

GROUP	5	15	27	HERBICIDES
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## ACURON® Herbicide

AGRICULTURAL

SUSPENSION

A herbicide for use in field, seed, and sweet corn.

FOR SALE AND USE IN EASTERN CANADA ONLY

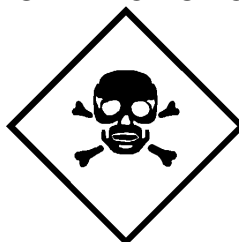
### ACTIVE INGREDIENTS:

Bicyclopyrone.....	7.1 g ai/L
Mesotrione.....	28.5 g ai/L
S-metolachlor (and R-enantiomer).....	257 g ai/L
Atrazine.....	120 g ai/L

Contains 1,2-benzisothiazolin-3-one at 0.009 % as a preservative or contains 1,2-benzisothiazolin-3-one at 0.002%, 2-bromo-2-nitropropane-1,3-diol at 0.02%, 5-chloro-2-methyl-4-isothiazolin-3-one at 0.001%, and 2-methyl-4-isothiazolin-3-one at 0.0003% as preservatives.

**READ THE LABEL AND BOOKLET BEFORE USING  
KEEP OUT OF REACH OF CHILDREN**

**WARNING**



**POISON**

**EYE AND SKIN IRRITANT  
POTENTIAL SKIN SENSITIZER**

**NET CONTENTS: 1 L – Bulk**

**REGISTRATION NO.: 31846  
PEST CONTROL PRODUCTS ACT**

### **Syngenta Canada Inc.**

140 Research Lane, Research Park  
Guelph, Ontario N1G 4Z3  
Telephone: 1-877-964-3682

LABEL

## 1.0 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.

## 2.0 FIRST AID

**IN CASE OF POISONING**, contact a physician or a poison control centre **IMMEDIATELY**. Take 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. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

**If 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.

## 3.0 TOXICOLOGICAL INFORMATION

There is no specific antidote. Treat symptomatically.

## 4.0 PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN.

May irritate eyes. Avoid contact with eyes. Causes skin irritation. DO NOT get on skin. Potential skin sensitizer.

Avoid breathing product and working in spray mist.

Avoid all drift or contact with other vegetation.

**Restricted entry intervals (REI): DO NOT** enter or allow worker entry into treated areas until 12 days after an application for hand setting irrigation equipment. For all other tasks, **DO NOT** enter or allow worker entry into the treated area until 12 hours after application.

**DO NOT** use or store near heat or open flame. **DO NOT** apply beyond the field boundary.

Consult the labels of the tank-mix partners and observe the most restrictive precautions (including personal protective equipment) indicated on the labels of the products in the tank mixture.

**DO NOT APPLY BY AIR.**

If this pest control product is to be used on a commodity that may be exported to other countries in the world and you require information on acceptable residue levels in these countries, please contact Syngenta Canada Inc. at 1-87-SYNGENTA/1-877-964-3682.

## **5.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)**

During mixing, loading, application, clean-up and repair, wear coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, chemical resistant footwear with socks. In addition, when mixing/loading, wear a faceshield.

Wash the outside of the gloves before removing. Wash splashes from skin and eyes IMMEDIATELY with plenty of water.

If pesticide gets inside, remove clothing/PPE immediately. Wash yourself thoroughly and put on clean clothing.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water.

While using product, do not eat, drink or use tobacco (including smoking).

All users should wash hands and shower thoroughly with soap and water after using ACURON<sup>®</sup> Herbicide before eating, drinking, using tobacco, applying cosmetics, or using the toilet.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.

Wear freshly laundered clothes daily.

Do not wear contaminated shoes.

Wash clothing in detergent and hot water before reuse.

Store and wash all protective clothing separately from household laundry.

## 6.0 SPRAY DRIFT MANAGEMENT FOR GROUND APPLICATIONS

### 6.1 General Information:

Use good pesticide practices and apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and parks is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings used for applications.

For the protection of non-target habitats, over-spray or drift to any body of water or other environmentally sensitive habitats must be avoided. The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

## 7.0 ENVIRONMENTAL HAZARDS

Toxic to small wild mammals, aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

This product demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of ACURON™ Herbicide in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

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

Avoid application when heavy rain is forecast.

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

Atrazine is persistent and will carry over. It is recommended that any products containing atrazine not be used in areas treated with the product during the previous season.

NOTE: One application of ACURON Herbicide provides 0.589 kg a.i./ha of atrazine. Do not apply more than 1.5 kg a.i./ha of atrazine per year either as a pre- or post-emergent application before corn reaches 30 cm in height. An additional treatment of a product containing atrazine can be made as long as the amount of atrazine applied does not exceed 0.911 kg a.i./ha. Atrazine may be applied alone or as a registered tank mix partner. Refer to the tank mix partners for further instructions.

## 8.0 STORAGE

Keep away from food, drink, and animal feed. Store in original container, tightly closed and in a safe place. Always store in original container with top closed in a cool, dry place. To prevent contamination, store this product away from food or feed. Avoid storing ACURON Herbicide below  $-7^{\circ}\text{C}$ . If frozen, mix product thoroughly prior to use. Do not use or store near heat or

open flame.

## 9.0 DISPOSAL

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

### 9.1. 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 requirements.

### 9.2. For Refillable Bulk Containers:

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 use this container for any other purpose.

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING,  
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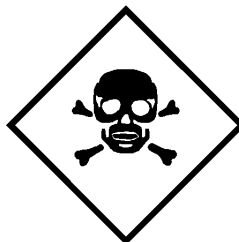
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PAMPHLET

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CALL 1-800-327-8633 (FASTMED)***

## 10.0 PRODUCT INFORMATION

ACURON Herbicide provides selective control of annual grass and broadleaf weeds in corn. ACURON Herbicide has a high level of crop safety to allow for flexibility of application timing in corn. To ensure weed control during the critical weed free period, ACURON Herbicide may be applied preemergent and early postemergent (up to and including the 2-leaf corn stage). ACURON Herbicide may also be applied postemergent (up to and including the 6-leaf corn stage) in hybrid field corn. ACURON Herbicide will not provide control of emerged grass weeds that are past the 2 leaf stage. ACURON Herbicide contains four active ingredients and is a one-pass broad-spectrum weed control product for use in corn.

**NOTE:** ACURON Herbicide contains benoxacor that has been shown to enhance S-metolachlor metabolism in corn.

## 11.0 DIRECTIONS FOR USE

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.

**DO NOT** apply more than 4.91 L product/ha/season.

**DO NOT** apply any other mesotrione containing products to fields treated with ACURON Herbicide in the same year.

**DO NOT** apply by air.

Avoid application of this product when winds are gusty.

### 11.1. Ground Application

It is important to check the physical compatibility of tank mixed pesticide products in a small volume prior to filling the sprayer. Check the compatibility of tank mixes containing ACURON Herbicide using a jar test with proportionate amounts of mix partners, and water, before mixing in the spray tank.

### 11.2. Mixing Instructions

1. Ensure that the sprayer interior is clean, then fill the spray tank with  $\frac{1}{2}$  the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
3. Add ACURON Herbicide and agitate to ensure complete mixing.
4. Add any SE or SC formulation mix partners and agitate to ensure complete mixing.
5. Add any EC formulation mix partners and agitate to ensure complete mixing.
6. Fill the tank to  $\frac{3}{4}$  the required amount of water.
7. Add any solution (SN or SL) formulation mix partners and agitate to ensure complete mixing.
8. Finish filling the sprayer with water, maintaining good agitation.
9. Always ensure that agitation is maintained until spraying is completed. After any break in spraying operations, agitate thoroughly before spraying again. Reduce agitation once tank volume is reduced to about one third of capacity.
10. ACURON Herbicide must be sprayed the same day as mixing. Do not allow spray solution to remain in the tank overnight.
11. Do not mix, load or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

When using chemical handling equipment to fill the sprayer, the following additional recommendations apply:

- WG and DF formulations are preferentially batch mixed.
- SC, SN, and SL formulations may be inducted or batch mixed.
- EC formulations are preferentially batch mixed.

### 11.3. Application in Liquid Fertilizers

Nitrogen solutions (such as 28-0-0 UAN), excluding suspension and sulphur containing fertilizers, may replace water as a carrier for pre-emergence applications of ACURON Herbicide in corn. Do not use nitrogen solutions as a carrier to corn that has emerged. Always predetermine the compatibility of ACURON Herbicide tank mixes with your liquid fertilizer carrier by mixing small proportional quantities in advance.

### 11.4. Spraying Instructions

1. Carrier Volume: Apply in a minimum spray volume of 150 L/ha OR the volume given in the crop and pest specific instructions tabulated below, whichever is LARGER.
2. Sprayer Agitation: Use a jet agitator or liquid sparge tube which recirculates 7-10% of the tank per minute. DO NOT use an air sparger.
3. Pump: Screens should be used to protect the pump and prevent clogging. Use 16 mesh or coarser screens on the suction side of the pump. DO NOT place a screen in the recirculation line. Use 50 mesh or coarser screens between the pump and boom unless directed otherwise by the sprayer manufacturer.
4. Spray Nozzles: 80° or 110° drift reducing flat fan (e.g. those with a pre-orifice or turbulence chamber) or air induction nozzles are recommended. Use 50 mesh or coarser nozzle screens or as recommended by the nozzle manufacturer. DO NOT use flood type nozzles, controlled droplet application equipment, spray foils or hollow cone nozzles.
5. Pressure: As recommended by the nozzle manufacturer to achieve no finer than ASAE medium sized droplets.
6. Apply at uniform speed and avoid overlapping. Shut off spray boom while starting, turning, slowing or stopping to avoid potential crop injury from over application.

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.

### 11.5. Sprayer Cleanup

To avoid subsequent injury to other crops, thoroughly clean application equipment immediately after spraying each day. Ensure that all traces of the product are removed. Do not allow residue to dry in spray tank. Do not allow solution to remain in lines or tank overnight. The following procedures are recommended:

1. Drain and flush tank, boom and all hoses for several minutes with clean water. Ensure dead end lines are flushed. **Do not** clean the sprayer near desirable vegetation, wells or other water sources.
2. Prepare a cleaning solution of one part of household ammonia per 25 parts of water. A household detergent may also be added to the solution.
3. Use a pressure washer to clean the inside of the spray tank with this solution. Take care to wash all parts of the tank, including the inside top surface. If a pressure washer is not available, completely fill the sprayer with the cleaning solution to ensure contact

of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.

4. Flush hoses, spray lines, and nozzles for at least 1 minute with the cleaning solution.
5. Dispose of all rinsings in accordance with provincial regulations.
6. Repeat steps 2-5.
7. Remove nozzles, screens, and strainers and clean separately in the ammonia solution after completing the above procedures.
8. Rinse the complete spraying system with clean water.

### 11.6. Buffer Zones

Use of the following spray methods or equipment **DOES 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	Corn	5	3	5	3	5

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) 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 buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site.

## 12.0 CROP USE DIRECTIONS

### 12.1. CORN

<b>Field, seed and sweet corn – Pre-emergent</b>	
<b>APPLICATION TIMING</b>	<b>Pre-emergent<sup>1</sup></b>
<b>PRODUCT RATE</b>	4.91 L/ha
<b>WEEDS</b>	<p>Broadleaf weeds controlled (including triazine and group 2 tolerant biotypes): American nightshade, Eastern black nightshade, common ragweed, lady's thumb, lambsquarters, redroot pigweed, velvetleaf, wild buckwheat, wild mustard, Canada fleabane<sup>3</sup>, waterhemp</p> <p>Grass weeds controlled: Barnyard grass, crabgrass (smooth, hairy), fall panicum, foxtail (green, yellow, giant) and witchgrass</p> <p>Grass weeds suppressed: proso millet</p>
<b>PRODUCT RATE</b>	4.0 L/ha <sup>4</sup>
<b>WEEDS</b>	Short season control or suppression of annual weeds listed above, excluding Canada fleabane
<b>APPLICATION METHOD</b>	<p>Ground application only</p> <p>Apply in a minimum of 150 L of carrier (water or UAN) per hectare.</p>
<b>Field corn only – Post-emergent<sup>2</sup></b>	
<b>APPLICATION TIMING</b>	<b>Post-emergent (up to and including 6 leaf corn)<sup>1, 2</sup></b>
<b>PRODUCT RATE</b>	4.91 L/ha
<b>WEEDS</b>	<p>Broadleaf weeds controlled (including triazine and group 2 tolerant biotypes): American nightshade, Eastern black nightshade, common ragweed, lady's thumb, lambsquarters, redroot pigweed, velvetleaf, wild buck wheat and wild mustard, Canada fleabane<sup>3</sup>, waterhemp</p> <p>Grass weeds controlled: Barnyard grass, crab grass (smooth, hairy), fall panicum, foxtail (green, yellow, giant) and witchgrass</p> <p>Grass weeds suppressed: proso millet</p>
<b>PRODUCT RATE</b>	4.0 L/ha
<b>WEEDS</b>	Short season control or suppression of annual weeds listed above, excluding Canada fleabane
<b>APPLICATION METHOD</b>	<p>Ground application only</p> <p>Apply in a minimum of 150 L of water per hectare.</p>

<b>Glyphosate tolerant field corn only – Post-emergent</b>	
<b>APPLICATION TIMING</b>	<b>Post-emergent (up to and including 6 leaf corn)<sup>2</sup></b>
<b>WEEDS</b>	Residual control or suppression of annual weeds listed above and burn-down of emerged annual and perennial weeds
<b>PRODUCT RATE</b>	4.0 L/ha or 4.91 L/ha
<b>TANK MIX PARTNER RATE/HA</b>	900 g ae/ha glyphosate containing products that are registered for burndown of annual and perennial weeds in glyphosate tolerant corn at the 6-leaf stage and beyond <sup>5</sup> .
<b>APPLICATION METHOD</b>	Ground application only  Apply in a minimum of 150 L of water per hectare.
<b>NOTES</b>	Do not mix with ammonium sulphate (AMS).  Do not use nitrogen solutions as a carrier to corn that has emerged.  No adjuvant required.  One application per year.  DO NOT apply other mesotrione-containing products (CALLISTO <sup>®</sup> 480SC or HALEX <sup>®</sup> GT) or bicyclopyrone-containing products (SYNA16003 Herbicide) or S-metolachlor-containing products (PRIMEXTRA <sup>®</sup> II MAGNUM <sup>®</sup> or DUAL II MAGNUM <sup>®</sup> ) to ground that has been treated with ACURON Herbicide in the same season. An additional treatment of a product containing atrazine can be made as long as the amount of atrazine applied does not exceed 0.911 kg ai/ha. See "ENVIRONMENTAL HAZARDS" for complete details on additional atrazine application. For tank mixes, consult the labels of the tank-mix partners for specific instructions regarding product rates, weeds controlled, soil-type variations, and rotational crops, grazing or other restrictions

<sup>1</sup> Apply prior to proso millet emergence and before other grass weeds exceed the 2-lf stage.

<sup>2</sup> Do not apply to emerged seed or sweet corn.

<sup>3</sup> Provides control of emerged Canada Fleabane up to 10 cm in height. Includes glyphosate-resistant biotypes.

<sup>4</sup> For pre-emergent timings, the 4.0 L/ha rate will provide control or suppression only through the critical crop establishment phase and is to be used in a planned weed management program with a post-emergent herbicide treatment. Monitor the species and growth stages of escapes in order to better select a post-emergent herbicide application.

<sup>5</sup> Higher rates of glyphosate may be recommended in some situations. Refer to the glyphosate product label for further effective rates.

## 12.2. Pre-Harvest Intervals (PHIs)

Do not harvest treated crop prior to the number of days specified in the table below.

<b>Crops</b>	<b>PHI (days)</b>
Field corn forage	60
Sweet corn ears	50
Sweet corn forage	45
Field corn grain and stover	Harvest at maturity



### 12.3. Use Precautions

ACURON Herbicide may be used pre-emergent or post-emergent on field corn and pre-emergent in production seed corn and sweet corn. Not all seed corn inbreds and sweet corn varieties have been tested; the use of ACURON Herbicide must be approved by the seed company and comply with the directions given by the seed corn company.

Although ACURON Herbicide has a flexible recropping profile, certain crops may be sensitive to low concentrations in the soil. Therefore, careful consideration should be given to crop rotation plans prior to using ACURON Herbicide (refer to "*RECROPPING GUIDELINES*").

Dry conditions following application may reduce the preemergent activity of ACURON Herbicide. If an activating rain (>1.25 cm) is not received within 7-10 days after a preemergent application, cultivate or use other weed control measures if weeds develop.

Do not apply to soils that contain less than 1% or more than 10% organic matter.

Temporary crop injury (bleaching) may occur under extreme weather conditions or when the crop is under stress due to inadequate or abnormally high moisture levels or extreme temperatures as well as under conditions of insect or plant disease attack, carryover of pesticide residues, use of certain soil applied systemic insecticides, improperly placed fertilizers or soil insecticides. The symptoms are most visible where excessive rates have been applied, such as sprayer overlaps. Corn quickly outgrows these effects and continues to grow normally.

Do not make a foliar postemergent application of any organophosphate or carbamate insecticide within 7 days before or 7 days after a ACURON Herbicide application or severe corn injury may occur. Syngenta Canada Inc. will not be held responsible for losses or damage resulting from such use.

Severe corn injury and crop yield loss may occur if ACURON Herbicide is applied to corn crops that are treated with Lorsban™.

ACURON Herbicide may be applied prior to or following a pyrethroid-type insecticide such as FORCE® Insecticide or MATADOR® 120EC Insecticide.

Do not apply ACURON Herbicide through any type of irrigation system.

Syngenta will not recommend soybeans be planted the year following application of ACURON Herbicide on soils with a sand or loamy sand soil textural classification. For all other soil textural classifications, however, Syngenta will fully endorse soybeans planted the year following (11 months) application of ACURON Herbicide. Refer to "Recropping Guidelines" section for more information.

Protect sprayer operators from drift or mist. Additional information on spray drift management for GROUND APPLICATIONS is provided in the section "SPRAY DRIFT MANAGEMENT FOR GROUND APPLICATIONS". When low volumes of spray are applied, complete coverage and thorough application are essential for most effective results. Schedule applications in accordance with local conditions. Consult your local agricultural authorities for specific use information.

### 13.0 RECROPPING GUIDELINES

Certain crops have been shown to be sensitive to low residues of ACURON Herbicide in the soil. The minimum recropping interval is the time between the last application of ACURON Herbicide and the anticipated date of planting of the next crop.

To avoid injury to subsequent crops after an application at the recommended rate of ACURON Herbicide, the following recropping intervals should be observed.

CROP	MINIMAL RECROPPING INTERVAL
Field Corn, Production Seed Corn, Silage Corn and Sweet Corn.	Immediately (no restriction)
Winter Wheat	4.5 months
Spring Wheat	10 months
Soybeans (except on sand or loamy sand soils)*	11 months
All Other Crops	Bioassay (after 12 months)

\*Syngenta will not recommend soybeans be planted the year following application of ACURON Herbicide on soils with a sand or loamy sand soil textural classification. For all other soil textural classifications, however, Syngenta will fully endorse soybeans planted the year following (11 months) application of ACURON Herbicide.

Observe the recropping guidelines of any product to be tank mixed with ACURON Herbicide.

In the event of crop failure, only field corn (grain or silage), seed corn, or sweet corn can be planted as a salvage crop in the same fields in which the failed crop was treated with ACURON Herbicide. An application of ACURON Herbicide must NOT be made to the salvage crop.

Land treated with ACURON Herbicide CAN ONLY BE PLANTED TO A CROP NOT LISTED IN THE PRECEEDING TABLE if a field bioassay can be successfully performed. The bioassay must indicate normal growth with no yield reductions.

A bioassay may be conducted in any year following the year of application to assess the tolerance of the tested crop intended for planting in the year following the bioassay. Do not conduct a bioassay in the year of application. When conducting a field bioassay, it is very important to select a representative area(s) of the field previously treated with ACURON Herbicide to plant the test crop(s).

#### **WARNING:**

Do not plant any crop other than corn in the same year on land treated with ACURON Herbicide as injury may occur. Crops that may be planted the following year are provided in the recropping guidelines. However, when the rotational crop is subjected to stress conditions, e.g. abnormally hot, dry weather, preceded by extended periods of dry weather the previous season, injury may occur. Do not tank mix with any other herbicide or additive unless listed on this label.

#### 13.1. FIELD BIOASSAY

##### 1. Representative Sample:

Ensure that soil parameters such as soil texture, depth of topsoil layer, soil pH and drainage of the test area selected are representative of the remainder of the field.

**2. Sample Size:**

The seeded area of each selected bioassay crop must be large enough to ensure that reliable results are obtained. The seedbed preparations and seeding of the bioassay crop(s) should be conducted the same way as when the entire field would be planted.

**3. Other Residual Herbicides:**

It is important that other herbicide products which are known to have residual activity were not applied to the field between the last application of ACURON Herbicide and the bioassay testing period. Avoid the use of other pesticides during the duration of the bioassay as they may damage the indicator crop(s).

**4. Comparisons:**

Ideally, an untreated check strip in a neighbouring field should be established and monitored for comparison since growing conditions can vary greatly from year to year and may result in erroneous results.

**5. Assessment:**

The site should be monitored regularly throughout the growing season. Watch for any damage to the crop such as thinning, yellowing or stunting. A yield sample should be taken and compared to an adjacent untreated field.

***DO NOT ROTATE TO OTHER CROPS UNTIL THE BIOASSAY INDICATES NORMAL GROWTH WITH NO YIELD REDUCTIONS.***

***Failure to follow these recropping guidelines could result in injury to seeded crop(s).***

ADHERE TO THESE PRODUCT LABELS FOR BROADLEAF AND GRASSWEEDS CONTROLLED, PRECAUTIONS, WARNINGS, RESTRICTIONS, TANK MIXING AND SPRAYING INSTRUCTIONS, ROTATIONAL CROPS AND DETAILED DIRECTIONS FOR USE REGARDING DOSAGE VARIATIONS ACCORDING TO SOIL TYPE.

## **14.0 RESISTANCE-MANAGEMENT RECOMMENDATIONS**

For resistance management, ACURON Herbicide is a Group 5, 15 and 27 herbicide. Any weed population may contain or develop plants naturally resistant to ACURON Herbicide and other Group 5 and/or 15 and/or 27 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 ACURON Herbicide or other Group 5 and/or 15 and/or 27 herbicides within a growing season (sequence) or among growing seasons with different herbicide groups that control the same weeds in a field.

Use tank mixtures with herbicides from a different group when such use is permitted. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as

the more resistance-prone partner.

Herbicide use should be based on an integrated weed management program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical control methods), cultural (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.

Monitor weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.

Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.

Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

For further information and to report suspected resistance, contact company representatives at 1-87-SYNGENTA (1-877-964-3682) or at [www.syngenta.ca](http://www.syngenta.ca).

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