

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

January 22, 2021

Mary Beth Endres Registration Manager Axion Ag Products, LLC 4850 Hahns Peak Drive, Suite 200 Loveland, CO 80538

Subject: Label Amendment – Incorporate postemergence use on soybeans supplemental

label Product Name: AX M-CHLOR CEC EPA Registration Number: 89167-19 Application Date: September 12, 2017

Decision Number: 533653

Dear Ms. Endres:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (FIFRA), is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

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 18 months from the date of this letter. After 18 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.

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 FIFRA 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.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions, please contact Endia Blunt by phone at 703-347-0788, or via email at Blunt.Endia@epa.gov.

Sincerely,

Mindy Ondish
Mindy Ondish

Product Manager 23

Herbicide Branch

Registration Division (7505P)

Office of Pesticide Programs

Enclosure

# AX M-CHLOR CEC Herbicide

For weed control in Cotton, Peanuts, Pod crops, Potatoes, Safflowers, Sorghum, Soybeans, and Tomatoes.

ACTIVE INGREDIENT:	% BY WT.
Metolachlor: 2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) acetamide	86.4%
OTHER INGREDIENTS:	13.6%
TOTAL:	100.0%
This product contains 8 pounds of active ingredient per gallon.	

# CAUTION CAUTION

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

[SEE INSIDE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS.]
[See inside booklet for additional Precautionary Statements and Directions for Use.]

[SHAKE WELL BEFORE USING]
[RECIRCULATE CONTENTS BEFORE USE]

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	0	1/2	22	/2	02	21	

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 20107.10

89167-19

EPA Reg. No. 89167-19

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**Manufactured For:** 

AXION AG PRODUCTS, LLC 1880 Fall River Drive, Suite 100 Loveland, CO 80538

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## **FIRST AID**

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes.

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 15 minutes, then continue rinsing eye.

**IF SWALLOWED:** Call a poison control center 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 center or doctor. Do not give anything by mouth to an unconscious or convulsing person.

#### **HOTLINE NUMBER**

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 **1-800-858-7378** or your poison control center at **1-800-222-1222**. For Chemical Spill, Leak, Fire or Exposure, call CHEMTREC **800-424-9300**.

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed, inhaled, or absorbed through skin. Causes eye irritation. Avoid contact with eyes or clothing. Avoid breathing spray mist.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Applicators and other handlers must wear:** Coveralls over short-sleeved shirt and short pants, Chemical-resistant gloves made of barrier laminate or viton ≥14 mils, Chemical-resistant footwear plus socks, Chemical-resistant headgear for overhead exposure, Chemical-resistant apron when cleaning equipment. 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.

## **USER SAFETY RECOMMENDATIONS**

**Users should:** 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) 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.

#### **ENGINEERING CONTROL STATEMENTS**

Mixers and loaders supporting aerial applications are required to use closed systems. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607(d)]. When using the closed system, the PPE requirements for mixers and loaders may be reduced or modified as specified in the WPS.

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 170.607(d-e)], the handler PPE requirements may be reduced or modified as specified in the WPS.

## **ENVIRONMENTAL HAZARDS**

For terrestrial uses, do not apply directly to water, 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 wash waters or rinsate.

## **Ground Water Advisory**

This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

### **Surface Water Advisory**

Metolachlor can contaminate surface water through ground spray drift. Under some conditions, metolachlor may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several months post-application. These include poorly draining or wet soils with readily visible

slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

## **Mixing/Loading/Application Instructions**

Care must be taken when using this product to prevent back-siphoning into wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsates.

Check-valves or antisiphoning devices must be used on all mixing and/or irrigation equipment.

This product may not be mixed or loaded within 50 feet of perennial or intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be mixed/loaded or used within 50 feet of all wells, including abandoned wells, drainage wells, and sinkholes. 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 wash water, and rain water 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.

#### PRODUCT INFORMATION - SHAKE WELL BEFORE USING

Observe all use precautions and limitations on the labels of each product used in tank mixtures. Tank mixtures are permitted only in those states where the tank-mix partner is registered.

This product is a herbicide for use as a preplant surface applied, preplant incorporated, or preemergence treatment in water or fluid fertilizer for control of most annual grasses and certain broadleaf weeds in Cotton, Peanuts, Pod crops, Potatoes, Safflowers, Soybeans, and Tomatoes

**Note: DO NOT** use in nurseries, turf, or landscape plantings. **DO NOT** apply under conditions which 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:

- 1) Avoid treating powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.
- 2) **DO NOT** apply to impervious substrates such as paved or highly compacted surfaces.
- 3) **DO NOT** use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least one-half inch of rainfall has occurred between application and the first irrigation.

Note: Certain states may have established rate limitations for atrazine within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

If this product is incorporated, any supplemental tillage before planting must not exceed the depth of incorporation.

Dry weather following preemergence application of this product or a tank mixture may reduce effectiveness. Cultivate if weeds develop.

Where reference is made to weeds partially controlled, partial control can either mean erratic control from good to poor, or consistent control at a level below that generally considered acceptable for commercial weed control.

**Use Precautions:** Injury may occur following the use of this product under abnormally high soil moisture conditions during early development of the crop.

## **RESISTANCE-MANAGEMENT**

Metolachlor, the active ingredient in this product, is a Group 15 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 15 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. 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 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 resistancemanagement and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact AX AG PRODUCTS, LLC at [855-466-8428 or 844-425-8488 or other appropriate telephone number].

#### **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 this Mode of Actions have been found in your region. If resistant biotypes of target
  weeds have been reported, use the application rates of this product specified for your local conditions.
  Tank mix products so that there are multiple effective mechanisms of actions for each target weed.

## **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.

#### **MIXING INSTRUCTIONS**

**This Product Alone:** Mix this product with water or fluid fertilizer and apply as a spray. Fill the spray tank one-half to three-quarters full with water or fluid fertilizer, add the proper amount of this product, then add the rest of the water or fluid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

**Tank Mixtures:** It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Fill the spray tank one-fourth full with water, and start agitation; add 2,4-D, 2,4-DB, atrazine, benfluralin, bentazon, chlorimuron ethyl, clomazone, ethafluralin, EPTC, fluometuron, imazaquin, imazethapyr, linuron, linuron + chlorimuron ethyl, metribuzin, msma, pendimethalin, prodiamine + isoxaben, prometryn, simazine or trifluralin and allow it to become dispersed; then add this product, then add glyphosate or paraquat if these products are being used, and finally the rest of the water. For tank mixtures with chlorimuron ethyl, clomazone, ethafluralin, EPTC, fluometuron\*, imazaquin, imazethapyr, linuron, metribuzin, pendimethalin\*, prodiamine + isoxaben, prometryn or trifluralin, fluid fertilizers may replace all or part of the water as carrier. For each tank mixture, conduct a compatibility test as described in Appendix A of this label. For all tank mixtures, agitate during mixing and application to maintain a uniform suspension.

\*See Special Mixing Instructions for tank mixtures with fluometuron or pendimethalin under the appropriate tank mixture section.

For directions on how to conduct a compatibility test, see Appendix A.

## **DIRECTIONS FOR USE**

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

**DO NOT** APPLY THIS PRODUCT BY AIR IN NEW YORK STATE. **DO NOT** SELL, USE OR DISTRIBUTE THIS PRODUCT IN NASSAU AND SUFFOLK COUNTIES.

## 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 24 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, Chemical-resistant gloves, made of barrier laminate or viton ≥14 mils, and chemical-resistant footwear plus socks, and chemical-resistant headgear for overhead exposures.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.

To avoid spray drift, **DO NOT** apply under windy conditions. Avoid spray overlap, as crop injury may result.

## 1) SOIL TEXTURES AND HERBICIDE RATES

Where rates are based on coarse-, medium-, or fine-textured soils, it is understood that soil textural classes are generally categorized as follows:

<u>Coarse</u>	<u>Medium</u>	<u>Fine</u>
Sand	Loam	Sandy clay loam
Loamy sand	Silt loam	Silty clay loam
Sandy loam	Silt	Clay loam
•		Sandy clay
		Silty clay
		Clay

Within rate ranges in the rate tables and elsewhere on this label, use the lower rate on soils relatively coarse-textured or low in organic matter; use the higher rate on soils relatively fine-textured or high in organic matter.

**Note:** This product may be applied preemergence alone, or in combination with tank-mix partners specified on this label, following preplant incorporated herbicides when used according to their label directions, provided that such use is not prohibited on the respective labels.

Thoroughly clean sprayer or other application device before using. Dispose of cleaning solution and rinsate in a responsible manner. **DO NOT** use a sprayer or applicator contaminated with any other materials, or crop damage or clogging of the application device may result.

## 2) APPLICATION PROCEDURES

**Application Timing -** This product alone or in some tank mixtures with other labeled herbicides may be applied for weed control in Field corn, Sweet corn, and Popcorn at various times. Refer to the specific crop section of the label to determine if application timings listed below are appropriate.

- A) Preplant Surface-Applied: For minimum-tillage or no-tillage systems only, this product alone and some tank mixtures of this product may be applied up to 45 days before planting. Use only split applications for treatments made 30 to 45 days before planting, with two-thirds the specified broadcast rate for the crop and soil texture applied initially and the remaining one-third at planting. Treatments less than 30 days before planting may be made either as a split or a single application. If weeds are present at the time of treatment, apply in a tank-mixture combination with a contact herbicide (for example, Gramoxone Extra or Glyphosate). Observe directions for use, use precautions, and restrictions on the label of the contact herbicide. To the extent possible, **DO NOT** move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.
- **B) Preplant Incorporated:** Apply this product to the soil and incorporate into the top 2 inches of soil within 14 days before planting, using a finishing disk, harrow, rolling cultivator, or similar implement capable of providing uniform 2-inch incorporation. Use a preplant incorporated application if furrow irrigation is used or when a period of dry weather after application is expected. If crop will be planted on beds, apply and incorporate this product after bed formation, unless specified otherwise.
- **C) Preemergence:** Apply this product during planting (behind the planter) or after planting, but before weeds or crops emerge.

## 3) Special Application Procedures

- A) Preplant Incorporated-CA Only (Safflowers, Pod crops): Broadcast this product to the soil and thoroughly incorporate with a disc or similar implement set to till 4 to 6 inches deep. For more thorough incorporation, till the soil in 2 different directions (cross-till). Crops may be planted on flat surface or on beds. Caution should be used when forming the beds that only soil from this product's treated zone is used (i.e., untreated soil should not be brought to soil surface). If the application is made to preformed beds, incorporate this product with a tillage implement set to till 2 to 4 inches deep. Care should be taken during tilling to keep the tilled (this product treated) soil on the beds.
- **B) Preemergence:** Apply this product after planting. Water with sprinkler or flood irrigation within 7 to 10 days.
- C) Fall Application (only in IA, MN, ND, SD, WI, North of Route 20 in the state of NE, and North of Route 136 in the state of IL): DO NOT apply to frozen ground. Use on medium and fine soils with greater than 2.5% organic matter that will be planted to Soybeans the next Spring. Ground may be tilled before or after application. DO NOT exceed a 2 to 3-inch incorporation depth if tilled after treatment.

**Note:** If a Spring application is made, the total rate of the Fall plus Spring applications must not exceed the maximum total rate for the specific crop, or illegal residues may result.

**D) Ground Application:** Apply this product alone or in tank mixtures by ground equipment in a minimum of 10 gals. of spray mixture per acre, unless otherwise specified.

Use sprayers that provide accurate and uniform application. For tank mixtures of this product with wettable powder or dry flowable formulations, screens and strainers should be no finer than 50-mesh. Rinse sprayer thoroughly with clean water immediately after use.

Calculate the amount of herbicide needed for band treatment by the formula.

Band width in inches

X Broadcast rate per acre = Amount needed per acre of field

Note: For additional information on:
COMPATIBILITY TEST - See APPENDIX A;
LOW CARRIER APPLICATION - See APPENDIX B;
AERIAL APPLICATION - See APPENDIX C;
CENTER PIVOT IRRIGATION APPLICATION - See APPENDIX D;
DRY BULK GRANULAR FERTILIZERS - See APPENDIX E

## THIS PRODUCT APPLIED ALONE 1) WEEDS CONTROLLED

Barnyardgrass (watergrass)

Bristly foxtail

Foxtail millet

Galinsoga

Red rice

CarpetweedGiant foxtailRobust foxtails (purple, white)CrabgrassGoosegrassSignalgrass (Brachiaria)CrowfootgrassGreen foxtailSouthwestern cupgrass

Eastern black nightshade Italian ryegrass Witchgrass
Fall panicum (*Lolium multiflorum*)\* Yellow foxtail
Florida pusley Pigweed Yellow nutsedge

\*For control of this weed, apply in the Fall using 1.67 pts. of this product on *medium soils* and 2 pts. of this product on *fine soils* after harvest of the previous crop but prior to emergence of this weed. **DO NOT** apply to frozen ground. A tillage operation may precede application of this product. A Fall and/or Spring tillage may follow application but incorporation depth must not exceed more than 2 to 3 inches. After emergence of this weed, apply this product in tank mix combination with other herbicides with use directions against this weed. Observe all use precautions and limitations on the labels of each product used in tank mixture. Tank mixtures are permitted only in those states where the tank mix partner is registered.

Observe the specified maximum allowable rate of this product for a crop growing season.

## 2) WEEDS PARTIALLY CONTROLLED\*:

Common purslane	Seedling	Wild proso millet	
Eclipta	Johnsongrass	Woolly cupgrass	
Florida beggarweed**	Shattercane		
Hairy nightshade	Texas panicum***		
Sandbur	Volunteer sorghum		

<sup>\*</sup> See **Product Information** section. Control of these weeds can be erratic, due partially to variable weather conditions. Control may be improved by following these suggested procedures:

- A) Thoroughly till moist soil to destroy germinating and emerged weeds. If this product is to be applied preplant incorporated, this tillage may be used to incorporate this product if uniform 2-inch incorporation is achieved as recommended under **Application Procedures**.
- B) Plant crop into moist soil immediately after tillage. If this product is to be used preemergence, apply at planting or immediately after planting.
- C) If available, sprinkler irrigate within 2 days after application. Apply one-half to 1 inch of water. Use lower water volume (one-half inch) on *coarse-textured soils* and higher volume (1 inch) on *fine-textured soils*. Also, refer to the section on **Center Pivot Irrigation Application** for this method of applying this product.

- D) If irrigation is not possible and rain does not occur within 2 days after planting and application, weed control may be decreased. Under these conditions, a uniform, shallow cultivation is recommended as soon as weeds emerge.
- \*\* For partial control of this weed, use a minimum of 2 pts./A and apply preemergence.
- \*\*\* For partial control of this weed, use a minimum of 2 pts./A and apply through a center pivot irrigation system.

### 3) ROTATIONAL CROPS

## **This Product Alone: Restrictions:**

- A) If crop treated with this product alone is lost, any crop on this label may be replanted immediately. DO NOT make a second broadcast application of this product. If the original application was banded and the second crop is planted in the untreated row middles, a second banded treatment may be applied.
- B) Barley, Oats, Rye, or Wheat may be planted 4.5 months following treatment; Alfalfa may be planted 4 months following application. Tomatoes may be planted 6 months following application.
- C) Any crop on this label, in addition to Root crops, Tobacco, Barley, Buckwheat, Milo, Oats, Rice, Rye, Wheat, Cabbage, or peppers may be planted in the Spring following treatment. Clover may be seeded 9 months following application. **DO NOT** graze or feed forage or fodder from Cotton to livestock. All other rotational crops may be planted 12 months after a lay-by application.
- D) Following a lay-by treatment or multiple treatments applied the previous season, any crop on this label, in addition to Tobacco, Cabbage or Peppers may be planted in the spring.

## **This Product In Tank Mixtures:**

For Rotational Crop restrictions for this product used in tank mixtures, refer to the Restrictions above for this product and to the respective product labels of any mixing partner(s) for additional statements/restrictions.

**Restrictions:** To avoid injury to rotational Alfalfa or Clover: (1) **DO NOT** apply more than 3 lbs. a.i. per acre (3 pts. of this product) preemergence (including preplant surface, preplant incorporated, postplant incorporated, etc.), and (2) **DO NOT** make lay-by or other postemergent applications of this product.

## **COTTON — THIS PRODUCT ALONE**

**Application:** Apply this product preemergence only in Area 1\* at the rate of 0.75 to 1 pt./A on sandy loams, 1 to 1.33 pts./A on medium soils, or 1 to 1.33 pts./A on fine soils. Apply this product preplant incorporated or preemergence in Area 2\*\* at 1 pt./A on sandy loams, 1 to 1.33 pts./A on medium soils, or 1.33 pts./A on fine soils.

Apply this product postemergence to cotton and preemergence to weeds at 0.75 to 1.33 pts./A according to the state rate limitations in the following Postemergence section below. **DO NOT use on sands and loamy sand.** 

- \* Area 1 = AR, LA, MS, TN, and Bootheel of MO
- \*\* Area 2 = NM, OK, and TX

**Preplant incorporated (NM, OK, and TX Only):** Apply to the soil and incorporate into the top inch of soil immediately before planting, at planting, or after planting, but before crop or weeds emerge. Use a rolling cultivator or similar implement to uniformly incorporate not more than 1 inch deep. Use a preplant incorporated application if furrow irrigation is used or when a period of dry weather after application is expected. Where furrow irrigation is used, wet the top of the bed for best results. If the crop is to be planted on beds, apply and incorporate after bed formation. Cotton should be planted below the zone of incorporation; i.e., at least 1 inch on fine soils and 1.5 inches on coarse and medium soils. If incorporated prior to planting, use a planter that will result in a minimum of soil disturbance.

**Note:** For best control of Yellow nutsedge and suppression of seedling Johnsongrass, apply this product preplant incorporated at the maximum rate for the soil texture, whether applied alone or mixed with prometryn.

**Preemergence:** Apply to the soil surface at planting or after planting, but before weeds or crop emerge. **Postemergence:** Apply this product broadcast over-the-top or directed to the soil surface, according to the rate and Cotton height limitations listed below by state. Application before weeds emerge or after clean cultivation to remove existing weeds is necessary as this product will not control emerged weeds.

This product postemergence may be applied over any previous registered herbicide treatment. In sprinkler-irrigated areas, sprinkler irrigate after application with one-half to 1 inch of water (one-half inch on coarse-textured soils to 1 inch on fine-textured soils) to incorporate this product in furrow-irrigated areas, apply

this product, incorporate with a rolling cultivator or similar implement that provides uniform shallow incorporation (2 inches or less), and then irrigate. In non-irrigated areas, if at least one-half inch of rainfall does not occur within 10 days after application, cultivate with a rolling cultivator or similar implement that pro vides uniform shallow incorporation of this product.

VA, NC, SC, GA, FL, and AL: Apply this product at 1 to 1.33 pts./A when Cotton is 3 to 6 inches tall. TN, AR, MS, MO, and LA: Apply this product at 0.75 to 1.33 pts./A when Cotton is 3 to 12 inches tall. TX, OK, NM, AZ, CA, and Clay Soils in AR: Apply this product at 1 to 1.33 pts./A when Cotton is 3 to 12 inches tall, but before August 1.

**Multiple Applications:** Where weed pressure is heavy, difficult-to-control species are expected, or reinfestation may occur, and a weed control program is used, multiple applications of this product are effective when used as part of the weed control program. Apply as a preplant incorporated or preemergence treatment and follow with an application postemergence to Cotton before weeds emerge or after clean cultivation to remove existing weeds since this product will not control emerged weeds. Cotton should be at least 3 inches tall at the postemergence timing. Apply this product postemergence over a previous preplant or preemergence application of this product as shown in the following table.

State	This Product Multiple Applications to Cotton Preplant incorporated or Preemergence Pts./A + Postemergence and Height Pts./A
MS, LA, TN, AR, MO	0.75-1 .33 (Preemergence Only) + 0.75-1. 33 to 3-12" Cotton
TX, OK, NM	1.0-1.33 to 3-12 Gotton 1.0-1.33 + 1.0-1.33 to 3-12" Cotton before August 1
NC, VA	1.0-1.33 (Preemergence Only) + 1.0-1 .33 to 3-12" Cotton

In sprinkler-irrigated areas, sprinkler irrigate after application with one-half to 1 inch of water (one-half inch on coarse-textured soils to 1 inch on fine-textured soils) to incorporate this product. In furrow irrigated areas, apply this product, incorporate with a rolling cultivator or similar implement that provides uniform shallow incorporation (2 inches or less), and then irrigate. In non-irrigated areas, if at least one-half inch of rainfall does not occur within 10 days after application, cultivate with a rolling cultivator or similar implement that provides uniform shallow incorporation of this product. For best control of Yellow nutsedge and suppression of seedling Johnsongrass, apply this product preplant incorporated, preemergence, or postemergence to Cotton and preemergence to weeds at the maximum rate for the soil texture, whether applied alone or in combinations. **DO NOT** apply more than a total of 2 pts./A on coarse soils or 4 pts./A of this product on medium and fine soils during a growing season. These treatments may be applied over previous registered herbicide treatments.

#### **Use Precautions**

- To avoid concentration in the seed furrow, **DO NOT** make broadcast applications of this product to Cotton planted in furrows more than 2 inches deep. Band applications may be made to Cotton planted in furrows deeper than 2 inches, but band width should not exceed the width of the bottom of the furrow.
- In furrow-planted Cotton, to avoid concentration in the furrow and potential injury, **DO NOT** apply this product postemergence until after first "knifing" or cultivation to level soil surface.
- **DO NOT** apply over-the-top in fluid fertilizer or any other adjuvant, surfactant, oil, or other pesticide not specified in the Cotton section of this label, or injury may occur.

## **Use Restrictions**

- **DO NOT** apply this product on sand or loamy sand soils, or in areas where water is likely to "pond" over the bed.
- DO NOT graze or feed forage or fodder from Cotton to livestock.
- DO NOT apply on Taloka silt loam.
- **DO NOT** use in Gaines County, TX.

## COTTON — THIS PRODUCT IN COMBINATIONS TANK MIXTURE OF THIS PRODUCT WITH GLYPHOSATE FOR USE ON ROUND-UP READY OR GLYPHOSATE-RESISTANT COTTON ONLY

Apply this product as a tank mixture with glyphosate in water postemergence-directed or postemergence-over-the-top for control of emerged weeds as listed on the glyphosate labels and for residual preemergence weed control of the weeds listed on this label. See the section Cotton — This **Product Alone Postemergence** for use rates and timings of this product and follow the glyphosate label for its specified rates, method of application, and timing of application restrictions.

#### **Use Precautions**

- Postemergence-over-the-top applications of this tank mixture may cause temporary injury such as necrotic spotting on the exposed Cotton leaves, which will not affect normal plant development.
- **DO NOT** add fertilizer additives, surfactants and spray adjuvants or pesticides to this tank mixture if it is to be applied postemergence-over-the-top to Cotton or crop injury may occur.

## **Use Restrictions**

- **DO NOT** apply this tank mixture postemergence to any variety of Cotton unless it is designated Roundup Ready or glyphosate-resistant and unless the glyphosate formulation being used states it may be used on Roundup Ready or glyphosate-resistant Cotton.
- **DO NOT** apply glyphosate postemergence-over- the-top to Cotton past the growth stage limit as specified on the glyphosate label.
- DO NOT use on sand or loamy sand soils in Gaines county, TX.

## TANK MIXTURE WITH GLUFOSINATE FOR USE ON LIBERTYLINK® OR GLUFOSINATE-RESISTANT COTTON

Apply this product as a tank mixture with glufosinate in water postemergence—directed or postemergence—over-the-top for control of emerged weeds as listed on the glufosinate label and residual preemergence weed control of the weeds listed on this label. See the section "COTTON - THIS PRODUCT ALONE POST EMERGENCE" for the use rates and timings of this product and follow the glufosinate label for its recommended rates, method of application, and timing of application restrictions.

#### **Use Precautions**

• Postemergence—over-the-top applications of this tank mixture may cause temporary injury such as necrotic spotting on the exposed Cotton leaves, which will not affect normal plant development.

#### **Use Restrictions**

- DO NOT apply this tank mixture postemergence to any variety of Cotton unless it is designated tolerant.
- **DO NOT** apply glufosinate postemergence—over-the-top to Cotton beyond early bloom stage.
- DO NOT use in Gaines County, TX on sand or loamy sand soils.
- **DO NOT** apply glufosinate to genetically modified Cotton in Florida, South of Tampa (Florida Route 60), or in Hawaii, except for test plots or breeding nurseries.
- **DO NOT** add fertilizer additives, surfactants and spray adjuvants or other pesticides to this tank mixture if it is to be applied postemergence—over-the-top to Cotton or crop injury may occur.

## TANK MIXTURE WITH PROMETRYN

This product tank mixed with prometryn may be applied preplant incorporated or preemergence in water or fluid fertilizer. When fluid fertilizer is used as a carrier for this product, either alone or in combination with prometryn, mix only the amount that will be sprayed in one operation. These mixtures should not be allowed to stand without agitation. Only water may be used as a carrier for postemergence directed application. In addition to those weeds controlled by this product alone, this product + prometryn, applied preplant incorporated or preemergence, also controls the following weeds: Junglerice, Wild oats, Annual morningglory, Groundcherry, Hairy nightshade, Lambsquarters, Malva, Mustard, Prickly sida (teaweed), Purslane, Ragweed, and shallow-germinating seedlings of Cocklebur and Coffeeweed. As a postemergence-directed application, prometryn provides postemergence control and residual control of weeds on its label, while this product provides residual control of weed species on its label. This product will not control emerged weeds.

**Preplant Incorporated or Preemergence:** Apply this product + prometryn, either preplant incorporated or preemergence, using the appropriate rate from the table below. Cotton should be planted below the zone of incorporation; i.e., at least 1 inch on *fine soils* and 1.5 inches on *coarse* and *medium soils*. If incorporated before planting, use a planter that will result in a minimum of soil disturbance.

Table 1: This Product + Prometryn — Cotton (NM, OK, TX)

Lies Areas	Soil Toyture	Broadcast Rates	Broadcast Rates Per Acre (pts)		
Use Areas	Soil Texture	This Product	Prometryn		
ALL	Sand, Loamy sand	DO NO	T USE		
OK, and Blacklands	Loams	0.85 - 1.33			
and Gulf Coast of TX	Clays	1.33			
Rio Grande	Loams	0.85 - 1.33			
Valley of TX	Clays	1.33	Label rate		
NM; High Plains,	Sandy loam	0.85 – 1.0	Laberrate		
Rolling Plains,	Loams	0.85 - 1.33			
Edwards Plateau of TX; and	Sandy clay loams	1.33			
Southwest TX	Other clay soils	1.33			

**Postemergence-Directed (AR, AZ, CA, LA, MO, MS, NM, OK, TN, and TX):** This product may be tank mixed with prometryn in water and applied postemergence directed in Cotton for control of emerged weeds listed on the prometryn label and residual preemergence control of weeds controlled by this product and prometryn, or application may be made after cultivation for residual preemergence control.

These treatments may be applied over previous registered treatments, including this product, provided the maximum label rate of any product is not exceeded. **DO NOT** apply over-the-top of Cotton or injury may occur.

Apply this product + prometryn in a minimum of 20 gals. of spray volume per acre. Follow the directions, limitations, and use precautions on the prometryn label when prometryn is applied as a postemergence directed application. Refer to the directions, limitations, and precautions for use of this product under the "COTTON – THIS PRODUCT ALONE – POSTEMERGENCE" section.

#### **Use Restrictions**

- To avoid concentration in the seed furrow, **DO NOT** make broadcast applications of this product + prometryn to Cotton planted in furrows more than 2 inches deep. Band applications may be made to Cotton planted in furrows deeper than 2 inches, but band width should not exceed the width of the bottom of the furrow.
- To avoid crop injury,
  - DO NOT apply on sand or loamy sand soils, or in areas where water is likely to "pond" over the bed:
  - **DO NOT** apply in cut areas of newly leveled fields, or in areas of excess salt;
  - DO NOT apply to glandless Cotton varieties; and
  - **DO NOT** apply on Taloka silt loam
- DO NOT use in Gaines County, TX.
- DO NOT graze or feed forage or fodder from Cotton to livestock, or illegal residues may result.

### TANK MIXTURE WITH FLUOMETURON

This product may be applied in tank mixture with Fluometuron preemergence for control of those weeds controlled by this product alone and those as listed on the Fluometuron label. This combination will also control Spotted spurge, Hyssop spurge, Nodding spurge, and Prostrate spurge. Apply to the soil surface at planting or after planting, but before weeds or crop emerge, using the appropriate rates from the table below. The tank mixture may be applied postemergence to Cotton, but preemeergence to weeds, or it may be applied postemergence to both Cotton and broadleaf weeds for control of weeds on the Fluometuron label. Apply as a directed, semi-directed, or over-the-top spray. This product will not control emerged weeds, but will provide preemergence control of species on its label.

**Mixing Instructions:** Incompatibility may occur when tank mixing this product and Fluometuron. To help overcome this condition, fill the spray tank one-quarter full with water of fluid fertilizer and start agitation, add the Fluometuron and allow to become dispersed. Add NIS at 0.5% volume/volume final spray (4 pts./100 gals.), then add this product and finally the rest of the water or fluid fertilizer. Agitate during mixing and application to maintain a uniform suspension. **DO NOT** use fluid fertilizer as a carrier for postemergence applications.

Table 2: This Product + Fluometuron — Cotton

	Broadcast Rates Per Acre (pts)					
Soil Texture	This P	Fluometuron				
	Area 1*	Area 2**	riuometuron			
Sand,		DO NOT USE				
Loamy sand		DO NOT USE				
Sandy loam	0.75-1.0	0.85-1.0				
Loam, Silt loam, Silt	1.0 – 1.33	1.0 – 1.33	Label rate			
Fine soil	1.0 – 1.33	1.33	7			
*Area 1 = AR, LA, MS, Boo	otheel of MO and TN.					
**Area 2 = Eastern OK, Gu	ılf Coast, Rio Grande Val	ley, and Eastern TX.				

**Postemergence:** This tank mixture may be applied postemergence to Cotton, but preemergence to weeds or postemergence to both Cotton and weeds for control of weeds on the Fluometuron label. Apply as a directed, semi-directed, or over-the-top spray. This product will not control emerged weeds, but will provide preemergence control of species on its label. Apply when Cotton is in the 3- to 12-inch stage. Where rate ranges are given for Fluometuron, use the higher rate when applying postemergence to weeds that are 2 inches or less. These treatments may be applied over previous registered treatments, including this product, provided the maximum label rate of any product is not exceeded.

#### **Use Precautions**

- **DO NOT** apply this product + Fluometuron on sand or loamy sand soils, or in areas where water is likely to "pond" over the bed, or crop injury may occur.
- To avoid concentration in the seed furrow, **DO NOT** make broadcast applications of this product + Fluometuron to Cotton planted in furrows more than 2 inches deep. Band applications may be made to Cotton planted in furrows deeper than 2 inches, but band width should not exceed the width of the bottom of the furrow.
- The use of Fluometuron following the use of a systemic insecticide at planting may result in crop injury.

#### **Use Restrictions**

- **DO NOT** feed treated forage or gin trash to livestock, or graze treated areas.
- DO NOT use on Taloka silt loam, or crop injury may occur.
- DO NOT use in Gaines County, TX.

Refer to the Fluometuron labels for further instructions, use precautions, and limitations.

## TANK MIXTURE OF THIS PRODUCT OR THIS PRODUCT + FLUOMETURON WITH PARAQUAT OR GLYPHOSATE FOR MINIMUM-TILLAGE OR NO-TILLAGE SYSTEMS

In minimum-tillage or no-tillage systems where Cotton is planted directly into a cover crop, stale seedbed, or previous crop residues, the contact herbicides Paraquat or Glyphosate may be added to a tank mix of either this product or this product + Fluometuron. When used as directed, the Paraquat portion of the tank mixture controls most emerged weeds and suppresses many perennial weeds. Glyphosate combinations will control emerged annual and perennial weeds when applied as directed on the Glyphosate label. This product and this product + Fluometuron portion of the tank mixture provides preemergence control of the weeds listed on this label in the "this product and this product + Fluometuron " sections, respectively.

Refer to the label of each product used in combination and observe the planting details, information regarding application, geographical restrictions, and all other precautions and limitations. Refer to **Mixing Instructions** under the **Tank Mixture with Fluometuron** section.

**Application:** Apply before, during, or after planting, but before the Cotton emerges, at the rates specified below. Apply this product at 0.85 to 1 pt./A on sandy loams, *medium*-, and *fine-textured soils*. Refer to Table 2 for the Fluometuron rates.

Add Paraguat or Glyphosate at at rates listed on the product labels:

**Paraquat:** Apply as directed on the product label. This treatment will not control weeds taller than 6 inches.

**Note:** Fluometuron apply combinations containing Paraquat in suspension-type liquid fertilizers, as the activity of paraquat will be reduced.

**Glyphosate:** See the Glyphosate label for weeds controlled, application rates, and other use directions.

Apply in 20 to 60 gals. of water or fluid fertilizer per acre with ground equipment.

#### **Use Precautions**

- If heavy rain occurs soon after application, crop injury may result, especially in poorly drained areas where water stands for several days, or where the seeding slit has not been properly closed.
- Refer to the Fluometuron labels and the **Tank Mixture with Fluometuron** section of this label for further instructions, use precautions, and limitations.

#### **Use Restrictions**

- **DO NOT** apply this product + Fluometuron + Glyphosate in a tank mixture because of compatibility problems.
- **DO NOT** use in Gaines County, TX.

## TANK MIXTURE WITH MSMA, MSMA + PROMETRYN, OR MSMA + FLUOMETURON

This product may be tank mixed with MSMA in water and applied postemergence-directed for control of emerged weeds listed on the MSMA product label and residual preemergence control of weeds controlled by this product. The addition of Fluometuron or Prometryn will add control of weed species on their respective labels.

**Postemergence-Directed (AR, AZ, CA, LA, MS, NM, OK, TN, TX, and Bootheel of MO):** Apply this product + MSMA postemergence directed to 3 to 12-inch cotton according to the directions, limitations, and use precautions on the MSMA product label, as well as the directions, limitations, and use precautions for use of this product in the section for **Cotton — This Product Alone — Postemergence**. These treatments may be applied over previous registered treatments, including this product, provided the maximum label rate of any product is not exceeded. Fluometuron or Prometryn may be added to this product + MSMA tank mixture according to the respective label directions for application to 3- to 12-inch Cotton. When these mixtures are used, follow the mixing instructions for this product + Fluometuron or Prometryn and then add the MSMA product.

## **Use Restrictions**

- DO NOT apply after first Cotton bloom.
- **DO NOT** use this product in tank mix with premixes of MSMA plus herbicides other than those registered for use in tank mixture with this product on cotton.

### PEANUTS — THIS PRODUCT ALONE

Apply this product, either preplant incorporated, postplant incorporated, preemergence, or lay-by, using the appropriate rate specified below.

**Preplant Incorporated or Preemergence:** Follow instructions for use of this product alone under **Application Procedures**.

**Postplant Incorporated:** Apply and shallowly incorporate this product into the soil after planting, but before Peanut germination. Incorporation depth and incorporating implements must be kept above the seed, or seed will be damaged.

**Lay-by:** Apply this product to the soil immediately after the last normal cultivation. Apply this product alone preplant incorporated, postplant incorporated, pre-emergence, or lay-by, at a broadcast rate of 1 to 1.33 pts./A in the Southeast\* and 0.85 to 1.33 pts./A in NM, OK, and TX.

\*In the Southeast, use 1.33 to 2 pts./A and apply preemergence for partial control of Florida beggarweed. This product alone may be applied as directed after any of the following preplant incorporated herbicides when used according to their label: Benfluralin, Ethalfluralin, Imazethapyr, Pendimethalin or Trifluralin.

## **User Restrictions**

- **DO NOT** graze or feed peanut forage or fodder to livestock for 30 days following application.
- **Preharvest Interval (PHI): DO NOT** apply within 90 days of harvest.

## PEANUTS — THIS PRODUCT IN COMBINATIONS

### TANK MIXTURE WITH BENFLURALIN

This product + Benfluralin tank mixture applied preplant incorporated controls those weeds listed under **This Product Applied Alone** and those weeds as listed on the Benfluralin label. Apply 1 to 1.33 pts./A of this product + labeled rate of Benfluralin in a minimum of 10 gals. of spray volume per acre for ground application or in a minimum of 5 gals. of spray volume per acre for aerial application. Follow the recommended procedures for Benfluralin on the Benfluralin label for soil preparation and incorporation of this tank mix. Apply and incorporate this product + Benfluralin up to 14 days prior to planting.

**Note:** Follow all restrictions and use precautions on the Benfluralin label.

## **MULTIPLE APPLICATIONS**

Where weed pressure is heavy or where species difficult to control are expected, this product is most effective when used as follows:

## 1) Southeast Only (AL, FL, GA, NC, SC, VA)

**1st Application:** Apply this product preplant incorporated as directed under **Peanuts — This Product Alone** or apply this product + Benfluralin preplant incorporated as directed previously in this section. Refer to the respective section for weeds controlled.

**2nd Application:** Apply this product any time from preemergence up to "ground cracking" at 1 to 2 pts./A for extended control of weeds not yet emerged. Refer to the **This Product Applied Alone** section for a list of weeds controlled.

**3rd Application:** Apply this product at lay-by as directed under **Peanuts — This Product Alone**. Use only when late germinating weeds are expected to be a problem. Refer to the **This Product Applied Alone** section for a list of weeds controlled.

## 2) Southwest Only (NM, OK, TX)

**1st Application:** Apply this product preplant incorporated or preemergence or at-cracking as directed previously in this section.

Refer to the respective section for weeds controlled.

**2nd Application:** Apply this product at lay-by as directed under **Peanuts — This Product Alone** on this label. Use only when late germinating weeds are expected to be a problem. Refer to the **This Product Applied Alone** section for a list of weeds controlled.

## **Use Restrictions - Multiple Applications**

- **DO NOT** apply more than the equivalent of 2.67 lb ai of this product per acre during any one year. If another metolachlor product is used as a sequential treatment, the pounds of active ingredient for all metolachlor applications must not exceed 2.67 lb ai per acre.
- DO NOT use this product or another metolachlor containing product after peanuts have emerged.
- **DO NOT** graze or feed peanut forage or fodder to livestock for 30 days following application.
- Preharvest Interval (PHI): DO NOT apply within 90 days of harvest.

## TANK MIXTURE OR SEQUENTIALLY WITH IMAZETHAPYR

The tank mixture or sequential treatment of this product and Imazethapyr controls all weeds controlled by this product alone and by Imazethapyr alone. Refer to the **This Product Applied Alone** section for weeds controlled by this product and to the Imazethapyr label for weeds controlled by Imazethapyr.

Refer to the respective labels for application methods, timing, rates, restrictions, and use precautions; and use in accordance with the more restrictive label. **DO NOT** exceed the label rate of either product. This product will not control emerged weeds.

### TANK MIXTURE WITH ETHAFLURALIN

The tank mixture controls all weeds controlled by this product alone and by Ethafluralin alone. Refer to the **This Product Applied Alone** section for weeds controlled by this product and to the Ethafluralin label for weeds controlled by Ethafluralin. Apply this product + Ethafluralin preplant incorporated, using the appropriate rate from the table below. Follow recommended soil preparation procedures for Ethafluralin. Refer to the Peanut Ethafluralin /This Product Tank Mixture label for incorporation specifications.

Table 3: This Product + Ethafluralin — Peanuts

	Broadcast Rates Per Acre (pts)				
Soil Texture	Southeast		NM, C	K, TX	
	This Product	Ethafluralin	This Product	Ethafluralin	
COARSE					
MEDIUM	1.0 – 1.33	Label rate	0.85 – 1.33	Label rate	
FINE					

**Note:** Follow all use directions, limitations, use precautions, and information regarding application to Peanuts on this product and Ethafluralin labels.

## TANK MIXTURE WITH PENDIMETHALIN

This product + Pendimethalin applied preplant incorporated controls all weeds controlled by this product alone plus Texas panicum, Field sandbur, Johnsongrass from seed, Lambsquarters, Kochia, Annual spurge, and other species on the Pendimethalin label. Apply this product + Pendimethalin by ground or by

aerial equipment within 14 days before planting. Incorporate into the top 1 to 2 inches of soil before planting and within 7 days of application, using a finishing disk or similar implement capable of providing uniform incorporation. If Peanuts will be planted on beds, apply and incorporate after bed formation. Refer to the **Incorporation** instructions of the respective labels for additional directions.

Apply this product + Pendimethalin preplant incorporated, using the appropriate rates from the table below.

Table 4: This Product + Pendimethalin — Peanuts

Soil Texture	Broadcast Rates Per Acre (pts)					
	NM, O	K, TX	Other Peanut Growing States			
	This Product	Pendimethalin	This Product	Pendimethalin		
Sand, Loamy sand	0.85		1.0 to 1.33 1.33			
Sandy loam	0.85 – 1.0	Label rate		Label rate		
Fine soil	1.33					

**Note:** Follow all use directions, limitations, use precautions and information regarding application to Peanuts on respective product labels.

#### TANK MIXTURE OR SEQUENTIALLY WITH PARAQUAT

This product + Paraquat applied at ground cracking or sequentially will control or suppress small (1 to 6 inch) emerged annual grass and broadleaf weeds and provide residual control of weed species listed in the **This Product Applied Alone** section of this label. Apply labeled rate of Paraquat with the appropriate rate of this product from the **Peanuts – This Product Alone** section in a minimum spray volume of 20 gals./A with ground equipment. A second application of this product + Paraquat may be made 28 days after ground cracking. (Refer to the **Peanuts – This Product Combinations – Multiple Applications** section of this label for geographical areas where multiple applications are recommended.) A second Paraquat application may be made in all Peanut growing areas, if needed. Refer to the respective labels and follow all directions, limitations, and restrictions for each product.

#### TANK MIXTURE OR SEQUENTIALLY WITH PARAQUAT + BENTAZON

The addition of Bentazon to this product + Paraquat mixture will result in improved control of such problem broadleaf weeds as Prickly sida, Cocklebur, Smartweed, and Bristly starbur. This product + Paraquat + Bentazon applied at ground cracking or sequentially will control or suppress small (1 to 6 inch) emerged annual grass and broadleaf weeds and provide residual control of weed species listed in the **This Product Applied Alone** section of this label. Apply Paraquat + Bentazon with the appropriate rate of this product from the **Peanuts – This Product Alone** section in a minimum spray volume of 20 gals./A with ground equipment. A second application of this product + Paraquat + Bentazon may be made 28 days after ground cracking. (Refer to the **Peanuts – This Product Combinations** 

**– Multiple Applications** section of this label for geographical areas where multiple applications are recommended.) A second Paraquat + Bentazon application may be made in all Peanut growing areas, if needed. Refer to the respective labels and follow all directions, limitations, and restrictions for each product.

## TANK MIXTURE OR SEQUENTIALLY WITH PARAQUAT + 2,4-DB

The addition of 2,4-DB to this product + Paraquat mixture will result in improved control of such problem broadleaf weeds as Sicklepod, Morningglory, and Cocklebur. This product + Paraquat + 2,4-DB applied at ground cracking or sequentially will control or suppress small (1 to 6 inch) emerged annual grass and broadleaf weeds and provide residual control of weed species listed in the **This Product Applied Alone** section of this label. Apply labeled rates of Paraquat + 2,4-DB with the appropriate rate of this product from the **Peanuts — This Product Alone** section in a minimum spray volume of 20 gals./A with ground equipment. A second application of this product + Paraquat + 2,4-DB may be made 28 days after ground cracking. (Refer to the **Peanuts — This Product Combinations — Multiple Applications** section of this label for geographical areas where multiple applications are recommended.) A second Paraquat + 2,4-DB application may be made in all Peanut growing areas, if needed. Refer to the respective labels and follow all directions, limitations, and restrictions for each product.

## TANK MIXTURE OR SEQUENTIALLY WITH BENTAZON

This product + Bentazon applied at ground cracking or sequentially will control species on the Bentazon label and provide residual control of species listed in the **This Product Applied Alone** section of this label. Apply labeled rate of Bentazon in 20 gals./A, depending on weed species and stage of growth as specified on the Bentazon label, with the appropriate rate of this product from the **Peanuts – This Product Alone** section. A second application of the combination may be made before Peanut pegging. (Refer to the **Peanuts – This Product Combinations – Multiple Applications** section of this label for geographical areas where multiple applications are recommended.) A second Bentazon application may be made in all Peanut growing areas, if needed. Refer to the respective labels and follow all directions, limitations, and restrictions for each product.

## TANK MIXTURE OR SEQUENTIALLY WITH BENTAZON + 2,4-DB

This product + Bentazon + 2,4-DB applied at ground cracking or sequentially will control species on the Bentazon and 2,4-DB labels, especially Morningglories. Apply labeled rates of Bentazon + 2,4-DB in 20 gals./A, depending on weed species and stage of growth as specified on the Bentazon label, with the appropriate rate of this product from the **Peanuts – This Product Alone** section. A second application of the combination may be made before Peanut pegging. (Refer to the **Peanuts – This Product Combinations – Multiple Applications** section of this label for geographical areas where multiple applications are recommended.) A second Bentazon + 2,4-DB application may be made in all Peanut growing areas, if needed. Refer to the respective labels and follow all directions, limitations, and restrictions for each product.

## TANK MIXTURE OR SEQUENTIALLY WITH BENTAZON + ACIFLUORFEN

This product + Bentazon + Acifluorfen applied at ground cracking through 2 expanded tetrafoliate leaves or this product applied according to the directions for **This Product Alone** and followed with an at-cracking through postemergence treatment of Bentazon + Acifluorfen as specified on its label will control species on the Bentazon + Acifluorfen label and provide residual control of species listed in the **This Product Applied Alone** section of this label.

This product will not control emerged weeds. Refer to the **Peanuts – This Product Alone** section and to the Bentazon + Acifluorfen label and follow all directions, limitations, and restrictions for each product.

## POD CROPS — THIS PRODUCT ALONE

Pod crops, including Garbanzo, Great northern beans, Kidney beans, Lima beans, Mung beans, Navy beans, Peas (English\*; Southern peas, such as Blackeye, Pinkeye, Crowder, etc.), Pinto beans, Snap beans (Green, Wax, String), Lentils, and Lupines (sweet, white, white sweet, and grain).

Apply this product either preplant incorporated or preemergence, using the appropriate rate specified below. **Preplant Incorporated or Preemergence:** Follow instructions for use of this product alone under **Application Procedures**. On *coarse soils* with less than 3% organic matter, apply 1 to 1.33 pts./A of this product or 1.33 pts./A if organic matter is 3% or greater. On *medium soils*, apply 1.33 to 1.67 pts./A of this product. On *fine soils*, apply 1.33 to 1.67 pts./A of this product if organic matter content is less than 3%, or 1.67 to 2 pts./A if organic matter content is 3% or greater.

\*On English peas, use only preemergence applications. **DO NOT** use on English peas in Northeastern U.S., or injury may occur.

## Use Restrictions

- · To avoid possible illegal residues,
  - **DO NOT** cut for hay within 120 days following application of this product.
  - **DO NOT** apply more than 3 pints per acre of this product per year.

#### POD CROPS — THIS PRODUCT IN COMBINATIONS

**Note:** When applying this product in combination on pod crops, **DO NOT** cut for hay within 120 days following application, or illegal residues may result.

## TANK MIXTURE AND SEQUENTIAL APPLICATIONS WITH EPTC - BEANS (GREEN OR DRY)

This mixture controls all weeds controlled by this product alone and by EPTC alone. Refer to the **This Product Applied Alone** section of this label for weeds controlled by this product alone and to the EPTC label for weeds controlled by EPTC.

**Preplant Incorporated:** Follow instructions for use of this product alone under **Application Procedures**. **Sequential:** Apply EPTC alone preplant incorporated, as specified on that label. Follow with a

preemergence application of this product at rates specified for this product alone, during planting (behind the planter) or after planting, but before the weeds or crop emerge.

Refer to the **Product Information** section of this label and to the EPTC label for weather, cultural practices, and all other use precautions and limitations that affect performance of these products.

Apply labeled rate of EPTC\* with this product as specified. On *coarse soils*, apply 0.85 pts./A of this product if organic matter content is less than 3%, or 1 pt./A if organic matter content is 3% or greater. On *medium soils*, apply 1 pt./A of this product if organic matter content is less than 3%, or 1.33 pt./A if organic matter content is 3% or greater. On *fine soils*, apply 1.33 pts./A of this product if organic matter is less than 3%, or 1.33 to 1.67 pts./A if organic matter is 3% or greater.

\*Refer to the EPTC label for rate limitations depending on geographical area, and for species and varietal restrictions.

## **Use Restriction**

 DO NOT exceed 3 lb ai per acre of EPTC on small white beans or green beans grown on coarsetextured soils.

## TANK MIXTURE WITH TRIFLURALIN — BEANS (DRY – KIDNEY, NAVY, PINTO, ETC., LIMA; AND SNAP)

This product + Trifluralin tank mix applied preplant incorporated controls those weeds listed under **This Product Applied Alone** and those weeds listed for Trifluralin alone on the Trifluralin label. This product + Trifluralin may be applied by ground or by aerial equipment and incorporated up to 14 days prior to planting. Follow the recommended procedures on this label and on the respective Trifluralin label, using equipment that provides uniform 2-inch incorporation. Apply this product + Trifluralin tank mix, using the appropriate rate of this product specified for this product alone, and the Trifluralin rate from the Dry Beans, and the Lima and Snap Beans section of the respective Trifluralin label. Choose the product rate for the specific soil texture/ organic matter classification and weed species expected.

**Note:** Follow all restrictions and use precautions on the respective Trifluralin label and in the **Pod Crops – This Product Alone** section of this label.

#### POTATOES — THIS PRODUCT ALONE

Apply this product, either incorporated, preemergence, or after hilling/lay-by, according to directions specified below for control of weeds listed under the **Product Information** section. Within a rate range, use the lower rate on soils relatively coarse-textured or low in organic matter; use the higher rate on soils relatively fine-textured or high in organic matter. Effectiveness will be reduced if later cultural practices expose untreated soil.

**Incorporated:** Apply this product at 1 to 2 pts./A to the soil and incorporate into the top 3 inches before planting, using a finishing disk, harrow, rolling cultivator, or similar implement. Planting and later cultural practices should not bring untreated soil to the surface. Postplant incorporated application may be made any time after planting to drag-off, but before Potato emergence. Use an implement that evenly distributes this product in the top 2 inches of soil. **DO NOT** damage Potato seed pieces or sprouts with incorporation equipment.

**Preemergence:** Apply this product at 1 to 2 pts./A, either after planting as a preemergence, delayed preemergence, after drag-off or hilling treatment, but before weeds emerge. Up to 2.75 pts./A of this product alone may be used where soil organic matter is between 6% and 20%.

**After Hilling/Lay-by:** Apply 1.67 pts./A of this product after hilling/at lay-by to control species sensitive to this product for remainder of the growing season. This application will not control emerged weeds. It may be applied over a previous application of this product, but **DO NOT** apply more than 3.7 pts./A of this product in a single crop season.

## **Use Precautions**

• If cool, wet soil conditions occur after application, this product may delay maturity and/or reduce yield of Superior and other early maturing Potato varieties.

## **Use Restrictions**

- DO NOT use on muck or peat soils.
- DO NOT use on Sweet potatoes or Yams.
- **DO NOT** apply both as a preemergence and an incorporated treatment.
- DO NOT use in Kern County, CA.
- **Preharvest Interval (PHI):** Potatoes treated with this product should not be harvested within 60 days after the at-planting to drag-off application, or within 40 days after a lay-by application

## POTATOES — THIS PRODUCT IN COMBINATIONS

#### TANK MIXTURE WITH METRIBUZIN

In addition to those weeds controlled by this product alone, this product applied in tank mix combination with, or sequentially with, any of the registered Metribuzin formulations, also controls the following broadleaf weeds: Cocklebur\*, Hairy nightshade\*, Hemp sesbania, Jimsonweed\*, Lambsquarters, Prickly sida, Ragweed, Smartweed, Velvetleaf, Venice mallow, and Wild mustard.

\*Partially controlled.

This product at 1 to 2 pts./A plus the labeled Metribuzin use rate may be used preemergence through after last hilling. Apply 1 to 1.33 pts./A of this product on *coarse soils* and 1.33 to 2 pts./A on other soil textures. Within this rate range, use the lower rate on soils relatively coarse-textured or low in organic matter; use the higher rate on soils relatively fine-textured or high in organic matter. Effectiveness will be reduced if later cultural practices expose untreated soil. This product will not control emerged weeds.

Refer to the Metribuzin labels for precautionary statements, restrictions, application information, and weeds controlled.

#### **Use Precautions**

• Postemergence applications to Potatoes should be made only as a directed or semi-directed spray to avoid chlorosis, minor necrosis, or leaf distortion.

### **Use Restrictions**

- **DO NOT** use this product + Metribuzin on Potatoes in Kern County, CA.
- **DO NOT** apply to Sweet potatoes or Yams.
- **DO NOT** use this tank mixture on muck or peat soils.
- **Preharvest Interval (PHI): DO NOT** harvest potatoes treated with this product in a tank mix with Metribuzin within 60 days after application.
- **Preharvest Interval (PHI): DO NOT** harvest potatoes within 40 days after a lay-by application of this product.

## THIS PRODUCT + LINURON TANK MIXTURE (EAST OF ROCKY MOUNTAINS)

This product may be applied in a tank-mix combination with any of the registered Linuron formulations as a preemergence broadcast application to Potatoes. Apply to the soil surface after planting and before emergence of the crop or after final drag-off, according to the rates specified in the table below.

Table 5: This Product + Linuron — Potatoes (East of Rocky Mountains)

	Broadcast Rates Per Acre (pts)					
Soil Texture	1% to Less Than 3	8% Organic Matter	3-5% Organic Matter			
	This Product	Linuron	This Product	Linuron		
COARSE Sandy Loam	1.0		1.33			
<b>MEDIUM</b> Loam, Silt loam, Silt	1.33	Label rate	1.67 – 2.0	Label rate		

## **Use Restrictions**

- DO NOT use on sands or loamy sands.
- **DO NOT** incorporate or spray over the top of emerged Potatoes.

Refer to the **Product Information** section of this label and to the Linuron label for precautionary statements, restrictions, application information, and weeds controlled.

## TANK MIXTURE WITH PENDIMETHALIN

In addition to the weeds controlled by this product alone, this tank mixture with Pendimethalin controls such problem species as Kochia, Lambsquarters, Purslane, Annual spurge, Stinging nettle, and others specified on the Pendimethalin Alone label. Apply this product + Pendimethalin preemergence, preemergence incorporated, or early postemergence according to the specific directions on the Pendimethalin label, using the rates in the table below.

Table 6: This Product + Pendimethalin — Potatoes

	Broadcast Rates Per Acre (pts)					
	Less Than 3% (	Organic Matter	More Than 3% Organic Matter			
Soil Texture	This Product Pendimethalin		This Product	Pendimethalin		
COARSE	1.0 - 1.33		1.0 - 1.33			
MEDIUM	1.33	Label rate	1.33 - 1.67	Label rate		
FINE	1.33 - 1.67		1.67 - 2.0			

Refer to this product and Pendimethalin labels and observe all directions, timings, limitations, use precautions, and restrictions concerning the use of these products on Potatoes and follow the most restrictive.

#### TANK MIXTURE WITH PENDIMETHALIN + EPTC

In addition to the weeds controlled by this product alone, this tank mixture will control those species on the Pendimethalin and EPTC labels. Refer to the "This product + Pendimethalin labels" for rates of those products and add labeled rate of EPTC, depending on geographical area. Refer to the respective this product, Pendimethalin, and EPTC labels and observe all directions, limitations, use precautions, and restrictions concerning the use of these products on Potatoes and follow the most restrictive.

#### SAFFLOWERS - THIS PRODUCT ALONE

**Preplant Incorporated or Preemergence:** Follow instructions for use of this product alone under **Application Procedures.** 

On *coarse soils*, apply 1 to 1.33 pts./A of this product if organic matter content is less than 3%, or 1.33 pts./A if organic matter is 3% or greater. On *medium soils*, apply 1.33 to 1.67 pts./A of this product. On *fine soils*, apply 1.33 to 1.67 pts./A of this product if organic matter content is less than 3%, or 1.67 to 2 pts./A if organic matter content is 3% or greater.

## SORGHUM (GRAIN OR FORAGE) SEED TREATED WITH A SEED SAFENER (e.g. CONCEP®) THAT PROVIDES TOLERANCE TO METOLACHLOR — THIS PRODUCT ALONE

Apply this product, either preplant surface, preplant incorporated, or preemergence, using the appropriate rate specified below. Apply this product alone only when the Sorghum seed has been properly treated by the seed company with a seed safener that provides tolerance to metolachlor.

**Pre-plant Surface Applied:** Refer to instructions for this product under **APPLICATION PROCEDURES**. For minimum-tillage or no-tillage systems only, this product may be applied up to 45 days before planting in CO, IA, IL, KS, MO, NE, and SD. Use only split applications for treatments made 30 to 45 days before planting, with two-thirds of the broadcast rate applied initially and the remaining one-third at planting. Apply 1.5 pts./A of this product on medium soils or 1.67 pts./A on fine soils. Treatments less than 30 days prior to planting may be either as split or single application. Apply 1.33 pts./A of this product on coarse soils not more than 2 weeks prior to planting. Under dry conditions, irrigation after application is recommended to move this product into the soil.

**Preplant Incorporated or Preemergence:** Refer to instructions for use of this product under *APPLICATION PROCEDURES*. Broadcast 1 to 1.33 pts./ A of this product on coarse soils, 1.33 to 1.5 pts./A on medium soils, or 1.33 to 1.67 pts./A on fine soils.

## **Use Precautions**

- If Sorghum seed is not properly treated with a seed safener that provides tolerance to metolachlor, this product will severely injure the crop.
- Under high soil moisture conditions prior to Sorghum emergence, injury may occur following the use of this product. The crop will normally outgrow this effect.

## **Use Restrictions**

• **DO NOT** use this product on Sorghum grown under dry mulch tillage, or injury may occur.

 Except for the split preplant surface treatment, DO NOT make more than one application per year, or illegal residues may result.

## SORGHUM (GRAIN OR FORAGE) SEED TREATED WITH A SEED SAFENER (e.g. CONCEP®) THAT PROVIDES TOLERANCE TO METOLACHLOR — THIS PRODUCT IN COMBINATIONS

This product tank mixed with Atrazine may be applied in water or fluid fertilizer. Apply this product in tank mixtures only when the Sorghum seed has been properly treated by the seed company with a seed safener that provides tolerance to Metolachlor.

IMPORTANT: FOR TANK MIXTURES WITH ATRAZINE - If applying this product in tank mixture with Atrazine, all the restrictions and rate limitations on the Atrazine label must be followed if more restrictive/ protective than those on this label. In addition, if Atrazine is/must be applied at rates lower than those recommended on this label, broadleaf weed control may be affected. Refer to the Atrazine label for weeds controlled at the reduced rates.

#### **Use Precautions**

- Application of this product + Atrazine on highly alkaline soils or on eroded areas where calcareous subsoils are exposed may cause Sorghum injury.
- If sorghum seed is not properly treated with a seed safener that provides tolerance to Metolachlor, this product + Atrazine may severely injure the crop.
- Under high soil moisture conditions prior to Sorghum emergence, injury may occur following the use of this product + Atrazine. The crop will normally outgrow this effect.
- Use of this product + Atrazine on sorghum grown under dry mulch tillage, may cause crop injury.

## **Use Restrictions**

• Except for the split preplant surface treatment, **DO NOT** make more than one application per year, or illegal residues may result.

## TANK MIXTURE WITH ATRAZINE

In addition to the weeds controlled by this product alone, this product + Atrazine also controls the following broadleaf weeds when applied either preplant surface, preplant incorporated, or preemergence: Cocklebur, Common purslane, Hairy nightshade, Lambsquarters, Morningglory, Ragweed, Smartweed, and Velvetleaf. **Preplant Surface-Applied:** Refer to instructions for use of this product under *APPLICATION PROCEDURES*. For minimum-tillage or no-tillage systems only, this product + Atrazine may be applied up to 45 days prior to planting in IA, IL, Eastern KS, MO, NE, and SD. Use only split applications for treatments made 30 to 45 days prior to planting, with two-thirds of the broadcast rate applied initially and the remaining one-third applied at planting. Apply 1.5 pts./A of this product + labeled rate of Atrazine on medium soils with 1.5 % organic matter or greater. Apply 1.5 pts./A of this product + labeled rate of Atrazine on fine soils with 1.5% organic matter or greater. Treatments less than 30 days prior to planting may be made either as a split or single application. Under dry conditions, irrigation after application is recommended to move this product + Atrazine into the soil.

### **Use Restrictions**

- DO NOT use on coarse soils
- **DO NOT** use on medium soils with less than 1.5% organic matter.

**Preplant Incorporated or Preemergence:** Refer to instructions for use of this product under *APPLICATION PROCEDURES*. On medium soils with 1.5% organic matter or greater, apply 1 pt./A of this product + labeled rate of Atrazine. On fine soils with less than 1.5% organic matter, apply 1 pt./A of this product + labeled rate of Atrazine. On fine soils with 1.5% organic matter or greater, apply 1.2 to 1.33 pts./A of this product + labeled rate of Atrazine.

## **Use Restrictions**

- DO NOT use on Coarse soils.
- **DO NOT** use on medium soils with less than 1.5% organic matter.
- **DO NOT** use in NM, OK, or TX, except in Northeast OK and the TX Gulf Coast and the Blacklands areas
- DO NOT apply preplant incorporated in AZ or the Imperial Valley of CA.

## TANK MIXTURE OF THIS PRODUCT OR THIS PRODUCT + ATRAZINE WITH PARAQUAT, GLYPHOSATE + 2,4-D OR GLYPHOSATE FOR MINIMUM-TILLAGE OR NO-TILLAGE SYSTEMS

In minimum-tillage or no-tillage systems where Sorghum (seed treated with a seed safener that provides tolerance to Metolachlor) is planted directly into a cover crop, stale seedbed, established sod, or previous

crop residues, the contact herbicides Paraquat, Glyphosate + 2,4-D or Glyphosate may be tank mixed with this product or this product + Atrazine. In Minimum-Tillage and No-Tillage systems, mix with Paraquat for control of most emerged annual weeds and suppression of perennial weeds; or with Glyphosate + 2,4-D for suppression of emerged field bindweed and control or suppression of annual weeds; or with Glyphosate for control of most emerged annual and perennial weeds. This product or this product plus Atrazine portion of the tank mixture provides preemergence control of the weeds listed on this label under the respective sections.

Refer to the label of each product used in combination and observe the planting details, restrictions, and all other use precautions and limitations.

**Application:** Apply before, during or after planting, but before Sorghum emerges, at the appropriate rates listed under **Sorghum (Grain or Forage) – This product Alone or – This Product in Combinations – Tank <b>Mixture with Atrazine**, respectively. Add Paraquat, Glyphosate + 2,4-D or Glyphosate at the following broadcast rates:

**Paraquat:** Apply as directed on the Paraquat product label. This treatment will not control weeds taller than 6 inches.

**Glyphosate + 2,4-D**: See the Glyphosate + 2,4-D label for weeds controlled, specified rates for specific weeds and other information concerning use.

**Glyphosate:** See the Glyphosate label for weeds controlled, recommended rates, and other use directions. Apply in a minimum of 20 gals. of water per acre with conventional spray equipment.

## SOYBEANS — THIS PRODUCT ALONE

Apply this product, either preplant surface-applied, preplant incorporated, or preemergence, using the appropriate rate specified below. **Preplant Surface- Applied, Preplant Incorporated, or Preemergence:** Follow instructions for use of this product alone under **Application Procedures**.

## **Preplant Surface-Applied**

- 1) Fall Application (Apply after September 30 in MN, ND, SD, WI and North of Route 30 in IA; Apply after October 15 North of Route 91 in NE and South of Route 30 in IA; Apply after October 15 North of Route 136 in the state of IL): In all locations, apply to crop stubble after harvest when the sustained soil temperature at a 4-inch depth is less than 55°F and falling. In minimum-till or no-tillage systems on soils having greater than 2.5% organic matter, use 1.67 to 2 pts./A on *medium-textured* and 2 pts./A on *fine-textured soils*. DO NOT apply to frozen ground. A tillage operation may precede the application. A Fall and/or a Spring tillage may follow application, but DO NOT exceed an incorporation depth greater than 2 to 3 inches. Minimize furrow and ridge formation in the tillage operations. Note: If a Spring application is made, the total rate of the Fall plus Spring applications must not exceed the maximum total rate for Soybeans, or illegal residues may result.
- **2)** Use on *medium* and *fine* soils with minimum-tillage or no-tillage systems in CO, CT, DE, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, MO, MT, ND, NE, NH, NY, OH, PA, RI, SD, TN, VA, VT, WI, WV, and WY. Apply two-thirds the recommended rate of this product (1.67 pts./A on *medium soils* and 2 pts./A on *fine soils*) as a split treatment 30 to 45 days prior to planting and the remainder at planting. Applications made less than 30 days before planting may be as either a split or single treatment. Apply 1.33 pts./A on *coarse soils* not more than 2 weeks prior to planting.

**Preplant Incorporated or Preemergence:** On *coarse soils*, apply 1 to 1.33 pts./A of this product if organic matter content is less than 3%, or 1.33 pts./A if organic matter content is 3% or greater. On *medium soils*, apply 1.33 to 1.67 pts./A of this product. On *fine soils*, apply 1.33 to 1.67 pts./ A of this product if organic matter content is less than 3%, or 1.67 to 2 pts./A if organic matter content is 3% or greater.

**Note:** On Soybeans, this product may be used up to 2.75 pts./A as a preplant surface-applied, preplant incorporated, or preemergence treatment on soils having an organic matter content between 6% and 20%. The total rate of this product applied to Soybeans during any one crop must not exceed 2.75 pts./A.

## **Postemergence Application**

## From emergence up through the fifth trifoliate leaf stage

Apply 1.0-1.33 pts/A as a postemergence treatment to soybeans from emergence up through the fifth trifoliate leaf stage. AX M-CHLOR CEC will not control emerged weeds so it must be applied to a weed-free surface or in tank mixture with products that provide postemergence control of weeds present at the time of application.

## **Use Restrictions:**

To avoid possible illegal residues when AX M-CHLOR CEC is applied postemergence to soybeans,
 DO NOT apply more than 1.33 pts/A postemergence.

- DO NOT graze or feed treated forage or hay from soybeans to livestock following a postemergence application of AX M-CHLOR CEC.
- **DO NOT** apply a postemergence application of AX M-CHLOR CEC if a preplant surface, preplant incorporated, or preemergence application of metolachlor products such as AX M-CHLOR CEC has already been applied.
- Preharvest Interval (PHI): Make postemergence applications at least 90 days before harvest.

#### SOYBEANS — THIS PRODUCT IN COMBINATIONS

Water or fluid fertilizer may be used as carrier for this product in combination with Clomazone, Ethafluralin, Imazaquin, Imazethapyr, Linuron, Metribuzin, Metribuzin + Chlorimuron or Prodiamine + Isoxaben.

## **Use Restrictions**

- For all of the following combinations, this product may be used up to 2.5 pints per acre on soils having an organic matter content between 6% and 20%.
- The total rate of this product applied to Soybeans during any one crop year must not exceed 2.75 pints per acre.

#### TANK MIXTURE WITH METRIBUZIN

In addition to those weeds controlled by this product alone, this product + Metribuzin, when applied as directed, also controls the following broadleaf weeds: Cocklebur\*, Hairy nightshade, Hemp sesbania, Jimsonweed\*, Lambsquarters, Prickly sida, Ragweed, Smartweed, Velvetleaf, Venice mallow, and Wild mustard.

\*Partially controlled.

Apply this product and Metribuzin preplant incorporated or preemergence, using the appropriate rates from the table below. **Preplant Incorporated or Preemergence:** Follow instructions for use of this product alone under **Application Procedures**.

**Sequential:** Apply this product alone **Preplant Incorporated**, as specified in the table below for this tank mixture. Follow with a preemergence application of Metribuzin during planting (behind the planter) or after planting, but before weeds or Soybeans emerge.

Refer to the Metribuzin label for planting details and Soybean variety restrictions.

Table 7: This Product + Metribuzin — Sovbeans

	Broadcast Rates Per Acre (pts)			
Soil Texture*	0.5 to < 3% Organic Matter		≥ 3% Organic Matter	
Son rexture	This Product	Metribuzin	This Product	Metribuzin
COARSE Loamy sand (over 2% organic matter), Sandy loam	0.85 to 1.0.		1.0.	
MEDIUM	1.0 to 1.33.	Label rate	1.33	Label rate
FINE	1.33.		1.33 to 1.67	
<b>Mississippi Delta Only</b> Silty clay, Clay	1.33		1.33 to 1.67	
Muck or Peat (soils with more than 20% organic matter)		DO NO	T USE	

<sup>\*</sup>On all sand and on loamy sand with less than 2% organic matter, **DO NOT** use this tank mixture preemergence or the sequential treatment. **DO NOT** use the tank mixture preplant incorporated on any sand, loamy sand or sandy loam or crop injury may occur.

## Use Precautions

- **DO NOT** use the tank mix or sequential application on soil with less than 0.5% organic matter or on alkaline soil with a pH over 7.4, or crop injury may occur.
- If heavy rain occurs soon after application, crop injury may result, especially in poorly drained areas where water stands for several days.

## **TANK MIXTURE WITH LINURON**

In addition to those weeds controlled by this product alone, this product + Linuron, applied preemergence, also controls the following broadleaf weeds: Cocklebur\*, Jimsonweed\*, Lambsquarters, Morningglory\*, Prickly sida, Ragweed, Smartweed, Velvetleaf\*, Venice mallow, and Wild mustard.
\*Partially controlled.

**Preemergence:** Apply during planting (behind planter) or after planting, but before weeds or Soybeans emerge. Refer to the Linuron label for planting details. Apply the appropriate rates from the table below.

### **Use Restriction**

• **DO NOT** use on soil with less than 0.5% organic matter, or crop injury may occur.

Table 8: This Product + Linuron — Soybeans

	Broadcast Rates Per Acre (pts)				
Call Tarriums*	0.5 to < 3% Organic Matter		≥ 3% Organic Matter		
Soil Texture*	This Product	Linuron	This Product	Linuron	
COARSE**	0.85		1.0		
MEDIUM	1.0	Label rate	1.33	Label rate	
FINE	1.33		1.33-1.67		
Muck or Peat (soils with more than 20% organic matter)		DO NO	T USE		

**DO NOT** use on sand, gravelly soils, or exposed subsoils.

## **TANK MIXTURE WITH TRIFLURALIN**

This product + Trifluralin tank mix applied preplant incorporated controls those weeds listed under the "**This product Applied Alone section**" and those weeds listed for Trifluralin Alone on the respective Trifluralin label. This product + Trifluralin may be applied by ground or by aerial equipment and incorporated up to 14 days before planting. Follow the recommended procedures on the Trifluralin and this product labels, using equipment that provides uniform 2-inch incorporation.

Apply this product + Trifluralin tank mix, using the appropriate rate from the **Soybeans** — **This Product Alone** section of this label and the Trifluralin Alone section of the Trifluralin label for the specified soil texture/organic matter classification and weed species expected. To control DNA-resistant Goosegrass\* and other species on the respective labels where the soil organic matter is 3% or less, apply the rate in the table below.

Table 9: This Product + Trifluralin — Organic Matter Content Less Than 3%

	Broadcast Rates Per Acre (pts)				
Soil Texture	This Product	Triflu	ıralin		
Soil Texture	Organic Matter	Organic	Matter		
	Less than 3%	Less than 2%	2 to 3%		
Coarse*	0.85 to 1.0				
Medium	1.0	Labe	l rate		
Fine	1.33				
* Where a range of rates is given for this product use the minimum rate where DNA-resistant					

<sup>\*</sup> Where a range of rates is given for this product use the minimum rate where DNA-resistant Goosegrass is the predominant species.

**Note:** Follow all restrictions and use precautions on the respective Treflan label and in the **Soybeans** — **This Product Alone** section of this label.

<sup>\*\*</sup>DO NOT use on loamy sand, except in the Northeastern U.S. on loamy sand with over 1% organic matter.

## TANK MIXTURE WITH IMAZAQUIN

This tank mixture controls all weeds controlled by this product alone and by Imazaquin alone. Refer to the **This Product Applied Alone** section for weeds controlled by this product and to the Imazaquin label for weeds controlled by Imazaquin. Refer to the Imazaquin label for geographical locations where this tank mixture may be applied. Apply this product + Imazaquin preplant incorporated or preemergence, using rates in the table below. Follow use directions under **Application Instructions** on the Imazaquin label. For preplant incorporated applications, apply and incorporate within 30 days before planting. Observe all other use precautions and limitations on the Imazaquin labels.

Table 10: This Product + Imazaguin — Soybeans

	Broadcast Rates Per Acre (pts)				
Soil Texture	Less Than 3% Organic Matter		3% or More Organic Matter		
	This Product	Imazaguin	This Product	lmazaquin	
Coarse	0.85		1.0		
Medium	1.0	Label rate	1.33	Label rate	
Fine	1.33		1.33 to 1.67*		
Muck or Peat	V.		14-		
(soils with more than	DO NOT USE				
20% organic					
* Use the higher rate of	of this product if hea	vv weed infestations	are expected.		

## **Use Restrictions**

- **DO NOT** apply within 90 days of harvest.
- **DO NOT** graze or feed treated Soybean forage, hay, or straw to livestock, or illegal residues may result.

#### TANK MIXTURE WITH LINURON + CHLORIMURON

This tank mixture controls all weeds controlled by this product alone and by Linuron + Chlorimuron alone. Refer to the **This Product Applied Alone** section for weeds controlled by this product and to the Linuron + Chlorimuron label for weeds controlled by Linuron + Chlorimuron. Apply this product + Linuron + Chlorimuron preemergence after planting, but before Soybeans emerge, using rates in the table below. **Note:** Follow all use directions, limitations, use precautions and information regarding application to Soybeans, and rotational restrictions on this product and Linuron + Chlorimuron labels.

Table 11: This Product + Linuron + Chlorimuron — Soybeans

	Broadcast Rates Per Acre (pts)				
Soil Texture	0.5 to 3% Organic Matter				
	This Product	Linuron + Chlorimuron			
COARSE	0.85				
MEDIUM	1.0	Label rate			
FINE	1.33				

#### **Use Restriction**

• **DO NOT** apply to sand, or to any soil with less than 0.5% organic matter, or to any soil with pH greater than 6.8

## **TANK MIXTURE WITH PRODIAMINE + ISOXABEN**

This tank mixture controls all weeds controlled by this product alone and by Prodiamine + Isoxaben alone. Refer to the **This Product Applied Alone** section for weeds controlled by this product and to the Prodiamine + Isoxaben label for weeds controlled by Prodiamine + Isoxaben. Apply this product + Prodiamine + Isoxaben preemergence after planting, but before Soybeans emerge, using rates in the table below.

**Note:** Follow all use directions, limitations, use precautions and information regarding application to Soybeans, and rotational restrictions on this product and Prodiamine + Isoxaben labels.

Table 12: This Product + Prodiamine + Isoxaben — Soybeans

	Broadcast Rates Per Acre (pts)		
Soil Texture 0.5 to 3% Organic N		Organic Matter	
	This Product	Prodiamine + Isoxaben	
COARSE: (Sandy loam only)	0.85	Label rate	

MEDIUM	1.0	
FINE	1.33	

• **DO NOT** apply to sand or loamy sand, or to any soil with less than 0.5% organic matter, or to any soil with pH greater than 7, except as noted on the Prodiamine + Isoxaben label.

## TANK MIXTURE WITH METRIBUZIN + CHLORIMURON

This tank mixture controls all weeds controlled by this product alone and by Metribuzin + Chlorimuron alone. Refer to the **This Product Applied Alone** section for weeds controlled by this product and to the Preview label for weeds controlled by Metribuzin + Chlorimuron.

Apply preplant incorporated or preemergence using the appropriate rates from the table below. **Preplant Incorporated:** Apply within 2 weeks of planting. Uniformly incorporate into the top 1 to 2 inches of soil before planting Soybeans. **Preemergence:** Apply after planting, but before Soybeans emerge.

**Note:** Follow all use directions, varietal restrictions, limitations, use precautions and information regarding application to Soybeans, and rotational restrictions on this product and Metribuzin + Chlorimuron labels.

Table 13: This Product + Metribuzin + Chlorimuron — Soybeans

	Broadcast Rates Per Acre (pts)				
Cail Taytura	0.5 to 3% Or	ganic Matter		rganic Matter	
Soil Texture	This Product	Metribuzin + Chlorimuron	This Product	Metribuzin + Chlorimuron	
COARSE	0.85		1.0		
MEDIUM	1.0	Label rate	1.33	Label rate	
FINE	1.33		1.33-1.67		

## **Use Restriction**

• **DO NOT** apply to sand, or to any soil with less than 0.5% organic matter, or to any soil with pH greater than 6.8.

#### **TANK MIXTURE WITH CLOMAZONE \***

This tank mixture controls all weeds controlled by this product alone and by Clomazone alone. Refer to the **This Product Applied Alone** section for weeds controlled by this product and to the Clomazone label for weeds controlled by Clomazone. Apply this product + Clomazone preplant incorporated, using rates in the table below. Follow all Clomazone application instructions as to incorporation interval, geographical location, equipment operation, soil moisture conditions, etc.

\*Note: Before making applications, read and strictly follow all use directions, limitations, use precautions and information regarding application to Soybeans, and rotational restrictions on the AX-M-CHLOR CEC and Clomazone labels.

Table 14: This Product + Clomazone — Sovbean

Table 14. Tille i Toddot - Olomazono — Odybodn					
	Broadcast Rates Per Acre (pts)				
	This Product		Clomazone		
Soil Texture	0.5 to 3% Organic Matter	Greater than 3% Organic Matter	Northern Area	Southern Area	
COARSE	0.85	1.0			
MEDIUM	1.0	1.33	Label rate	Label rate	
FINE	1.33	1.33 - 1.67			

## TANK MIXTURE WITH ETHAFLURALIN

This tank mixture controls all weeds controlled by this product alone and by Ethafluralin alone. Refer to the **This Product Applied Alone** section for weeds controlled by this product and to the Ethafluralin label for weeds controlled by Ethafluralin.

Apply this product and Ethafluralin preplant incorporated, using the appropriate rates from the table below. **Preplant Incorporated:** Follow recommended soil preparation procedures for Ethafluralin. Refer to the Ethafluralin /This Product Tank Mixture label for incorporation specifications.

**Sequential:** Apply Ethafluralin alone preplant incorporated as specified on the Ethafluralin label. Follow with a preemergence application of this product during planting (behind the planter) or after planting, but before weeds or Soybeans emerge.

Table 15: This Product + Ethafluralin — Soybeans

	Broadcast Rates Per Acre (pts)			
Soil Texture	Less Than 3% Organic Matter		3% or More Organic Matter	
	This Product	Ethafluralin	This Product	Ethafluralin
COARSE	1.0-1.33		1.33	
MEDIUM	1.33-1.67	Label Rate	1.33-1.67	Label Rate
FINE	1.33-1.67		1.67-2.0	
<b>Muck or Peat</b> (soils with more than 20% organic matter)	DO NOT USE			

For Eastern black nightshade on these soils, apply Ethafluralin at 3.0 pts./A on *medium* and 3.5 pts./A on *fine-textured soils*, and follow with 2 incorporation passes.

**Note:** Follow all use directions, limitations, use precautions and information regarding application to soybeans on this product and Ethafluralin labels.

#### TANK MIXTURE WITH IMAZETHAPYR

This tank mixture controls all weeds controlled by this product alone and by Imazethapyr alone. Refer to the **This Product Applied Alone** section for seeds controlled by this product and to the Imazethapyr label for weeds controlled by Imazethapyr. Refer to the Imazethapyr label for geographical locations where this tank mixture may be applied.

Apply this product + Imazethapyr early preplant, preplant incorporated, or preemergence after planting, using rates in in the table below. Application can be made in water or liquid fertilizer. Follow all use directions under Soil Applications on the Imazethapyr label. For early preplant and preplant incorporated applications, apply within 30 days before planting.

**Note:** Follow all use directions, limitations, use precautions and information regarding application to Soybeans, and rotational restrictions on this product and Imazethapyr labels.

Table 16: This Product + Imazethapyr — Soybeans

	Broadcast Rates Per Acre (pts)			
Soil Texture	Less Than 3% Organic Matter	3% or More O	rganic Matter	
	This Product	This Product	Imazethapyr	
COARSE	0.85	1.0		
MEDIUM	1.0	1.33	Label rate	
FINE	1.33	1.33-1.67		

**Sequential:** Apply this product early preplant, preplant incorporated, or preemergence after planting at 0.85 pt./A on *coarse soils* and 1 pt./A on *medium*- and *fine-textured soils*. Follow with a sequential postemergence application of Imazethapyr to control emerged weeds according to the Imazethapyr label. This product will improve the consistency and level of control from Imazethapyr on most grass species. Refer to the Imazethapyr postemergence label for a listing of weeds controlled, application rate, and growth stage limitations.

# TANK MIXTURE METRIBUZIN, IMAZAQUIN, LINURON, LINURON + CHLORIMURON, PRODIAMINE + ISOXABEN, METRIBUZIN + CHLORIMURON, IMAZETHAPYR, PARAQUAT OR GLYPHOSATE FOR MINIMUM-TILLAGE OR NO-TILLAGE SYSTEMS

In minimum-tillage or no-tillage systems where Soybeans are planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, the contact herbicides Paraquat or Glyphosate may be added to a tank mix of either this product + Metribuzin, this product + Imazaquin, this product + Linuron, this product + Prodiamine + Isoxaben, this product + Metribuzin + Chlorimuron, this product + Imazethapyr.

When used as directed, the Paraquat portion of the tank mixture controls most emerged weeds and suppresses many perennial weeds. Glyphosate combinations will control emerged annual and perennial weeds when applied as directed on the Glyphosate label. This product + Metribuzin, Imazaquin, Linuron, Linuron + Chlorimuron, Prodiamine + Isoxaben, Metribuzin + Chlorimuron, Imazethapyr of the tank mixture provides preemergence control of the weeds listed on this label in the tank mixture section for this product + Metribuzin, this product + Imazaquin, this product + Linuron, this product Linuron + Chlorimuron, this product + Prodiamine + Isoxaben, this product + Metribuzin + Chlorimuron, this product + Imazethapyr, respectively.

Refer to the label of each product used in combination and observe the planting details, Soybean variety restrictions, information regarding application to Soybeans, geographical restrictions, and all other use precautions and limitations.

Refer below for rates of Paraquat or Glyphosate, this product + Metribuzin, this product + Imazaquin, this product + Linuron, this product + Linuron, this product + Inuron, this product + Metribuzin + Chlorimuron, this product Imazethapyr, respectively.

**Application:** Apply before, during, or after planting, but before the Soybeans emerge, at the rates specified below. Add Paraguat or Glyphosate at the following broadcast rates:

**Paraquat:** See the Paraquat label for weeds controlled, specified rates and other use directions. Apply surfactant at 1 or 2 pts./100 gals. of spray mixture with 75% or greater or 50 to 74% nonionic active ingredient, respectively. This treatment will not control weeds taller than 6 inches.

**Restriction: DO NOT** apply combinations containing Paraquat in suspension-type liquid fertilizers, as the activity of paraquat will be reduced.

**Glyphosate:** See the Glyphosate label for weeds controlled, recommended rates, and other use directions. Apply in 20 to 60 gals. of water or fluid fertilizer per acre with ground equipment.

## This Product + Metribuzin + Paraquat or Glyphosate

Apply 1 pt/A of this product on *loamy sand* with over 2% organic matter, 1.33 pts/A of this product on *medium soils* or 1.33 to 1.67 pts./A of this product on *fine soils*. Refer to the Metribuzin label for appropriate rate according to geographical location, soil and organic matter classification, pH limitations and all other use directions.

#### **Use Precaution**

• If heavy rain occurs soon after application, crop injury may result, especially in poorly drained areas where water stands for several days, or where the seeding slit has not been properly closed.

#### **Use Restriction**

• To avoid crop injury, **DO NOT** use this tank mixture on soil with less than 0.5% organic matter, on alkaline soil with a pH over 7.4, or on all sand and on loamy sand with less than 2% organic matter.

## This Product + Imazaguin + Paraguat or Glyphosate

Apply 1 pt./A of this product on *coarse soils*, 1.33 pts/A of this product on *medium soils* or 1.67 pts./A of this product on *fine soils*. Refer to the Imazaquin label for appropriate rate according to geographical location, soil and organic matter classification, pH limitations and all other use directions.

## **Use Restrictions**

- Preharvest Interval (PHI): DO NOT apply within 90 days of harvest.
- **DO NOT** graze or feed treated Soybean forage, hay, or straw to livestock.

## This Product + Linuron + Parquat or Glyphosate

On *coarse soils*\*, apply 1 pt./A of this product. On *medium soils*, apply 1.33 pts./A of this product. On *fine soils*, apply 1.33 to 1.67 pts./A of this product.

Apply 1 pt./A of this product on *coarse soils*\*, 1.33 pts./A of this product on *medium soils* or 1.33 to 1.67 pts./A of this product on *fine soils*. Refer to the Linuron label for appropriate rate according to geographical location, soil and organic matter classification, pH limitations and all other use directions.

### **Use Restrictions**

- \*DO NOT use on loamy sand, except in the Northeastern U.S. on loamy sand with over 1% organic matter, or injury may occur. DO NOT use on sand, gravelly soils, or exposed subsoils, or injury may occur.
- **DO NOT** use on soil with less than 0.5% organic matter, or crop injury may occur.

## This Product + Linuron + Chlorimuron + Paraquat or Glyphosate

Use only where soils have 0.5 to 3% organic matter. Apply 1 pt./A of this product on *coarse soils*, 1.33 pts./A on *medium soils* or 1.33 pts./A on *fine soils*. Refer to the Linuron + Chlorimuron label for appropriate

rate according to geographical location, soil and organic matter classification, pH limitations and all other use directions.

#### **Use Restriction**

• **DO NOT** apply to sand or to any soil with pH greater than 6.8.

## This Product + Prodiamine + Isoxaben + Paraquat or Glyphosate

Use only where soils have 0.5 to 3% organic matter. Apply 1 pt./A of this product on *coarse soils* (sandy loam only), 1.33 pts./A on *medium soils* or 1.33 to 1.67 pts./A on *fine soils*. Refer to the Prodiamine + Isoxaben label for appropriate rate according to geographical location, soil and organic matter classification, pH limitations and all other use directions.

## **Use Restriction**

• **DO NOT** apply to sand or loamy sand, or to any soil with less than 0.5% organic matter, or to any soil with pH greater than 7, except as noted on the Prodiamine + Isoxaben label.

## This Product + Metribuzin + Chlorimuron + Paraquat or Glyphosate

Use only where soils have 0.5 to 3% organic matter. Apply 1 pt./A of this product on *coarse soils* (sandy loam only), 1.33 pts./A on *medium soils* or 1.33 to 1.67 pts./A on *fine soils*. Refer to the Metribuzin + Chlorimuron label for appropriate rate according to geographical location, soil and organic matter classification, pH limitations, and all other use directions.

#### **Use Restriction**

• **DO NOT** apply to sand, or to any soil with less than 0.5% organic matter, or to any soil with pH greater than 6.8, except as noted on the Metribuzin + Chlorimuron label.

## This Product + Imazethapyr + Paraquat or Glyphosate

Apply 1 pt./A of this product on *coarse soils*, 1.33 pts./A of this product on *medium soils* or 1.67 pts./A of this product on *fine soils*. Refer to the Imazethapyr label for weeds controlled, specified rates and other use directions.

#### **TOMATOES**

## **Seeded Tomatoes**

This product may be applied postdirected to direct seeded Tomatoes. Plants must be at least 4 inches tall at the time of application and the product must be applied in a minimum of 20 gallons of water per acre. Minimize spray contact with plants. This product will not control emerged weeds.

## **Transplanted Tomatoes Only**

This product may be applied preplant incorporated or preplant before transplanting. If the latter method is used, keep soil disturbance to a minimum during transplanting. Application may also be made postdirected to transplants after the first settling rain or irrigation. When an application is made postdirected, apply in a minimum of 20 gallons of water per acre and minimum contact with tomato plants. This product will not control emerged weeds. In bedded transplanted Tomatoes, apply this product preplant nonincorporated to the top of the pressed bed, as the last step, prior to laying plastic. This product may also be used to treat row-middles in bedded tomatoes, as long as the total amount of this product does not exceed the maximum allowed per crop.

#### **Use Rate**

Type of Soil	Organic Matter Content (%)	This Product Per Acre (pts)
Coarse	<3	1.0 to 1.33
	>3	1.33
Medium	-	1.33 to 1.67
Fine	<3	1.33 to 1.67
	>3	1.67 to 2.0

#### **Use Precautions**

- **DO NOT** apply to varieties or cultivars with unknown tolerance to this product.
- This product may damage transplants that have been weakened by any cause. To prevent damage, plant only healthy transplants. **DO NOT** plant when wet, cool, or unfavorable growing conditions exist.

- In transplanted tomatoes, if this product is applied preplant incorporated, incorporate to a depth less than the depth of transplanting, and use the lower end of the rate range for the given soil type, or damage may occur.
- For row middle applications where plants are grown on sandy soils and where high soil moisture conditions can exist (i.e. low binding and high evaporation conditions) as may be found in the states of Florida, Georgia, Maryland, and Virginia, there is potential for crop injury in the form of leaf epinasty. This risk of this type of injury can be reduced by: a) incorporating this product immediately following application (tomato only), b) applying this product seven or more days before transplanting (but only after the beds have been formed), c) minimizing the application of this product onto the plastic of the bed, or d) any combination of the above.

## **Use Restrictions:**

- · To avoid possible illegal residues:
  - **DO NOT** apply this product within 90 days of tomato harvest.
  - **DO NOT** exceed the maximum label rate for the soil texture per year.
  - Apply by ground application only.
  - **DO NOT** apply more than 1 post emergence application per year.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Keep container closed to prevent spills and contamination. Store in original container.

**PESTICIDE DISPOSAL:** Open dumping is prohibited. Wastes resulting from the use of this product are toxic. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of Federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to Federal, state, or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

## **CONTAINER HANDLING:**

**Nonrefillable Container (rigid material; less than 5 gallons):** Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling if available. Clean container 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 one-fourth 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. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**Nonrefillable Container (rigid material; 5 gallons or greater):** Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth 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 rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Refillable Containers:** 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% 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.

## **CONDITIONS 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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#### **APPENDICES**

## **APPENDIX A: COMPATIBILITY TEST**

Since liquid fertilizers can vary, even within the same analysis, always **check compatibility with herbicide(s) each time before use**.

Be especially careful when using **complete** suspension or fluid fertilizers, as serious compatibility problems are more likely to occur. Commercial application equipment may improve compatibility in some instances. The following test assumes a spray volume of 25 gals./A. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure:

- 1. Add 1 pt. of fertilizer to each of 2 one-quart jars with tight lids.
- 2. To **one** of the jars, add one-quarter teaspoon or 1.2 milliliters of a compatibility agent approved for this use, such as MIX, Compex or Unite (one-quarter tsp. is equivalent to 2 pts./100 gals. spray). Shake or stir gently to mix.
- 3. To **both** jars, add the appropriate amount of herbicide(s). If more than one herbicide is used, add them separately with dry herbicides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix. The appropriate amount of herbicides for this test follows:

Dry herbicides: For each pound to be applied per acre, add 1.5 level teaspoons to each jar.

**Liquid herbicides:** For each pint to be applied per acre, add one-half teaspoon or 2.5 milliliters to each jar. **Note:** For this product in tank mixtures with Atrazine + Simazine, use one-third to one-half the amount of Atrazine specified above and the remainder as Simazine, depending on whether the 1:2 or 1:1 ratio of Atrazine to Simazine is to be applied.

4. After adding all ingredients, put lids on and tighten, and invert each jar 10 times to mix. Let the mixtures stand 15 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the 2 jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (A) slurry the dry herbicide(s) in water before addition, or (B) add one-half of the compatibility agent to the fertilizer and the other one-half to the emulsifiable concentrate or flowable herbicide before addition to the mixture. If incompatibility is still observed, **DO NOT** use the mixture.

## APPENDIX B: LOW CARRIER APPLICATION For Broadcast Ground Application Only

Use sprayers, such as Ag-Chem RoGator, Hagie, John Deere HiCycle<sup>™</sup>, Melroe Spra-Coupe, Tyler Patriot<sup>™</sup>, or Willmar Air Ride®, that provide accurate and uniform application. **Only water may be used as a carrier**. Screens in suction and in-line strainers should be 50-mesh. Manufacturers may require that tip screens as fine as 100-mesh be used with some nozzles. Use a pump with capacity to: (1) maintain up to 35 to 40 psi at the nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension. Use a minimum of 5 gals. of spray mixture per acre. Maximum recommended sprayer speed is 15 mph. Rinse sprayer thoroughly with clean water immediately after each use.

**Note:** Low pressure nozzles are recommended to reduce drift and increase application accuracy. Care should be taken when using automatic rate controlling devices to spray the material within the rated working pressure and flow ranges of the nozzles selected. Nozzle screens should be used when recommended by the manufacturer. All nozzles should be placed on 20-inch centers, except flooding types which should be placed on 40-inch centers. When Flat Fan-type nozzles are used, angles of 80° or 110° are recommended. Always read and follow the manufacturer's directions for optimum setup and performance of their nozzles or tips.

## **APPENDIX C: AERIAL APPLICATION**

Apply this product in water alone or in tank mixtures with Atrazine, or Linuron in a minimum total volume of 2 gals./A by aircraft. This product may also be applied by air in combination with Prowl. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. In order to assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 feet, using low-drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply this product alone or this product + Atrazine by aircraft at a minimum upwind distance of 400 feet from sensitive plants, or apply this product + Linuron at a minimum upwind distance of 300 feet from sensitive plants.

Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

**Aerial Drift Management** Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movements from aerial applications to agricultural field crops. These requirements **DO NOT** apply to forestry applications, public health uses or to applications using dry formulations.

- 1. The distance of the outermost nozzles on the boom must not exceed three-fourths the length of the wingspan or rotor.
- 2. Nozzles must always point backwards parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they must be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory Information** section below.

## **Aerial Drift Reduction Advisory Management:**

**Information on Droplet Size** The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions

(see Wind, Temperature and Humidity, and Temperature Inversions). Controlling Droplet Size

- **Volume** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets
- **Pressure DO NOT** exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles -** Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**Boom Length** For some use patterns, reducing the effective boom length to less than three-fourths of the wingspan or rotor length may further reduce drift without reducing swath width.

**Application Height** Applications must not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**Swath Adjustment** When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

**Wind** Drift potential is lowest between speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift. **Temperature and Humidity** When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

**Temperature Inversions** Applications must not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small-suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights when there is limited cloud cover and light to no

wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified 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.

**Sensitive Areas** This pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive area).

#### APPENDIX D: CENTER PIVOT IRRIGATION APPLICATION

This product alone in tank mixture with other herbicides on this label, which are registered for center pivot application, may be applied in irrigation water preemergence (after planting, but before weeds or crop emerge) at rates recommended on this label. This product also may be applied postemergence to the Field corn crop, Sweet corn, or Popcorn crop and preemergence to weeds in Field corn, Sweet corn, or Popcorn where postemergence applications are allowed on this label.

**Restrictions:** Follow all restrictions (height, timing, rate, etc.) to avoid illegal residues. Apply this product only through a center pivot irrigation system. **DO NOT** apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension specialists, equipment manufacturers, or other experts. **DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut down the system and make the necessary adjustments should the need arise.

## **Operating Instructions**

- 1. The system must contain a functional check-valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump or piston pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.
- 8. Prepare a mixture with a minimum of 1 part of water to 1 part herbicide(s) and inject this mixture into the center pivot system. Injecting a larger volume of more dilute mixture per hour will usually provide more accurate calibration of metering equipment. Maintain sufficient agitation to keep the herbicide in suspension.
- 9. Meter into irrigation water during entire period of water application.
- 10. Apply in one-half to 1 inch of water. Use the lower water volume (one-half inch) on *coarse-textured soils* and the higher volume (1 inch) on *fine-textured soils*. More than 1 inch of water at application may reduce weed control by moving the herbicide below the effective zone in the soil.

**Use Precautions:** For center pivot applications: Where sprinkler distribution patterns **DO NOT** overlap sufficiently, unacceptable weed control may result. Where sprinkler distribution patterns overlap excessively, crop injury may result.

**APPENDIX E: DRY BULK GRANULAR FERTILIZERS** Many dry bulk granular fertilizers may be impregnated or coated with this product alone or selected tank mixtures of this product which are registered for preplant incorporated or preplant surface application which are used to control weeds in crops on this product label and are not prohibited from use on dry bulk granular fertilizers.

When applying this product or this product mixtures with dry bulk granular fertilizers follow all directions for use and use precautions on the respective product labels regarding Field corn, Sweet corn, and Popcorn, rates per acre, soil texture, application methods (including timing of application), and rotational crops. All individual state regulations relating to dry bulk granular fertilizer blending, registration, labeling, and application are the responsibility of the individual and/or company selling the herbicide/fertilizer mixture.

Prepare the herbicide/fertilizer mixtures by using any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Nozzles used to spray this product and this product mixtures onto the fertilizer must be placed to provide uniform spray coverage. Care should be taken to aim the spray directly onto the fertilizer only and to avoid spraying the walls of the blender. If the herbicide/fertilizer mixture is too wet, add a highly absorptive material, such as Agsorb® or Celatom MP-79®, or similar granular clay or diatomaceous earth materials, to obtain a dry, free-flowing mixture. Absorptive materials should be added only after the herbicide has been thoroughly blended into the fertilizer mixture. Best application results will be obtained by using a granule of six-thirtieth particle size or of a size similar to that of the fertilizer material being used. Generally, less than 2% by weight of absorptive material will be needed. Avoid using more than 5% absorptive material by weight.

Calculate amounts of this product, Atrazine, Atrazine + Simazine or Simazine by the following formula:

2000 Lbs. of fertilizer per acre	Х	pts./A of liquid or flowable product	=	pints of liquid or flowable product per ton of fertilizer
2000	Х	lbs./A of dry product	=	pounds of dry product per ton of
Lbs. of fertilizer per acre				fertilizer

**Pneumatic (Compressed Air) Application (This Product Alone):** High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer may cause fertilizer mixture to build up or plug the distributor head, air tubes, or nozzle deflector plates. To minimize buildup, premix this product with Exxon Aromatic 200 at a rate of 1 to 4 pts./gal. of this product. Aromatic 200 is a noncombustible/nonflammable petroleum product. Aromatic 200 may be used in either a fertilizer blender or through direct injection systems. Drying agents should not be used when using Aromatic 200.

**Restrictions:** (1) Mixtures of this product and Aromatic 200 must be used on dry fertilizer only. Poor results or crop injury may result if these mixtures are used in water or liquid fertilizer solutions for spraying applications. (2) When impregnating this product in a blender before application, a drier mixture can be attained by substituting a drying agent for Aromatic 200. The use of Agsorb FG or drying agents of sixthirtieth particle size are recommended. (3) Drying agents are not recommended for use with the On-The-Go impregnation equipment.

**Restrictions:** To avoid potential for explosion, (1) **DO NOT** impregnate this product or this product mixtures on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers. (2) **DO NOT** use this product or this product mixtures on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

**Application** Apply 200 to 700 lbs. of the herbicide/fertilizer mixture per acre. For best results, apply the mixture uniformly to the soil with properly calibrated equipment immediately after blending. Uniform application of the herbicide/fertilizer mixture is essential to prevent possible crop

injury. Non-uniform application may also result in unsatisfactory weed control. In areas where conventional tillage is practiced, a shallow incorporation of the mixture into the soil may improve weed control.

On *fine*- or *medium-textured soils* in areas where soil incorporation is not planned, i.e., reduced tillage situations or in some conventional till situations, make applications approximately 30 days before planting to allow moisture to move the herbicide/fertilizer mixture into the soil. On *coarse-textured soils*, make applications approximately 14 days prior to planting.

**Use Precaution:** To avoid crop injury, **DO NOT** user the herbicide/ fertilizer mixture on Field corn, Sweet corn, and Popcorn where bedding occurs.