



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

June 21, 2023

Mary Beth Endres  
Regulatory Manager  
Axion Ag Products, LLC  
1880 Fall River Drive, Suite 100  
Loveland, CO 80538

Subject: Registration Review Label Mitigation for Acetochlor, Clopyralid, &  
Flumetsulam Product Name: AX ACETOCHLOR + 2 HERBICIDE  
EPA Registration Number: 89167-34  
Application Dates: January 31, 2022  
Decision Numbers: 592416, 592415, & 578906

Dear Mary Beth Endres:

The Agency, in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Acetochlor, Clopyralid, and Flumetsulam Interim Decisions, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide, Fungicide, and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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Decision No. 592416, 592415, & 578906

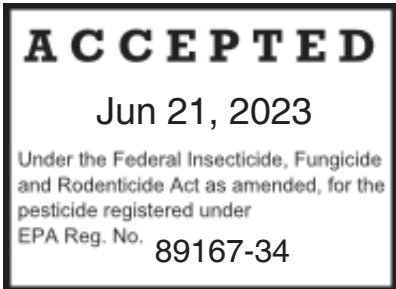
If you have any questions about this letter, please contact Caleb Carr via email at [carr.caleb@epa.gov](mailto:carr.caleb@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to be "Linda Arrington", with a stylized flourish at the end.

Linda Arrington, Branch Chief  
Risk Management and Implementation Branch 4  
Pesticide Re-Evaluation Division  
Office of Pesticide Programs

Enclosure



ACETOCHLOR	GROUP	15	HERBICIDE
FLUMETSULAM	GROUP	2	HERBICIDE
CLOPYRALID	GROUP	4	HERBICIDE

# AX Acetochlor + 2 HERBICIDE

**For use on herbicide tolerant and conventional field corn, and silage corn**

ACTIVE INGREDIENTS:	% BY WT.
Acetochlor: 2-chloro-2'-methyl-6'-ethyl-N-ethoxymethylacetanilide.....	41.67%
Flumetsulam: N-(2,6-difluorophenyl)-5- methyl-1,2,4-triazolo[1,5a]-pyrimidine-2-sulfonamide.....	1.30%
Clopyralid: 3,6-dichloro-2-pyridinecarboxylic acid, monoethanolamine salt.....	4.27%
<b>OTHER INGREDIENTS:</b> .....	<b>52.76%</b>
<b>TOTAL:</b> .....	<b>100.00%</b>

Acid equivalent: clopyralid: 3,6-dichloro-2-pyridinecarboxylic acid – 3.24% (0.29 lb/gal)  
 Contains 3.75 lb acetochlor, 0.38 lb clopyralid monoethanolamine salt, and 0.12 lb flumetsulam active ingredient per gallon

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION / PRECAUCIÓN**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
 (If you do not understand the label, find someone to explain it to you in detail.)

**For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300.**

**SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS.**

**Not for Sale, Sale into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.**

EPA Reg. No.: 89167-34

EPA Est. No: \_\_\_\_\_

NET CONTENTS: \_\_\_ Gal. (\_\_\_ L)

**Manufactured For:**  
 AXION AG PRODUCTS, LLC  
 1880 Fall River Drive, Suite 100  
 Loveland, CO 80538

061223

<b>FIRST AID</b>	
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOTLINE NUMBER</b>	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at <b>1-800-858-7378</b> or your poison control center at <b>1-800-222-1222</b>. For Chemical Spill, Leak, Fire or Exposure, call CHEMTREC <b>800-424-9300</b>.</p>	

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
CAUTION**

Causes Moderate Eye Irritation. Avoid contact with eyes or clothing. Wear long sleeved shirt, long pants, shoes and socks. Prolonged or Frequently Repeated Skin Contact May Cause Allergic Reactions in Some Individuals.

**Personal Protective Equipment (PPE):**

**Applicators and other handlers must wear:**

- Coveralls over short-sleeved shirt and short pants
- Waterproof gloves made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, or viton ≥14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing, or loading

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. **DO NOT** reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering Controls**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

<b>USER SAFETY RECOMMENDATIONS</b>
<p><b>Users should:</b></p> <ul style="list-style-type: none"> <li>• Wash hands before eating, drinking, and chewing gum, using tobacco or using the toilet.</li> <li>• Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.</li> <li>• Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.</li> </ul>

**ENVIRONMENTAL HAZARDS**

This product is toxic to fish. **DO NOT** apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwaters.

### Groundwater Advisory

This product contains chemicals known to leach through soil into groundwater under certain conditions as a result of label use. This product may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

### Surface Water Advisory

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having a high potential for reaching surface water via runoff for several weeks after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of clopyralid from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

### Non-Target Organism Advisory

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

Caution should be exercised when handling this product at mixing and loading sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

Acetochlor has properties that may result in surface water contamination via dissolved runoff and runoff erosion. Practices should be followed to minimize the potential for dissolved runoff and/or runoff erosion.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying. **DO NOT** apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides.

It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours. Exception:** If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over short-sleeved shirt and short pants
- Waterproof gloves made of any barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, or viton ≥14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

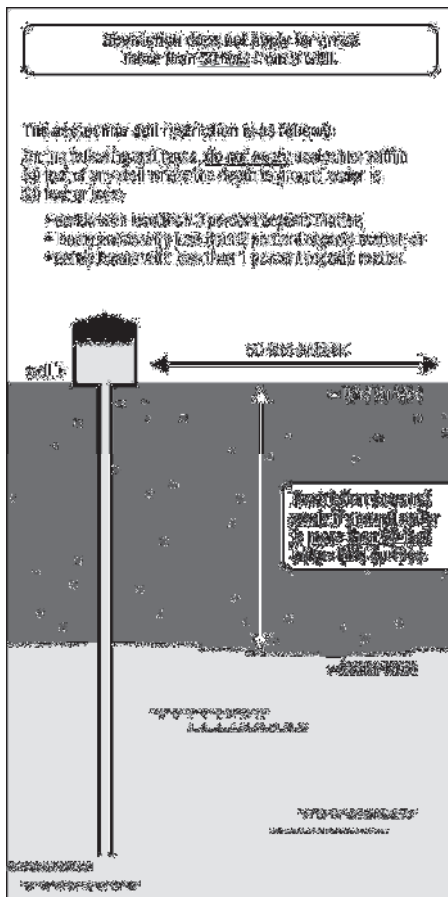
## PRODUCT INFORMATION

AX Acetochlor + 2 herbicide is designed for use on herbicide tolerant (such as glyphosate or glufosinate) and conventional field corn and silage corn. It may be used in preplant, preemergence, or early postemergence applications in corn. It is designed to provide early season control of grass and broadleaf weeds to allow for optimal timing of the in-crop postemergence application of glyphosate or glufosinate.

AX Acetochlor + 2 is a unique combination of the herbicides acetochlor, flumetsulam, clopyralid, and the safener dichlormid. AX Acetochlor + 2 may be applied to the surface or incorporated into the top 1 to 2 inch layer of soil. It is specified for use alone or in tank mix combinations for control or suppression of weeds, as indicated in the Target Weeds section of these use directions. AX Acetochlor + 2 controls weeds by interfering with normal germination and seedling development. AX Acetochlor + 2 may provide postemergence activity on 1 to 2 inch broadleaf weeds present at application but will not provide postemergence activity on grass weeds present at application. If emerged grass and broadleaf weeds are present at the time of application, best results will be achieved by tank mixing a herbicide such as glyphosate, glufosinate or paraquat and/or 2,4-D with AX Acetochlor + 2.

### Use Precautions and Restrictions

- **Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.**
- On the following soil types, **DO NOT** apply this product within 50 feet of any well where the depth to groundwater is 30 feet or less: sands with less than 3% organic matter; loamy sands with less than 2% organic matter; or sandy loams with less than 1 percent organic matter. See the figure for additional clarification.



- **Chemigation: DO NOT** apply this product through any type of irrigation system.

- **DO NOT** use flood irrigation to apply or incorporate this product.
- **DO NOT apply this product using aerial application equipment.**
- This product must not be mixed or loaded within 50 feet of any wells including abandoned wells and drainage wells, sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.
- Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.
- Product must be used in a manner that will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.
- **DO NOT** apply under conditions that favor runoff or wind erosion of soil containing this product to non-target areas. To prevent off-site movement due to runoff or wind erosion:
  - Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface must first be settled by rainfall or irrigation.
  - **DO NOT** apply to impervious substrates such as paved or highly compacted surfaces or frozen or snow covered soils.
  - **DO NOT** use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least 1/2 inch of rainfall has occurred between application and the first irrigation.

#### **Application Restrictions**

- Uneven application or uneven incorporation of AX Acetochlor + 2 can result in erratic weed control or crop injury. Over application may result in crop injury or rotational crop damage from soil residue.
- **Maximum Application Rates:** The total cumulative maximum application amount of AX Acetochlor + 2 on corn is 3.5 pints (1.64 lb ai acetochlor, 0.053 lb ai flumetsulam and 0.17 lb ai clopyralid) per acre per year.
- **DO NOT** exceed 3 pints (1.41 lb ai acetochlor, 0.045 lb ai flumetsulam and 0.17 lb ai clopyralid) per acre per application.

#### **Restrictions and Precautions for Soil Application (Not Applicable to Postemergence Use)**

- **Corn Planting Depth:** Minimum planting depth should be at least 1 1/2 inches.
- **DO NOT** apply to areas where the soil pH is greater than 7.8 as this may result in increased crop injury.
- **DO NOT** apply to a soil containing greater than 5% organic matter if the soil pH is below 5.9 as reduced weed control will result.
- Use of AX Acetochlor + 2 in soil-applied treatments on soils with less than 1.5% organic matter (O.M.) may result in crop injury. Apply as a soil-treatment to fields which have less than 1.5% O.M. only if the risk of crop injury is acceptable.
- If any herbicide with ALS (acetolactate synthase) inhibition mode of action such as Pursuit, Canopy, Classic, Scepter, or Squadron herbicide, etc., was applied the previous year, apply AX Acetochlor + 2 to corn only if the rotational restrictions applicable to corn for the preceding product has been met.

#### **Adverse Weather Conditions**

- Extended cold, wet conditions (soil temperatures below 50°F and excessive rainfall with wet soil conditions), following application of AX Acetochlor + 2 to herbicide tolerant corn, which persist during germination and/or early crop development may result in crop injury. Injury symptoms, which include

yellowing of leaves and/or crop stunting, are usually temporary and affected corn plants usually recover without affecting yield.

- Dry weather following preplant surface or preemergence applications of AX Acetochlor + 2 may reduce effectiveness. If sufficient activating rainfall or overhead irrigation does not occur within 7 to 10 days of application, rotary hoe, harrow, or shallowly cultivate to incorporate the herbicide lightly into the soil. Use a preplant incorporated application when a period of dry weather is predicted after application.
- Low humidity and high temperatures increase the likelihood of spray drift to sensitive areas. Avoid spraying during conditions of low humidity and/or high temperatures. **DO NOT** apply during inversion conditions.

#### **Soil Insecticide Advisories**

- When AX Acetochlor + 2 is used for soil applied weed control in corn:
- Soil applied organophosphate insecticides (except terbufos or phorate, see below) must be applied in a T-band or a band to avoid potential crop injury.
- Terbufos or phorate insecticides must not be used.
- Soil insecticides from other classes of chemistry must be applied in-furrow, T-banded, or banded.

#### **Soil Insecticide Advisories for Postemergence Applications**

- **DO NOT** apply AX Acetochlor + 2 postemergence if corn was previously treated with terbufos or phorate as severe crop injury may result.
- Postemergence applications of AX Acetochlor + 2 to corn previously treated with T-band, band, or in-furrow applications of other organophosphate insecticides, insecticides may cause temporary crop injury.

#### **Foliar Insecticide Advisories for Postemergence Applications**

- **DO NOT** tank mix AX Acetochlor + 2 with foliar postemergence organophosphate insecticides as severe crop injury may result. To avoid crop injury, apply the foliar organophosphate insecticide treatment at least 10 days before or 10 days after the application of AX Acetochlor + 2.
- AX Acetochlor + 2 may be tank mixed with non-organophosphate foliar insecticides, provided they are labeled for use with postemergence corn herbicides.

#### **Other Precautions and Restrictions**

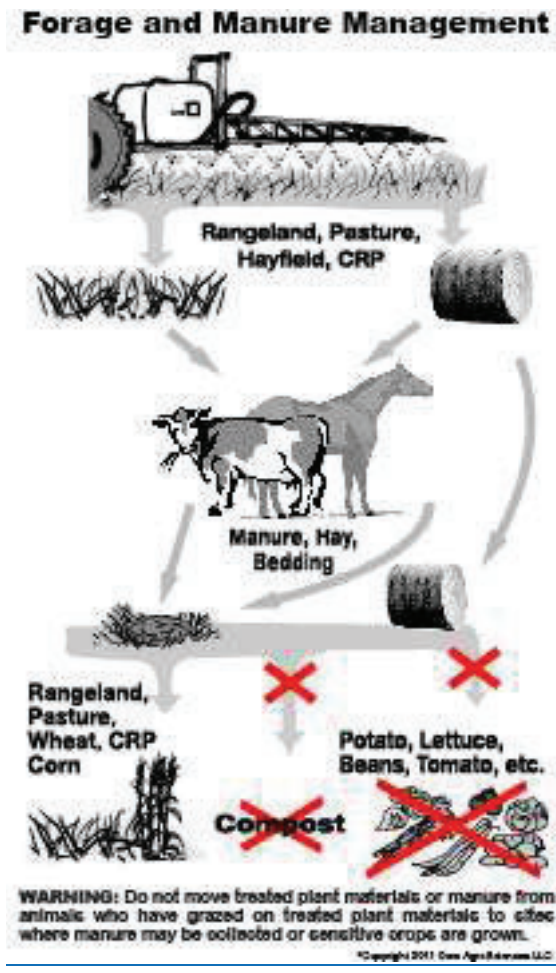
- **DO NOT** apply AX Acetochlor + 2 to sweet corn or popcorn.
- **Hybrid Seed Production:** Corn inbred lines grown for hybrid seed production may be injured by AX Acetochlor + 2. Inbred lines should be thoroughly tested for crop tolerance before treating large acreage. While growers are not prohibited from using AX Acetochlor + 2 on seed corn, **Axion Ag Products LLC will not accept responsibility for any crop injury arising from the use of AX Acetochlor + 2 on field corn grown for seed.**
- **Preharvest interval:** An interval of at least 85 days is required between application of AX Acetochlor + 2 and field corn harvested for grain.
- **Avoid all direct or indirect contact with non-target plants. DO NOT** apply near desirable vegetation. Allow adequate distance between target area and desirable plants under conditions of application to minimize potential exposure.
- **Crop Residues from Treated Areas:** Crop residues from treated areas cannot be used for composting or mulching on ground where susceptible crops may be grown the following season. To promote herbicide decomposition, plant material should be evenly incorporated or burned. Adequate moisture is also required to promote breakdown of plant residues, which contain clopyralid.
- **DO NOT move treated soil.** Avoid situations where soil particles may blow into areas where susceptible crops are grown. The hazard of movement of this product on dust is reduced if treated fields are irrigated or if rain occurs shortly after application.
- **DO NOT apply under conditions that favor runoff or wind erosion of soil containing AX Acetochlor + 2 to non-target areas. To prevent off-site movement due to runoff or wind erosion:**
- Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.
- **DO NOT** apply to impervious substrates such as paved or highly compacted surfaces or frozen or snow covered ground.
- **DO NOT** apply to soils when saturated with water.
- **DO NOT** use nozzles that product a fine-droplet spray.



- **DO NOT apply when weather conditions favor drift to non-target sites.** Spray drift of AX Acetochlor + 2 to emerged soybeans or soil to which soybeans will be planted during the same growing season may cause soybean injury.
- **Off-site Compost and Animal Feed/Bedding Restrictions:**
  - This product is persistent and may be present in treated plant materials for months to years after application. **DO NOT** sell or transport treated plant materials or manure from animals that have grazed on treated plant materials off-site for compost distribution or for use as animal bedding/feed for 18 months after application.
  - Manure from animals that have grazed or eaten forage or hay harvested from treated areas within the previous three days may only be applied to the fields where the following crops will be grown: pasture grasses, grass grown for seed, wheat and corn.
  - Animals that have been fed clopyralid-treated forage must be fed forage free of clopyralid for at least 3 days before movement to an area where manure may be collected or sensitive crops are grown.
- **For applications to pasture:**
  - The applicator must document that they have notified property owners/operators, or customers, in writing, of the compost and animal bedding/feed prohibitions within 14 days of the application. Applicators must keep the records of notification for two years. This record must include date of application, the name of the applicator, the EPA registration number of the product applied, the area(s) treated, and a copy of the written notification provided to the property owner/operator. Notification may be made via email, via mail, via paper handout, or by any other written communication method. Records must be made available to State Pesticide Regulatory Official(s), and to EPA upon request. If this information is already being retained, duplicate records are not needed.
  - It is recommended that applicators also transmit at the time of notification relevant educational materials for managing treated plant matter, as available. Additional educational materials for clopyralid will be posted at: <https://www.epa.gov/ingredients-used-pesticide-products/registration-review-pyridine-and-pyrimidine-herbicides#compost>.
  - Applications by property owners/operators on their own property are exempt from this notification and record keeping requirement.
  - Applications to public land (i.e., lands managed directly by federal, state, tribal, or local authorities) are exempt from this notification requirement.

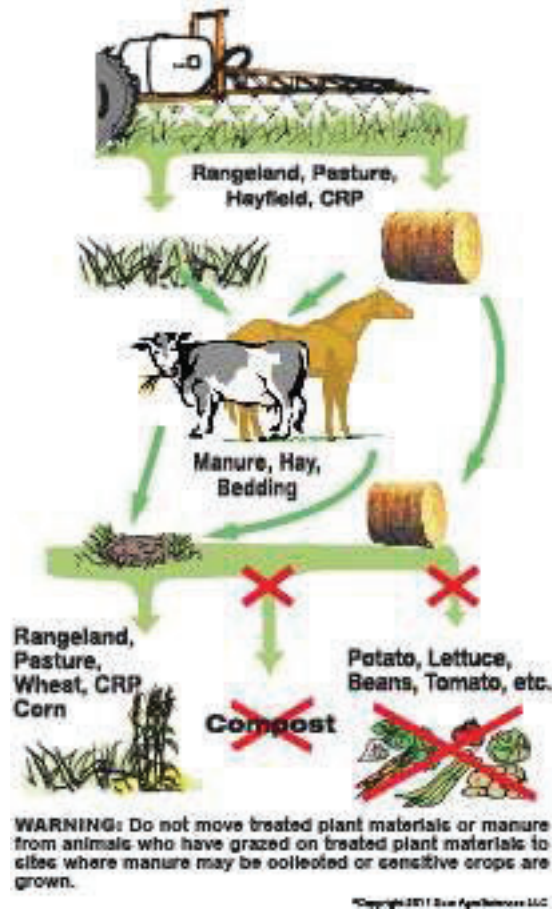
[Note to reviewer: Either pictogram that follows can be used on the printed label.]

Option 1: Black and White pictogram



Option 2: Colored pictogram

### Forage and Manure Management



For more information on how to manage clopyralid treated materials and to prevent clopyralid from contaminating compost please visit <https://www.epa.gov/pesticide-reevaluation/registration-reviewpyridine-and-pyrimidine-herbicides>

### RESISTANCE MANAGEMENT

For resistance management, this product contains Group 2 (Flumetsulam), Group 4 (Clopyralid) and Group 15 (Acetochlor) herbicides. Any weed population may contain plants naturally resistant to Group 2, Group 4 and/or Group 15 herbicides. The resistant individual may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

### Weed Management

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of this product or other Group 2, Group 4 and Group 15 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in the field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local

extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.

- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., 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.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for 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 AXION AG PRODUCTS, LLC at 844-425-8488.

### **Management of Resistant Biotypes**

Since the occurrence of resistant weeds cannot be determined until after product use and scientific confirmation, manufacturer is not responsible for any losses that may result from the failure of this product to control resistant weed biotypes.

The following good agronomic practices are recommended to reduce the spread of resistant biotypes:

- If a naturally occurring resistant biotype is present in your application site, this product should be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g. crop rotation or tillage) may also be used as appropriate.
- Scout treated application site after herbicide applications and control escaping weeds including resistant biotypes before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.
- Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to these Mode of Actions have been found in your region. **DO NOT** assume that each listed weed is being controlled by multiple mechanisms of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product.

### **Integrated Pest (Weed) Management**

This product may be integrated into an overall weed pest management strategy whenever the use of an herbicide is required. Practices known to reduce weed development (tillage, crop competition) and herbicide use (weed scouting, proper application timing, banding) should be followed wherever possible. Consult local agricultural and weed authorities for additional IPM strategies established for your area.

#### **MANDATORY SPRAY DRIFT**

##### **Ground Applications**

- Apply with the release height no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.

- Applicators are required to select a nozzle and pressure combination that delivers a medium or coarser droplet size (ASABE S572).
- **DO NOT** apply when wind speeds exceed 15 mph at the application site.
- **DO NOT** apply during temperature inversions.

**Boom-less Ground Sprayer Applications:**

- Applicators are required to select a nozzle and pressure combination that delivers a medium or coarser droplet size (ASABE S572) for all applications.
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

**SPRAY DRIFT ADVISORIES**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

**IMPORTANCE OF DROPLET SIZE**

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

**Controlling Droplet Size - Ground Boom**

- **Volume** - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- **Pressure** - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- **Spray Nozzle** - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

**Boom-less Ground Applications**

- Setting Nozzles at the lowest effective height will help to reduce the potential for spray drift.

**Handheld Technology Applications**

- Take precautions to minimize spray drift.

**BOOM HEIGHT - Ground Boom**

ground equipment, the boom should remain level with the crop and have minimal bounce.

**SHIELDED SPRAYERS**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

**TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

**TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

**WIND**

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

**Sprayer Cleanup**

To avoid injury to or exposure of non-target crops, thoroughly clean and drain spray equipment used to apply AX Acetochlor + 2 after uses. Cleaning must occur as soon as possible after application of AX

Acetochlor + 2. Spray equipment must be cleaned after use with AX Acetochlor + 2 by the following procedure:

1. Drain any remaining AX Acetochlor + 2 from the spray tank and dispose of according to label disposal instructions.
2. Hose down the interior surfaces of the tank. Flush tank, hoses, boom, and nozzles with clean water for 10 minutes. Fill the tank with water and recirculate for 15 minutes. Spray part of the mixture through the hoses, boom, and nozzles and drain the tank. All rinse water must be disposed of in compliance with local, state, and federal guidelines.
3. Fill the tank with water and recirculate for 15 minutes. For optimum cleaning, a tank cleaner such as liquid ammonia (1 gallon per 100 gallons of water) or other commercial tank cleaner is recommended in the second rinse if the spray equipment will be used on crops other than field corn. Spray part of the mixture through the hoses, boom, and nozzles and drain the tank. All rinse water must be disposed of in compliance with local, state, and federal guidelines.
4. Remove the nozzles and screens and clean separately.
5. If the spray equipment will be used on crops other than field corn, repeat steps 1 and 2 again and thoroughly wash the spray mixture from the outside of spray tank and the boom.

**Rotational Crop Restrictions:**

When tank mixing with other herbicides, follow the most restrictive crop rotation guidelines on the label of each product used. The following rotational crops may be planted as indicated:

Rotational Crop (1)	Timing or Interval
Corn	Anytime - 0 months after application
Wheat	4 months after application
alfalfa (2), barley, clover (2), dry beans (2, 3), lespedeza (2), oats, pea (4), popcorn, rye, soybean (2), vetch (2), wild rice	Spring Following Application
Sorghum	12 months
potatoes, sunflower, sweet corn (5), tobacco	18 months
Sugar Beets, Canola and all other crops	26 months (6)

Numbers within parentheses (-) in the table refer to Specific Rotational Crop Requirements below.

1. If crop treated with AX Acetochlor + 2 is lost, corn may be replanted immediately. **DO NOT** make a second application of AX Acetochlor + 2.
2. When annual rainfall and/or irrigation is less than 15 inches on soils with less than 2% organic matter, this crop must not be planted until 18 months after treatment.
3. Dry beans includes: adzuki, kidney, lima (dry), navy, pinto
4. Pea includes: blackeyed, chick, cow, Crowder, field, pigeon, Southern.
5. Certain sweet corn varieties may be planted 10.5 months following application. Please refer to the separate product bulletin for a list of these varieties.
6. Rotation to Sugar Beets, Canola, and all other crops requires a
7. 26 – month rotation interval and a successful field bioassay.

**Field Bioassay Instructions:** In fields previously treated with this product, plant short test rows of the intended rotational crop across the original direction of application in a manner to sample field conditions such as soil texture, soil pH, drainage, and any other variable that could affect the seed bed of the new crop. Field bioassay at any time between harvest of the treated crop and the planting of the rotational crop. Observe the test crop for herbicidal activity, such as poor stand (effect on seed germination) chlorosis (yellowing), and necrosis (dead leaves or shoots), or stunting (reduced growth). If herbicidal symptoms do not occur, the test crop can be grown. If there is apparent herbicidal activity, **DO NOT** plant the field to the test rotational crop; plant only a labeled crop or crop listed in the table above for which the rotational interval has clearly been met.

## APPLICATION DIRECTIONS - CORN

### Carriers and Spray Volume

**Liquids:** Either water or liquid fertilizers such as solutions, slurries, or suspensions may be used as liquid carriers. If fluid fertilizers are used, a physical compatibility with these must be done **before combining** in the spray tank. See Appendix I for details of the compatibility testing procedure. Even if AX Acetochlor + 2 is physically compatible with a fluid fertilizer, constant agitation is necessary to maintain a uniform mixture during application.

Apply in a minimum broadcast spray volume of 10 gallons per acre using boom equipment for ground applications. Use low pressure nozzles designed for application of herbicides. Use sufficient operating pressure to produce the desired spray pattern for the nozzle (15 to 40 psi) and follow manufacturer's instructions for nozzle spacing and operating height to ensure uniform spray distribution at the soil surface. Use 50-mesh or coarser screens, if needed.

**Dry Bulk Fertilizer:** AX Acetochlor + 2 may be impregnated on dry bulk fertilizer and applied as the fertilizer is spread. Use at least 200 pounds of dry bulk fertilizer per acre. See Appendix II for more details including which fertilizers are compatible.

### Adding to Spray Tank

The spray tank must be clean, thoroughly rinsed, and decontaminated before adding either AX Acetochlor + 2 alone or in tank mix combinations. If water is used as the carrier, use clean water. All return lines to the spray tank must discharge below the liquid level.

**Used Alone:** If AX Acetochlor + 2 is used alone, add the specified amount to the spray tank before the tank is half filled, then add the rest of the water or fluid fertilizer. Provide sufficient agitation to ensure thorough mixing and to maintain a uniform spray mixture during application.

**Tank Mixed:** If a tank mixture is used, it is recommended that a small-scale test of compatibility be done before actual tank mixing. See Appendix I for details on the procedure for such a test.

### Water Carrier

Allow time for complete dispersion/mixing before adding another product to the spray mixture. Add products to the tank mixture in the following order:

- Compatibility agent if needed
- To start, add one-half of the required amount of water to the spray tank. Begin agitation.
- Products in water soluble packaging. Important: Allow time for complete dispersion.
- Wettable powders or dry flowables (slurry if specified by tank mix product label)
- Liquid flowables
- AX Acetochlor + 2 or other emulsifiable concentrates
- Suspension concentrates
- Urea ammonium nitrate (UAN) or ammonium sulphate (AMS), if required
- Soluble liquids such as glyphosate, paraquat, 2,4-D amine
- Crop oil concentrate (COC) or nonionic surfactant (NIS), if required
- Finish filling spray tank to required spray volume

### Liquid Fertilizer Carrier

Allow time for complete dispersion/mixing before adding another product to the spray mixture. Add products to the tank mixture in the following order:

- To start, add one-half of the required amount of liquid fertilizer to the spray tank. Begin agitation.
- Compatibility agent if needed
- Products in water soluble packaging. Important: Products in water soluble packaging must be premixed with water (slurried) prior to addition to the spray tank.
- Wettable powders or dry flowables (slurry if specified by tank mix product label)
- Liquid flowables
- AX Acetochlor + 2 or other emulsifiable concentrates
- Suspension concentrates
- Ammonium sulphate (AMS), if tank mixing with glyphosate.
- Soluble liquids such as glyphosate, paraquat, 2,4-D amine
- Crop oil concentrate (COC) or nonionic surfactant (NIS), if required
- Finish filling spray tank to required spray volume.

**Note:** For all tank mixtures, maintain agitation during mixing and throughout application to ensure spray mixture remains uniformly suspended.

### **Application Timing and Methods**

For the optimum period of effective weed control during the time most critical to corn production, preplant and preemergence applications of AX Acetochlor + 2 herbicide should occur as close as possible to planting and prior to weed emergence. Postemergence applications may be made from prior to weed emergence up to 1 to 2 inch weeds. If weeds are emerged, apply in tank mix combination with a glyphosate product or a glufosinate product to control emerged weeds in herbicide tolerant corn.

#### **Fall and Spring Early Preplant:**

AX Acetochlor + 2 herbicide may be applied in the fall or early spring at 2.0 to 3.0 pints (0.94 – 1.41 lb ai acetochlor, 0.030 - 0.045 lb ai flumetsulam and 0.09 – 0.14 lb ai clopyralid) per acre.

**Fall Applications:** Following soybean harvest, apply to soybean stubble after October 15, when the sustained soil temperature at 4-inch depth is less than 50 degrees F, but before ground freezes. Use on medium and fine textured soils with greater than 2.5% organic matter. Only corn may be planted the following spring. Ground may be tilled before or after application. **DO NOT** exceed 2-inch incorporation depth if tilled after application. If a spring application is made, the total rate of the fall plus spring application must not exceed 3.5 pints (1.64 lb ai acetochlor, 0.053 lb ai flumetsulam and 0.17 lb ai clopyralid) per acre.

**Spring Early Preplant Applications:** On medium and fine textured soils, AX Acetochlor + 2 may be applied 21 or more days prior to planting. If the application is made less than 21 days prior to planting, please refer to the use rate table below for specific product rate recommendations.

**Preplant Incorporation:** AX Acetochlor + 2 and certain tank mixes may be mechanically incorporated into the top 2 inches of the soil by mechanical means such as field cultivators, discs, or spring tooth harrows any time up to 14 days before planting. Improper incorporation, excessive crop residues, or poor soil tilth may result in erratic, streaked, or otherwise unsatisfactory weed control. **DO NOT** mix AX Acetochlor + 2 deeper than 2 inches into the soil and avoid moving or shaping soil after incorporation.

**Preemergence Surface:** AX Acetochlor + 2 and certain tank mixes may be applied to the soil surface as a broadcast or banded application. Precipitation or sprinkler irrigation of at least 0.25 inch is required to bring AX Acetochlor + 2 into contact with germinating seeds. If rain or sprinkler irrigation does not occur within 7 days after application, weed control may be improved by using a rotary hoe or similar equipment to incorporate the herbicide. Incorporation equipment should be run at a shallow depth to avoid disturbance of germinating corn seed. Erratic weed control resulting from exposure of untreated soil may occur if surface soil is moved or reshaped after incorporation.

**Postplant-Preemergence:** AX Acetochlor + 2 may be applied after planting but prior to corn emergence. If rain or sprinkler irrigation does not occur within 7 days after application, weed control may be improved by using a rotary hoe or similar equipment to shallowly incorporate the herbicide. Incorporation equipment should be run at a shallow depth to prevent disturbance of the germinating corn. Erratic weed control resulting from exposure of untreated soil may occur if surface soil is moved or reshaped during incorporation.

**Early Postemergence:** AX Acetochlor + 2 may be applied early postemergence to corn up to 11 inch tall corn. Applications may be made from prior to weed emergence up to 1 to 2 inch weeds. If weeds are emerged, apply in tank mix combination with a glyphosate product or a glufosinate product to control emerged weeds in herbicide tolerant corn. Read and follow restrictions and directions on tank mix product labels. AX Acetochlor + 2 will provide limited activity on small (1-2 inch) emerged broadleaf weeds but will not control established or germinated grass weeds present at application listed in the Target Weeds Controlled or Partially Controlled section of this label.

If grass and broadleaf weeds have germinated, and emerged, best results will be achieved by tank mixing a glyphosate herbicide or glufosinate herbicide with AX Acetochlor + 2 for control of emerged weeds. AX Acetochlor + 2 will provide soil residual control of the grass and broadleaf weeds listed in the Target Weeds Controlled or Partially Controlled section of this label. **Note: Postemergence applications of AX Acetochlor + 2 tank mixed with glyphosate may be applied only on corn varieties designated as containing the glyphosate tolerant gene. Postemergence applications of AX Acetochlor + 2 tank mixed with glufosinate may be applied only on corn varieties designated as containing the glufosinate tolerant gene.**

**Sprinkler Irrigation: DO NOT apply AX Acetochlor + 2 by sprinkler irrigation.** Use a sprinkler system only to incorporate AX Acetochlor + 2 after application. After AX Acetochlor + 2 has been applied, a sprinkler irrigation system set to deliver 0.25 to 0.75 inch of water per acre may be used to incorporate the product. Using more than 0.75 inch of water could result in reduced performance. On sandy soil low in organic



matter, use no more than 0.5 inch of water. **DO NOT** use flood irrigation to apply or incorporate AX Acetochlor + 2.

**Cultivation**

Cultivation should be delayed as long as possible. If weeds develop, a shallow cultivation or rotary hoeing will generally result in improved weed control. If AX Acetochlor + 2 was incorporated, cultivate to a depth of less than half the depth of incorporation.

If cultivation is necessary due to soil crusting or compaction, adjust equipment to run shallow and minimize soil movement. This will decrease the possibility of diluting or moving the herbicide from the weed control zone.

**Soil Texture and Organic Matter**

The use rate of AX Acetochlor + 2 is determined by a combination of two factors, soil texture and organic matter, which must be determined prior to application. Different soil textures are grouped into three textural classes (coarse, medium, and fine) as outlined in Table 1. Soil texture and organic matter content of the soil may be determined from soil survey information and/or by laboratory analysis and must be known in order to select the proper rate from Table 2.

**Table 1:** Soil Texture Groupings for AX Acetochlor + 2 Use Rate Selection.

<b>Course</b>	<b>Medium</b>	<b>Fine</b>
Sand Loamy Sand Sandy Loam	Loam Silt Silt Loam Sandy Clay Loam	Silty Clay Loam Silty Clay Sandy Clay Sandy Clay Loam Clay Loam Clay

**Use Rates**

AX Acetochlor + 2 may be used in conventional, reduced and no-till systems. Optimal weed control will be obtained when applications are made as close as possible to planting but before weeds emerge. However, applications may be made from 30 days prior to planting through 11-inch tall corn. In reduced or no-till systems, it is recommended that a burndown herbicide such as glyphosate, glufosinate or paraquat and/or 2,4-D be tank mixed with AX Acetochlor + 2 if emerged weeds are present at application. AX Acetochlor + 2 may be used at rates from 1.5 to 3.0 pints (0.70 – 1.41 lb ai acetochlor, 0.023 – 0.045 lb ai flumetsulam and 0.07 – 0.14 lb ai clopyralid) per acre. Use rates in the higher end of the rate range for soil type (see table below) for longer residual activity. Apply 2.0 to 3.0 pints (0.94 – 1.41 lb ai acetochlor, 0.030 - 0.045 lb ai flumetsulam and 0.09 – 0.14 lb ai clopyralid) per acre in fall or spring early replant applications.

Use Rates for AX Acetochlor + 2 by Soil Texture and Organic Matter Content

<b>Soil Texture</b>	<b>Soil Organic Matter Content</b>	
	<b>Less Than 3%</b>	<b>3% or Greater</b>
	<b>Pints/Acre</b>	<b>Pints/Acre</b>
<b>Coarse</b>	1.5 – 2.0	1.5 – 2.0
<b>Medium</b>	1.5 – 2.5	1.75 – 3.0
<b>Fine</b>	2.0 – 3.0	2.0 – 3.0

**Target Weeds Controlled or Partially Controlled by AX Acetochlor + 2 at Specified Use Rates.**

AX Acetochlor + 2 will provide activity on the following weeds which will allow for optimal timing of an in-crop postemergence application of glyphosate or glufosinate in herbicide tolerant corn. Partially controlled weeds will be severely stunted, or experience reduced height, vigor, or population compared to untreated areas.

Grasses and Sedges	Broadleaves	
barnyardgrass	amaranth, Palmer	ragweed, common
crabgrass spp.	beggarweed, Florida	ragweed, giant
crowfootgrass	buckwheat, wild	shepherd's purse
cupgrass, prairie	carpetweed	Sicklepod
cupgrass, southwestern	chickweed, common	sida, prickly
cupgrass, woolly	clover, red	smartweed, Pennsylvania
foxtail, bristly	cocklebur, common	spurge, nodding
foxtail, giant	galinsoga	spurge, prostrate
foxtail, green	henbit	spurge, spotted
foxtail, robust (purple, white)	horseweed (maretail)	sunflower, common
foxtail, yellow	jimsonweed	thistle, Canada (1)
goosegrass	kochia	Velvetleaf
johnsongrass, seedling	ladysthumb	waterhemp species
millet, foxtail	lambsquarters, common	wormwood, biennial
millet, wild proso	mallow, Venice	
nutsedge, yellow	morningglory, ivyleaf	
panicum, browntop	morningglory, tall	
panicum, fall	mustard, wild	
panicum, Texas	nightshade species	
rice, red	pigweed, redroot	
sandbur, field	pigweed, smooth	
shattercane	poinsettia, wild	
signalgrass, broadleaf	puncturevine	
sprangletop, red	purslane, common	
witchgrass	pusley, Florida	

(1) Burndown activity of Canada thistle in minimum and no-till corn only.

AX Acetochlor + 2 will provide limited activity on small (1-2 inch) emerged broadleaf weeds but will not control established or germinated grass weeds present at application. If grass and broadleaf weeds have germinated, and emerged, best results will be achieved by tank mixing a glyphosate herbicide or glufosinate herbicide with AX Acetochlor + 2 for control of emerged weeds. AX Acetochlor + 2 will provide soil residual control of the grass and broadleaf weeds listed above.

AX Acetochlor + 2 will control or suppress glyphosate, triazine or ALS resistant biotypes of the weeds listed above.

#### Tank Mix Combinations

Additional weeds may be controlled with tank mixes. Tank mix combinations may be used in either conventional, reduced, or no-till systems and may be applied by the same methods and at the same application timing as AX Acetochlor + 2 herbicide unless otherwise specified in the tank mix product label.

If emerged grass and broadleaf weeds are present at the time of application, best results will be achieved by tank mixing the appropriate rate of herbicides such as glyphosate or paraquat and, or 2, 4-D with AX Acetochlor+2.

**DO NOT** post apply AX Acetochlor + 2 in tank mix combination with Basagran, Laddock, or Lightning herbicides as severe crop injury may result.

AX Acetochlor + 2 may be tank mixed with any other herbicide labeled for use on corn provided the compatibility of the tank mix is verified by a jar test and tank mixing with AX Acetochlor + 2 is not prohibited by the label of the tank mix product. The compatibility of a tank mixture can be determined by mixing the ingredients of the herbicide mixture in their relative proportions in a glass jar as described for fluid fertilizer mixtures in Appendix I by substituting water for fluid fertilizer. Refer to the label of the tank mix product for applicable use directions, precautions and limitations, including additional weeds controlled. **DO NOT** exceed application rates on the respective product labels. **DO NOT** tank mix with another pesticide product that contains the same active ingredient as this product unless the label of either tank mix partner specifies the maximum dosages that may be used.

#### **Use of Spray Adjuvants**

AX Acetochlor + 2 is a preemergence herbicide for which spray adjuvants have little or no influence on performance. However, several herbicides used in tank mixtures with AX Acetochlor + 2 require use of adjuvants to aid in the control of emerged weeds. Use only those adjuvants recommended on the label of the tank mix product and approved for use in growing crops. Surfactants and/or low rate liquid fertilizers (28%, 30%, or 32% UAN) or ammonium sulfate (AMS) adjuvants may be used with tank mixes applied preplant or preemergence to the crop.

### **APPENDIX I**

#### **Procedure for Testing the Compatibility of AX Acetochlor + 2 and Tank Mixes with Fluid Fertilizers**

Since fluid fertilizers vary, the following procedure is suggested for determining whether AX Acetochlor + 2 herbicide may be combined with a specific fluid fertilizer for spray tank application.

##### **Materials Needed:**

1. AX Acetochlor + 2 and any tank mix products
2. Fluid fertilizer to be used
3. Adjuvant for fertilizer tank mix: Use any adjuvant cleared for use on growing crops under 40 CFR 180.1001 to improve the compatibility of AX Acetochlor + 2 with fluid fertilizers. The adjuvant that provides the best emulsification depends upon the specific fertilizer under consideration.
4. Two 1 quart, wide mouth glass jars with lid or stopper
5. Measuring spoons (a 25 ml pipette or graduated cylinder provides more accurate measurement)
6. Measuring cup, 8 ounces (257 ml)

##### **Procedure:**

1. Pour a pint (about 473 ml) of the fluid fertilizer into each of the quart jars.
2. Add AX Acetochlor + 2 and any tank mix combination to the jars. The order of addition is wettable powders first with mixing, followed by flowables with mixing and the ECs last. The rate of wettable powders and dry flowables is 1 1/2 teaspoon per pound of product per acre to be applied. ECs must be added at the rate of 1/2 teaspoon for each pint per acre to be applied. Premixing the wettable powders in 1 oz of water before adding to the pint of fluid fertilizer will improve the compatibility of the final mixture.
3. Add 1/2 teaspoon (2 ml) adjuvant to one of the jars, label it as "with," and mix. The rate of 1/2 teaspoon per pint is equal to 3 pints of adjuvant per 100 gallons of fluid fertilizer.
4. Close both jars with lids or stoppers and mix the contents by turning the jars upside down 10 times.
5. Inspect the surface and body of the mixtures:
  - a. Immediately after completing the jar inversions
  - b. After allowing the jars to stand undisturbed for 30 minutes
  - c. And then again after turning the jars upside down 10 times after the 30 minute inspection.

##### **Evaluation:**

If either mixture remains uniform for 30 minutes, the combination may be used. Should either mixture separate after 30 minutes, but readily remix uniformly with 10 jar inversions, the mixture can be used if adequate agitation is maintained in the tank. If the mixture with adjuvant is satisfactory but the one without adjuvant is not, be sure to use the adjuvant in the spray tank. Add the adjuvant first at a rate of 3 pints per

100 gallons of fluid fertilizer. Foaming may be minimized by using moderate agitation. If non-dispersible oil, sludge, or clumps of solids form in the mixtures, the combination should not be used.

## APPENDIX II

### Dry Bulk Fertilizer Impregnation

All individual state regulations relating to dry bulk fertilizer blending, registration, labeling, and application are the responsibility of the individual and/or company selling AX Acetochlor + 2 fertilizer mixtures.

When applying AX Acetochlor + 2 alone or in tank mixes with dry bulk fertilizers, follow all directions for use and precautions on the respective tank mix product labels regarding use rates, soil texture, application methods, and rotational restrictions. Use a minimum of 200 lb of dry bulk fertilizer per acre.

### Approved Dry Fertilizer Ingredients for Use with AX Acetochlor + 2<sup>1</sup>

Fertilizer	N	P	K
Ammonium Phosphate-Sulfate	16	20	0
Ammonium Sulfate	21	0	0
Diammonium Phosphate	18	46	0
Monoammonium Phosphate	11	56	0
Potassium Chloride	0	0	60
Potassium Sulfate	0	0	52
Urea <sup>2</sup>	45	0	0

<sup>1</sup> **DO NOT** impregnate on fertilizers containing ammonium nitrate, potassium nitrate, or sodium nitrate.

<sup>2</sup> Some ureas may be phytotoxic when high rates are applied to corn. Use only urea rates known to be safe for corn application.

For impregnating pesticides on dry fertilizers, use suitable mixers equipped with suitable spraying equipment. The spray nozzles must be positioned inside the mixer to provide uniform spray coverage of the tumbling fertilizer. AX Acetochlor + 2 must be sprayed uniformly onto the fertilizer using a fine spray pattern. Tank mix components may be applied as separate ingredients with powders and dry flowables added first or they may be mixed in a slurry in the proper ratio and added jointly. AX Acetochlor + 2 may also be impregnated on dry bulk fertilizer in the field while the fertilizer is being spread using a pneumatic applicator equipped to impregnate herbicides.

The following table provides a reference to determine the amount of AX Acetochlor + 2 to be mixed per ton of dry bulk fertilizer for a range of herbicide rates.

Fertilizer Rate (lb/acre)	Acres Covered (per ton)	AX Acetochlor + 2 Rate (pints/acre)					
		1.5	1.75	2.0	2.5	2.75	3.0
		Pints Herbicide/Ton Fertilizer					
200	10	15	17.5	20	25	27.5	30
300	6.7	10	11.7	13.4	16.8	18.4	20.1
400	5	7.5	8.8	10	12.5	13.8	15
500	4	6	7	8	10	11	12
600	3.3	5	5.8	6.6	8.3	9.1	9.9
700	2.9	4.4	5.1	5.8	7.3	8	8.7

To determine the amount of AX Acetochlor + 2 needed for other rates of fertilizer, use this formula:

$$\frac{\text{AX Acetochlor + 2 (pints/acre)}}{\text{Pounds of fertilizer/acre}} \times 2000 = \text{Pints of AX Acetochlor + 2 per ton of fertilizer}$$

If the herbicide/fertilizer mixture is too wet, use of a drying agent is required to provide a dry, free-flowing mixture. For mixtures to be used in spinning-disc applicators, Micro-Cel E calcium silicate powder (Manville, Filtration & Minerals) is recommended for use as a drying agent.

Mixtures to be used in pneumatic applicators should use Micro-Cel E or Agsorb 16/30 RVM-MS granular clay (Oil-Dri Corporation). The drying agents should be added separately and uniformly to the prepared pesticide/fertilizer mixture, in a quantity that is sufficient to provide a suitable free-flowing mixture. Generally, less than 2% Micro-Cel E or 5% Agsorb 16/30 RVM-MS by weight is required.

**Precaution:** To avoid potential for explosion, **DO NOT** impregnate AX Acetochlor + 2 on ammonium sorbate nitrate, potassium nitrate, or sodium nitrate fertilizer or fertilizer blends. **DO NOT** impregnate on a single (0-20-0) or triple (0-46-0) super phosphate. **DO NOT** attempt to impregnate AX Acetochlor + 2 on agricultural limestone as the herbicide will not be adequately absorbed.

### STORAGE AND DISPOSAL

**DO NOT** contaminate water, food, or feed by storage or disposal.

**Pesticide Storage:** Store in original container only. Keep container closed when not in use. **DO NOT** store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with vermiculite, earth, or synthetic absorbent.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**Container Handling:**

**NONREFILLABLE CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS): DO NOT** reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**NONREFILLABLE CONTAINER (GREATER THAN 5 GALLONS): DO NOT** reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration, or by other procedures allowed by state and local authorities.

**REFILLABLE CONTAINER:** Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. After triple rinsing is complete, and the container

is not suitable for refilling or reconditioning, offer the container for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

**CONDITONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of AXION AG PRODUCTS, LLC or Seller, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold AXION AG PRODUCTS, LLC and Seller harmless for any claims relating to such factors.

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