PRESSURE:** Apply in 150 litres of water per hectare at a pressure of 275 kPa.

**TIMING:** Seedling grasses may be treated from the 2 to 4-leaf stage. Make only one application per season.

**APPLICATION RATE:** 1.25 L/ha

**WEEDS CONTROLLED**

**Seedlings up to 4-leaf stage**

Green smartweed  
Pale smartweed  
Lady's-thumb  
Cow Cockle\*  
Redroot pigweed  
Flixweed  
Bluebur  
Shepherd's-purse  
Kochia\*\*  
Russian thistle\*\*  
Scentless chamomile\*\*\*  
Volunteer sunflower  
Volunteer rapeseed (including Canola)  
Night flowering catchfly  
Cocklebur  
Velvetleaf\*\*\*\*  
Ball mustard  
American nightshade

**Seedlings up to 6-leaf stage**

Wild tomato

**Seedlings up to 8-leaf stage**

Wild buckwheat  
Tartary buckwheat  
Common buckwheat  
Stinkweed  
Wild mustard  
Wormseed mustard  
Lamb's-quarters  
Common ragweed  
Common groundsel

**Perennials: Top-growth checked**

Canada thistle  
Perennial sow-thistle

*\*In normal conditions cow cockle will be controlled up to the 4-leaf stage. Plants beyond this stage are unlikely to be controlled.*

*\*\*Spray before plants are 5 cm high.*

*\*\*\*Spring annuals only.*

*\*\*\*\*Spray before plants are 8 cm high.*

**ESTABLISHED GRASSES  
(not underseeded to legumes)**

**BADGE EMULSIFIABLE SELECTIVE WEEDKILLER USED ALONE**

**CROP:** Established Timothy Grown for Seed

**SPRAY VOLUME:** Apply in 150 litres of water per hectare.

**TIMING:** Apply prior to shot blade in the seed production year. Make only one application per season.

**RATE:** 1.25 L/ha

**WEEDS CONTROLLED**

As listed for BADGE EMULSIFIABLE SELECTIVE WEEDKILLER used alone in seedling grasses.