GROUP 2 HERBICIDE

# **PRIMERO**

[Selective] Herbicide

75% WATER DISPERSIBLE GRANULES

FOR SALE FOR USE ON FIELD CORN AND SWEET CORN ONLY

REGISTRATION NO. 34948 PEST CONTROL PRODUCTS ACT

COMMERCIAL (AGRICULTURAL)

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

**ACTIVE INGREDIENT:** Nicosulfuron 75%

Warning, contains the allergen sulfites

CAUTION - EYE IRRITANT KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: 100 g - 100kg

Albaugh LLC 1525 NE 36th Street Ankeny, IA 50021 USA 1-800-247-8013

For medical or treatment information from exposure to this product, call 1-888-347-6732 (7 days/week, 24-hr).

For 24-hour chemical spill, leak, fire, exposure, or accident response information, call CHEMTREC toll free at 1-800-424-9300.

AD013025

## PRECAUTIONS:

- KEEP OUT OF REACH OF CHILDREN.
- Avoid breathing spray mist.
- · Avoid contact with skin, eyes and clothing.
- · Do not contaminate any body of water.
- Apply only to agricultural crops when the potential for drift to areas of human habitation and human activity, such as houses, cottages, schools and recreational areas, is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.
- DO NOT apply this product to any body of water.
- Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab.
- When tank-mixes are permitted, read and observe all label directions, including rates and
  restrictions for each product used in the tank-mix. Follow the more stringent label precautionary
  measures for mixing, loading and applying stated on both product labels.
- DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

#### **ENVIRONMENTAL PRECAUTIONS:**

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

To reduce runoff from treated areas into aquatic habitats, avoid areas with a moderate to steep slope, compacted soil or clay.

Avoid application when heavy rain is forecast.

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

## FIRST AID:

**INHALATION:** 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 treatment advice.

**EYE CONTACT:** 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.

**SKIN CONTACT:** 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.

**INGESTION:** If swallowed, call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

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

**TOXICOLOGICAL INFORMATION:** No antidote is available. Treat symptomatically.

## STORAGE:

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

#### DISPOSAL:

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill, and for clean-up of spills.

## For recyclable containers:

DO NOT reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Make the empty, rinsed container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial/territorial requirements.

# **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.

GROUP 2 HERBICIDE

# **PRIMERO**

[Selective] Herbicide

75% WATER DISPERSIBLE GRANULES

FOR SALE FOR USE ON FIELD CORN AND SWEET CORN ONLY

REGISTRATION NO. 34948 PEST CONTROL PRODUCTS ACT

COMMERCIAL (AGRICULTURAL)

READ THE LABEL AND THIS BOOKLET BEFORE USING

**ACTIVE INGREDIENT**: Nicosulfuron 75%

Warning, contains the allergen sulfites

CAUTION - EYE IRRITANT

Albaugh LLC 1525 NE 36<sup>th</sup> Street Ankeny, IA 50021 USA 1-800-247-8013

For medical or treatment information from exposure to this product, call 1-888-347-6732 (7 days/week, 24-hr)

For 24-hour chemical spill, leak, fire, exposure, or accident response information, call CHEMTREC toll free at 1-800-424-9300.

AD013025

## PRECAUTIONS:

- KEEP OUT OF REACH OF CHILDREN.
- Avoid breathing spray mist.
- · Avoid contact with skin, eyes and clothing.
- · Do not contaminate any body of water.
- Apply only to agricultural crops when the potential for drift to areas of human habitation and human activity, such as houses, cottages, schools and recreational areas, is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.
- · DO NOT apply this product to any body of water.
- Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab.
- When tank-mixes are permitted, read and observe all label directions, including rates and
  restrictions for each product used in the tank-mix. Follow the more stringent label precautionary
  measures for mixing, loading and applying stated on both product labels.
- DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

#### FIRST AID:

**INHALATION:** 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 treatment advice.

**EYE CONTACT:** 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.

**SKIN CONTACT:** 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. **INGESTION:** If swallowed, call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

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

**TOXICOLOGICAL INFORMATION**: No antidote is available. Treat symptomatically.

## **IMPORTANT**

Injury to or loss of desirable trees or vegetation may result from failure to observe the following: Do not apply or 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, tennis courts, or similar areas. Prevent drift of spray to desirable plants. Do not contaminate any body of water, including irrigation water. Keep from contact with fertilizers, insecticides, fungicides and seeds.

APPLY PRIMERO WITH A RECOMMENDED SURFACTANT.

## DO NOT apply by air.

Carefully observe sprayer cleanup instructions, as spray tank residue may damage crops other than corn.

## **GENERAL INFORMATION**

PRIMERO is a water dispersible granular formulation to be mixed in water and applied post-emergence to field corn in Eastern Canada for control of quackgrass and annual grasses. PRIMERO is non-corrosive, non-flammable, non-volatile, and does not freeze.

## **DIRECTIONS FOR USE:**

#### **ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY**

- PRIMERO rapidly stops growth of susceptible species; typical symptoms usually appear within 5-7 days but may not be noticeable for 2-3 weeks after application, depending on growing conditions and weed susceptibility.
- Warm, moist conditions following application promote the activity of PRIMERO, while cool and/or dry conditions may reduce or delay activity. Weeds hardened off by cold weather or drought stress may not be controlled.
- Rainfall within 2-4 hours after application of PRIMERO may reduce weed control.
- PRIMERO is a foliar applied herbicide that will not give residual control of grass or broadleaf weed seedlings that may germinate after application. Weed control may be reduced if the corn canopy has closed in over the weeds, intercepting the spray.
- Poor weed control or crop injury may result from applications made to plants under stress from:
  - · abnormally hot or cold weather
  - · environmental conditions such as drought, water-saturated soils, hail damage or frost
  - · disease, insect or nematode injury
  - prior herbicide, or carryover from a previous year's herbicide application.
- Delay application until stress passes and both weeds and corn resume growth. If corn has been
  injured by frost, wait 48-72 hours before applying PRIMERO. Severe stress conditions
  immediately following application may also result in crop injury or poor weed control.
- Ensure that the boom is set at the proper height in relation to the corn plants to apply PRIMERO accurately and uniformly, and to AVOID excessive application into the corn whorl.

# **ENVIRONMENTAL PRECAUTIONS**

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

To reduce runoff from treated areas into aquatic habitats, avoid areas with a moderate to steep slope, compacted soil or clay.

Avoid application when heavy rain is forecast.

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

Read "Special Use Applications" of this label before using on sweet corn or seed corn.

#### DIRECTIONS FOR USE:

- · Apply with ground equipment only. Make only one application per growing season.
- **DO NOT** apply by air.
- As this product is not registered for the control of pests in aquatic systems, DO NOT use to control
  aquatic pests.
- DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

# Field sprayer application:

• DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural

Engineers (ASAE S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

# Spray buffer zones:

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, pastures, rangelands, and shrublands).

Application Rate (g a.i./ha)	Spray buffer zone (metres) required for the protection of terrestrial habitat
25	2
12.5	1

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

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

## **TANK MIXING**

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Albaugh, LLC at 1-800-247-8013 for information before applying any tank mix that is not specifically recommended on this label.

# PRIMERO USED ALONE IN EASTERN CANADA ONLY SPRAY ADJUVANTS

PRIMERO must be applied with one of the following recommended adjuvants:

Adjuvant	Volume Adjuvant / Volume Spray Solution	Rate (% v/v)
Non-ionic Surfactant¹ <u>plus</u> 28% UAN²	2 L / 1000 L + 5 L / ha	0.2 5 L/ ha
Non-ionic Surfactant¹ <u>plus</u> 28% UAN³	2 L / 1000 L + 12.5 L / 1000 L	0.2 1.25
Non-ionic Surfactant <sup>1</sup>	2 L / 1000 L	0.2
XA Oil Concentrate	10 L / 1000 L	1.0
Merge* Adjuvant	5 L / 1000 L	0.5
Sure-Mix® Surfactant	5 L / 1000 L	0.5

<sup>&</sup>lt;sup>1</sup>Recommended non-ionic surfactants include SIDEKICK NT NON-IONIC SPRAY ADJUVANT\*, CITOWETT PLUS\*, AGRAL\* 90 NON-IONIC WETTING & SPREADING AGENT LIQUID, and IPCO AGSURF\* ORIGINAL.

## **RATES AND TIMING**

Apply 33.4 grams/ha as a broadcast spray, with a recommended surfactant to corn and weeds according to the following chart:

CROP OR WEED	LEAF STAGING AT APPLICATION
Corn	1-8 leaves (6 visible collars) See diagram below.
Annual Grasses	1-6 leaves (up to early tillering, 2 - two leaf tillers)
Quackgrass	3-6 leaves (10-20 cm in height - leaf extended)

# **CORN LEAF STAGING**



Apply PRIMERO from the 1 to 8 leaf stage (6 visible collars). The coleoptile (short, blunt leaf) is counted as the first leaf.

A corn leaf is counted as a full leaf when the next leaf is visible in the corn whorl.

# **WEEDS CONTROLLED**

Barnyard Grass Fall Panicum

<sup>&</sup>lt;sup>2</sup>Non-ionic surfactants may be applied with 28% liquid urea ammonium nitrate (UAN) at 5 L/ha for improved performance on certain weeds.

<sup>31.25%</sup> v/v UAN must also be included for tankmixes with Distinct\* Herbicide.

Green Foxtail
Old Witchgrass
Quackgrass<sup>1</sup>
Yellow Foxtail<sup>2</sup>

**NOTE:** Weeds which emerge after application of PRIMERO will not be controlled. Application should be made when the majority of weeds have emerged.

Annual grasses are most sensitive when small and actively growing.

#### **Specific Weed Control Recommendations:**

- Quackgrass Apply PRIMERO with a recommended surfactant postemergence when the majority of the quackgrass shoots are actively growing and in the 3 to 6-leaf stage (10 to 20 cm in height leaf extended). Annual grasses not emerged at the time of PRIMERO application to quackgrass will not be controlled.
- For the control of Yellow Foxtail Apply PRIMERO with 28% liquid urea ammonium nitrate (UAN) at 5L/ha plus a recommended non-ionic surfactant (NIS) or apply PRIMERO with Merge\*. Failure to use an NIS with UAN or Merge as indicated above will result in suppression only of yellow foxtail.

# PRIMERO TANK MIXES IN EASTERN CANADA ONLY

NOTE: Certain weeds which emerge after application of PRIMERO TANK MIXES will not be controlled. Application should be made when the majority of weeds have emerged.

NOTE: A reduction in the level of yellow foxtail suppression may result with these tank mix combinations.

## PRIMERO + DISTINCT\* Herbicide

PRIMERO may be tank mixed with DISTINCT\* Herbicide to control annual grasses, quackgrass and many broadleaf weeds. Tank mix 33.4 grams/ha of PRIMERO and 285 g/ha of DISTINCT\* Herbicide with a non-ionic surfactant at 0.25 % v/v and liquid urea ammonium nitrate (UAN) at 1.25% v/v.

This tank mixture will control or suppress the weeds listed for PRIMERO alone, plus the weeds listed on the DISTINCT\* Herbicide label. Refer to the "PRIMERO USED ALONE" section of this label for more application instructions and restrictions on the use of PRIMERO. Refer to the DISTINCT\* Herbicide label for weeds controlled by DISTINCT\* Herbicide and consult the label for additional application instructions and use precautions.

The tank mix of PRIMERO and DISTINCT\* Herbicide must be applied at the 2- to 8-leaf stage of corn.

## PRIMERO + PEAK\* 75WG Herbicide + either BANVEL\* II Herbicide or BANVEL\* DRY EG Herbicide

PRIMERO may be tank mixed with PEAK\* 75WG Herbicide plus either BANVEL\* II Herbicide **or** BANVEL\* DRY EG Herbicide to provide one-pass control of the annual grasses and broadleaf weeds indicated in the table below. Tank mix 33.4 grams/ha of PRIMERO and 13.3 g/ha PEAK\* 75WG Herbicide and either 300 mL/ha of BANVEL\* II Herbicide **or** 0.2 kg/ha BANVEL\* DRY EG Herbicide with a non-ionic surfactant at 0.2% v/v (2 L/1000 L).

Refer to the "PRIMERO USED ALONE" section of this label for more application instructions and restrictions on the use of PRIMERO. Refer to the PEAK\* 75WG Herbicide, BANVEL\* II Herbicide, and BANVEL\* DRY EG Herbicide labels for additional application instructions, use precautions, and recropping restrictions.

The tank mix of PRIMERO + PEAK\* 75WG Herbicide + either BANVEL\* II Herbicide or BANVEL\* DRY EG Herbicide can be applied from the 2 to 7 leaf stages of corn.

Weed	Weed Stage
Buckwheat, Wild*	1-6 leaves
Lady's Thumb	1-4 leaves
Lamb's Quarters, including triazine tolerant biotypes	1-6 leaves
Mustard, Wild	2-12 leaves, prior to flowering
Pigweed, Redroot, including triazine tolerant biotypes	1-6 leaves
Ragweed, Common	1-8 leaves
Velvetleaf*	1-6 leaves
Green Foxtail*	1-6 leaves
Yellow Foxtail*	1-6 leaves
Barnyard Grass	1-6 leaves

<sup>\*</sup>Suppression only

#### PRIMERO + MARKSMAN\* Herbicide

PRIMERO may be tank mixed with MARKSMAN\* Herbicide to control annual grasses, quackgrass and many broadleaf weeds. Tank mix 33.4 grams/ha of PRIMERO and 2.5 L/ha of MARKSMAN\* Herbicide with a non-ionic surfactant at 0.2% v/v (2 L/1000 L) and apply postemergence to corn up to the 5-leaf stage.

This tank mixture will control or suppress the weeds listed for PRIMERO alone, plus velvetleaf (most sensitive when small & actively growing), common ragweed and lamb's quarters. Refer to the "PRIMERO USED ALONE" section of this label for more application instructions and restrictions on the use of PRIMERO. Refer to the MARKSMAN\* Herbicide label for additional application instructions and use precautions.

The tank mix of PRIMERO and MARKSMAN\* Herbicide must not be applied after the 5-leaf stage.

## PRIMERO + BANVEL\* II Herbicide

PRIMERO may be tank mixed with BANVEL\* II Herbicide to control annual grasses, quackgrass and many broadleaf weeds. Tank mix 33.4 grams/ha of PRIMERO and 600 mL/ha of BANVEL\* II Herbicide with a non-ionic surfactant at 0.2% v/v (2 L/1000 L) and apply postemergence to corn up to the 6-leaf stage (4 visible collars or 30 cm in height - leaf extended).

This tank mixture will control or suppress the weeds listed for PRIMERO alone, plus the weeds listed on the BANVEL\* II Herbicide label. Refer to the "PRIMERO USED ALONE" section of this label for more application instructions and restrictions on the use of PRIMERO. Refer to the BANVEL\* II Herbicide label for weeds controlled by BANVEL\* II Herbicide and consult the label for additional application instructions and use precautions.

The tank mix of PRIMERO and BANVEL\* II Herbicide must not be applied after the 6-leaf stage (4 visible collars or 30 cm in height - leaf extended) of corn.

## PRIMERO+ BROX 240 EC or PARDNER\* Herbicide

PRIMERO may be tank mixed with BROX 240 EC or PARDNER\* Herbicide to control annual grasses, quackgrass and many broadleaf weeds. Tank mix 33.4 grams/ha of PRIMERO and 1.2 L/ha of BROX 240 EC or 1.0 L/ha of PARDNER\* Herbicide with a non-ionic surfactant at 0.2% v/v (2 L/1000 L) and apply postemergence to corn up from the 4 to 8-leaf stage (2-6 visible collars).

This tank mixture will control or suppress the weeds listed for PRIMERO alone, plus the weeds listed on the BROX 240 EC label or PARDNER\* Herbicide label. Refer to the "PRIMERO USED ALONE" section of this label for more application instructions and restrictions on the use of PRIMERO. Refer to the BROX 240 EC or PARDNER\* Herbicide labels for weeds controlled by BROX 240 EC or PARDNER\* Herbicide and consult the labels for additional application instructions and use precautions.

The tank mix of PRIMERO and BROX 240 EC or PARDNER\* Herbicide must not be applied prior to the 4-leaf (2 visible collars) or after the 8-leaf stage (6 visible collars) of corn.

## PRIMERO + Callisto\* 480SC Herbicide

PRIMERO may be tank mixed with Callisto\* 480SC Herbicide to control annual grasses, quackgrass and many broadleaf weeds. Tank mix 33.4 grams/ha of PRIMERO and 0.21 L/ha of Callisto\* 480SC Herbicide with a non-ionic surfactant AGRAL\* 90 NON-IONIC WETTING & SPEADING AGENT LIQUID at 0.2% v/v (2 L/1000 L) and apply postemergence from the 3 to 8 leaf stage of corn and up to 8 leaf stage of broadleaf weeds.

For the control of additional broadleaf weeds AATREX\* Liquid 480 Herbicide at a rate of 0.58 L/ha may be added to the tank mix.

This tank mixture will control or suppress the weeds listed for PRIMERO alone, plus the weeds listed on the Callisto\* 480SC Herbicide label. Refer to the "PRIMERO USED ALONE" section of this label for more application instructions and restrictions on the use of PRIMERO. Refer to the Callisto\* 480SC Herbicide label for weeds controlled by Callisto\* 480SC Herbicide and consult the label for additional application instructions, recropping restrictions and use precautions. If Applicable, refer to the AATREX\* Liquid 480 Herbicide label for additional application instructions, recropping restrictions and use precautions.

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Albaugh LLC under the User Requested Minor Use Label Expansion program. For these uses, Albaugh LLC has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

# SWEET CORN: FOR SALE FOR USE ON ALL SWEET CORN VARIETIES INCLUDING, BUT NOT LIMITED TO THE SWEET CORN VARIETIES LISTED ON THIS LABEL.

Sweet corn varieties may vary in their tolerance to herbicides, including PRIMERO. The tolerance of sweet corn varieties listed on this label has been confirmed when PRIMERO is applied as directed. Since not all sweet corn varieties have been tested for tolerance to PRIMERO, first use of PRIMERO should be limited to a small area of each variety to confirm tolerance prior to adoption as a general field practice. Additionally, consult your seed supplier for information on the tolerance of specific varieties of sweet corn to PRIMERO.

For control of labelled weeds, apply PRIMERO at a rate of 33.4 grams/ha + 0.2% v/v of a registered non-ionic surfactant (refer to the section of SPRAY ADJUVANTS on this label) when sweet corn is in the 1-6 leaf stage (4 visible collars). The coleoptile (short, blunt leaf) is counted as the first leaf.

Do not harvest sweet corn until 40 days after application.

NOTE: Weeds which emerge after application of PRIMERO will not be controlled. Application should be made when the majority of weeds have emerged.

Make only one application per year with ground application equipment. Avoid over-application.

**DO NOT** apply by air.

Refer to other sections of this label for additional application and recropping (bioassay) instructions and/or use precautions.

# TOLERANCE OF SWEET CORN VARIETIES LISTED BELOW HAVE BEEN ASSESSED AND ACCEPTED WHEN PRIMERO IS APPLIED AS DIRECTED

Bonus BT	GSS 7831	CNS 710	Krispy King	GH 2690	Calico Belle
Elite	FTF222	FTF243	FTF246		
Crisp-N-Swe	et 710R	Legacy	Marvel	GG445	GSS 9299
Trinity		Honey Select	Candy Corner	Sensor	GG 214

Do NOT apply on Delmonte 2038 as unacceptable injury or complete crop death will occur.

## **SWEET CORN IN WESTERN CANADA:**

Krispy King, Jubilee and Jubilee Supersweet

# SEED CORN INBREDS IN EASTERN CANADA ONLY

For control of labelled weeds, apply PRIMERO at a rate of 33.4 grams/ha + 0.2% v/v a registered non-ionic surfactant (refer to the section of SPRAY ADJUVANTS on this label) when seed corn inbreds are in the 1-8 leaf stage (6 visible collars). The coleoptile (short, blunt leaf) is counted as the first leaf.

NOTE: Not all seed corn inbreds have been tested; the use of PRIMERO must be approved by the Seed Corn Company and comply with the directions given by the Seed Corn Company

NOTE: Weeds which emerge after application of PRIMERO will not be controlled. Application should be made when the majority of weeds have emerged.

Make only one application per year. Avoid over-application.

Refer to other sections of this label for additional application instructions and/or use precautions.

# **LONG-SPINED SANDBUR**

For control of Long-spined Sandbur, apply PRIMERO at a rate of 33.4 grams/ha + 0.2% v/v a registered non-ionic surfactant (refer to the section of SPRAY ADJUVANTS on this label) when field corn is in the 1-8 leaf stage (6 visible collars) and Long-spined Sandbur is at the 3-5 leaf stage. The coleoptile (short, blunt leaf) is counted as the first leaf.

Do not harvest corn until 30 days after application.

NOTE: Weeds which emerge after application of PRIMERO will not be controlled. Application should be made when the majority of weeds have emerged.

Make only one application per year with ground application equipment. Avoid over-application.

Refer to other sections of this label for additional application and recropping (bioassay) instructions and/or use precautions.

# FIELD CORN IN WESTERN CANADA – MANITOBA, SASKATCHEWAN, ALBERTA AND BRITISH COLUMBIA:

Apply PRIMERO at a rate of 33.4 grams/ha + 0.2% v/v non-ionic surfactant (CITOWETT\* PLUS, AGRAL\* 90 NON-IONIC WETTING & SPREADING AGENT LIQUID or IPCO AG-SURF\* ORIGINAL) when the corn is between the 1-8 leaf stage (6 visible collars). The coleoptile (short, blunt leaf) is counted as the first leaf.

Weeds controlled or suppressed:

WEED	WEED STAGE
Barnyard Grass	1-6 leaves (up to early tillering, 2 – two leaf tillers)
Fall Panicum	1-6 leaves (up to early tillering, 2 – two leaf tillers)
Green Foxtail	1-6 leaves (up to early tillering, 2 – two leaf tillers)
Old Witchgrass	1-6 leaves (up to early tillering, 2 – two leaf tillers)
Quackgrass	3-6 leaves (10-20 cm in height – leaf extended)
Wild Oats	3-6 leaves
Yellow Foxtail*	1-6 leaves (up to early tillering, 2 – two leaf tillers)

<sup>\*</sup> Suppression only. Weed suppression is a visual reduction in weed competition (reduced population or vigour) as compared to an untreated area. Degree of suppression will vary with size of weed and environmental conditions prior to and following treatment.

NOTE: Weeds which emerge after application of PRIMERO will not be controlled. Application should be made when the majority of weeds have emerged.

Annual grasses are most sensitive when small and actively growing.

Refer to other sections of this label for additional application and recropping (bioassay) instructions and/or use precautions.

# PRIMERO TANK MIXES IN WESTERN CANADA ONLY PRIMERO + BANVEL\* II Herbicide

This tank mixture will control or suppress the weeds listed for PRIMERO alone, as well as broadleaf weeds on corn in the Prairie Provinces. Tank mix 33.4 g/ha PRIMERO and 600 mL/ha (288 g ai/ha) BANVEL\* II Herbicide and apply as a single post-emergent spray, ground application only. This tank mix is to be used with a non-ionic surfactant such as Agral\* Non-ionic Wetting & Spreading Agent Liquid, IPCO Ag-Surf\* Original, or Citowett\* Plus at 0.2% v/v.

Apply to weeds up to the 6-leaf stage.

Do not apply this tank mix within 30 days of harvest.

# PRIMERO TANK MIX IN PRAIRIE PROVINCES PRIMERO + BROX 240 EC or Pardner\* Herbicide

This tank mixture will control or suppress the weeds listed for PRIMERO alone, as well as the weeds on the BROX 240 EC or Pardner\* Herbicide labels. Tank mix 33.4 g/ha (25 g a.i./ha) PRIMERO and 1.2 L/ha of BROX 240 EC or 1 L/ha Pardner\* Herbicide and apply as a single post-emergent spray, ground application only. This tank mix is to be used with a non-ionic surfactant such as Agral\* Non-ionic Wetting & Spreading Agent Liquid, IPCO Ag-Surf\*Original, or Citowett\* Plus at 0.2% v/v.

Apply to weeds when the corn is at the 4 to 8-leaf stage (2-6 visible collars).

Do not apply this tank mix within 30 days of harvest.

Refer to other sections of this label for additional application and recropping (bioassay) instructions and/or use precautions.

#### MIXING INSTRUCTIONS:

- 1. Fill clean tank about 1/4 full with fresh water.
- 2. Turn on full agitation.
- 3. Add the proper amount of PRIMERO to the water in the spray tank with the agitator running. Maintain full agitation until product is fully dispersed. Continuous agitation is required to keep the product in suspension.
- 4. After PRIMERO has been well mixed and is in suspension add the proper amount of tank mix partner (if applicable) to the spray tank with the agitator running.
- 5. After all products have been well mixed and are in suspension, add a recommended adjuvant (see "Spray Adjuvants" section for a complete list and use rate).
- 6. If applicable, add 28% liquid urea ammonium nitrate (UAN).
- 7. Fill the remainder of the spray tank.

On repeat tank 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.

Agitation is required for uniform mixing and application. The optimum water volume for PRIMERO application is 140-190 litres of water per hectare (minimum of 100 litres of water per hectare). Use a spray pressure of 175 - 275 kPa. Flat fan nozzles are recommended. Use 50 mesh filter screens or larger. Use spray preparation of PRIMERO within 24 hours or product degradation may occur resulting in a loss of weed control. Use vigorous agitation to thoroughly disperse spray mixtures that have been allowed to stand in the tank.

NOTE: PRIMERO will degrade in acidic or highly alkaline water. Mix no more than can be used in one day. If spraying is interrupted, thoroughly re-agitate the spray mixture before resuming spraying.

# **SPRAYER CLEANUP:**

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of PRIMERO as follows:

- 1. Drain tank; thoroughly hose down the interior surfaces of the tank; then flush tank, boom and hoses with clean water for a minimum of 5 minutes.
- 2. Fill the tank with clean water while adding one litre of household ammonia (containing a minimum of 3% ammonia) for every 100 litres of water. Flush the hoses, boom and nozzles with the cleaning solution and then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 minutes. Again flush the hoses, boom and nozzles with the cleaning solution and then drain the 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 the water through the hoses and boom.
- 6. PRIOR to using the sprayer for the next application, flush the tank, boom and hoses for 5 minutes with fresh water.

CAUTION:

DO NOT mix 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 OF INSECTICIDES**

For maximum crop safety, PRIMERO should be applied only to corn which has NOT been treated with a highly systemic organophosphorus soil insecticide.

Application of PRIMERO to corn previously treated with a non-organophosphate will allow maximum crop safety.

DO NOT tank mix PRIMERO with any organophosphorus insecticide. DO NOT apply a foliar organophosphorus insecticide within 7 days before or after applying PRIMERO.

#### REPLANTING TO OTHER CROPS

PRIMERO is degraded by natural soil processes, and field tests have shown that the following crops may safely be planted at the prescribed interval following corn that has been treated with PRIMERO.

# **EASTERN CANADA**

Crop	Replanting Interval
Winter wheat	4 months
Spring barley, Canola, Soybeans, White beans,	10 months
Red Clover, Sorghum, Field Corn, Alfalfa	

For other crops, a field bioassay is recommended before planting. A successful field bioassay means growing to maturity a test strip of the crop(s) intended for production the following year.

#### **FIELD BIOASSAY**

Select a representative area or areas of the field previously treated with PRIMERO to plant your bioassay crop(s). Be sure to consider factors such as size of field, soil texture, drainage and turn-around areas when selecting the site(s) that are most representative of the soil conditions in the field. On large fields, more than one site may be needed in order to obtain reliable results.

Plant the test strips perpendicular to the direction in which the field was sprayed. The strips should be long enough to cross the width of several spray swaths. Large test strip areas are more reliable than small ones.

Use standard tillage and seeding equipment to plant the bioassay. Prepare a seed bed and plant the crops and varieties you want the option of growing the following year. It is important to use the same planting time, conditions, techniques and cultural practices you normally use to plant and grow the bioassay crop(s). Also plant into an adjacent area not treated with PRIMERO to use as a comparison.

As the crop(s) emerges and grows, examine these key points in PRIMERO treated and non-treated areas:

-crop stand -root development -rate of growth

-plant colour and vigour -yield

Allow the bioassay crop(s) to grow to maturity while making your observations. Do not overspray the test strips with herbicides that may damage the bioassay crop(s). If the bioassay indicates that PRIMERO residues are still present, continue cropping only to those crops listed on the label and do not rotate to other crops until bioassay results indicate that susceptible crops are growing normally.

# **USE PRECAUTIONS:**

Do not apply PRIMERO during periods of intense rainfall or to soils saturated with water. Do not apply directly to standing or running water. Do not apply in areas where surface water from the treatment site can run off to adjacent cropland, either planted or to be planted, or into bodies of water (such as streams,

ponds, wetlands, irrigation water), or wells. Applications should only be made when there is no hazard of spray drift contaminating non-target land areas since very small quantities of the PRIMERO spray solution may severely injure susceptible crops during both growing and dormant periods.

As with any herbicide, overlaps or starting, stopping, slowing and turning while spraying may result in crop injury.

Overspray or drift to important wildlife habitats such as ponds, wetlands, streams, vegetated areas at the edges of bodies of water, woodlots and shelterbelts should be avoided. Leave a 22-metre spray buffer zone between the last spray swath and bodies of water or wetlands. Leave a 5-metre spray buffer zone between the last spray swath and the terrestrial habitats listed above.

Do not apply PRIMERO within 30 days of corn harvest (silage, fodder or grain).

Do not graze or feed treated corn forage, silage, fodder or grain for at least 30 days after an application of PRIMERO.

#### **RESISTANCE-MANAGEMENT RECOMMENDATIONS:**

For resistance management, PRIMERO is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to PRIMERO 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 PRIMERO 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 IPM 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 favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Monitor treated weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

For further information or to report suspected resistance, contact your local Albaugh LLC. representative or call Albaugh LLC at 1-800-247-8013 for further information.

## STORAGE:

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

#### **DISPOSAL:**

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill, and for clean-up of spills.

## For recyclable containers:

DO NOT reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Make the empty, rinsed container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial/territorial requirements.

# **NOTICE TO USER:**

This pest control product is to be used only in accordance with the directions on this label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

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