

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

January 6, 2023

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

Subject: Registration Review Label Amendments Incorporating Mitigation Measures from

the Interim Decision for S-Metolachlor/Metolachlor and the National Marine

Fisheries Services' (NMFS) Biological Opinion on the Effects of S-

Metolachlor/Metolachlor on Pacific Salmonids

Product Name: AX M-CHLOR C EPA Registration Number: 89167-20 Application Dates: 04/22/2021; 08/17/2021

Decision Numbers: 588857; 588858

## Dear Mary Beth Endres:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the S-Metolachlor/Metolachlor Interim Decision. The Agency has concluded that your submission is acceptable.

This letter also addresses the label mitigation resulting from the NMFS' Biological Opinion on the effects of S-Metolachlor/Metolachlor on Pacific salmonids. The Agency has concluded that your submission is also acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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

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

If you have any questions about this letter, please contact Srijana Shrestha at <a href="mailto:shrestha.srijana@epagov">shrestha.srijana@epagov</a>.

Sincerely,

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

Office of Pesticide Programs

Enclosure: Stamped Label



# **AX M-CHLOR C Herbicide**

#### **HERBICIDE**

FOR WEED CONTROL IN CORN (FIELD, POP, SWEET), COTTON, PEANUTS, POD CROPS, POTATOES, SAFFLOWERS, SORGHUM AND SOYBEANS

ACTIVE INGREDIENT: %	BY WT.
Metolachlor: 2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) acetamide	84.4%
OTHER INGREDIENTS:	15.6%
TOTAL:	100.0%
This product contains 7.9 pounds of active ingredient per gallen	

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

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

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

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS.

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

EPA Reg. No.: 89167-20 EPA Est. No.:

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### **Manufactured For:**

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

## ACCEPTED

Jan 06, 2023

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 89167-20

081721

	FIRST AID
IF INHALED:	Move person to fresh air.
	• If person is not breathing, call 911 or an ambulance, then give artificial
	respiration, preferably by mouth-to-mouth if possible.
	Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR	Take off contaminated clothing.
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue</li> </ul>
	rinsing eye.  • Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	Call a poison control center or doctor in treatment advice.      Call a poison control center or doctor immediately for treatment advice.
IF SWALLOWED.	Have person sip a glass of water if able to swallow.
	• <b>DO NOT</b> induce vomiting unless told to by a poison control center or doctor.
	• <b>DO NOT</b> give anything by mouth to an unconscious person.
	y bo not give anything by mouth to all unconscious 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 skin, eyes or clothing. Avoid breathing vapor or spray mist. This product may cause skin sensitization reactions in some people.

#### 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 and
- · Chemical-resistant apron when cleaning equipment, mixing or loading

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **Engineering 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 170.240(d)(4)]. 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 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

## **USER SAFETY RECOMMENDATIONS**

**Users should:** 1) Wash hands thoroughly after using and 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.

#### **ENVIRONMENTAL HAZARDS**

**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 rinsate or equipment washwater.

#### **Ground Water Advisory**

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

## **Surface Water Advisory**

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

### **Non-Target Organism Advisory**

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

### Reporting Ecological Incidents:

To report ecological incidents, including mortality, injury, or harm to plants and animals, call 844-425-8488.

#### **MIXING/LOADING 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 abovespecified minimum containment capacities **DO NOT** apply to vehicles when delivering pesticide shipments to the mixing/loading site.

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

## **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 shoes plus socks.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND USE 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.

#### **PRODUCT INFORMATION - SHAKE WELL BEFORE USING**

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 Corn (Field, Pop Sweet), Cotton, Peanuts, Pod crops, Potatoes, Safflowers and Soybeans. This product can also be used as a postemergence treatment in Cotton and Soybeans.

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.

## **Endangered Species Protection Requirements:**

It is a Federal offense to use any pesticide in a manner that results in an unauthorized "take" (e.g., kill or otherwise harm) of an endangered species and certain threatened species, under the Endangered Species Act section 9. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult http://www.epa.gov/espp/, call 1-844-447-3813, or email ESPP@epa.gov. You must use the Bulletin valid for the month in which you will apply the product.

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

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

#### **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 844-425-8488.

## **Management of Resistant Biotypes**

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

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

- If a naturally occurring resistant biotype is present in your application site, this product should be tank
  mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to
  achieve control.
- Cultural and mechanical control practices (e.g. crop rotation or tillage) may also be used as appropriate.
- Scout treated application site after herbicide applications and control escaping weeds including resistant biotypes before they set seed.
- · Thoroughly clean equipment before leaving fields known to contain resistant biotypes.
- Contact your local sales representative, crop advisor, or extension agent to find out if suspected
  resistant weeds to 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 1/2 to 3/4 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.

#### **This Product in 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.

For each mixture, check compatibility as described below before mixing in spray tank. When adding ingredients to the mixture, allow time for each ingredient to be thoroughly mixed before adding the next. Be sure to agitate during mixing and application to maintain a uniform suspension.

- 1. Fill the spray tank 1/4 full with water, and start agitation
- 2. Add the following herbicides and allow it to become dispersed
- a. Atrazine, Atrazine + Dicamba, Benfluralin, Bentazon, Clomazone, 2,4-D, 2,4-DB, Ethalfluralin, Dicamba, EPTC, Fluometuron, Imazaquin, Imazethapyr, Linuron, Metribuzin, Metribuzin + Chlorimuron, MSMA, Pendimethalin, Prodiamine + Isoxaben, Prometryn, Simazine or Trifluralin
- 3. Then add this product
- 4. Then add Paraquat or Glyphosate if these products are being used
- 5. Add the rest of the water

For tank mixtures with Atrazine, Atrazine + Dicamba, Atrazine + Simazine, Clomazone, Dicamba, EPTC, Ethafluralin, Fluometuron\*, Imazaquin, Imazethapyr, Linuron, Metribuzin, Metribuzin + Chlorimuron, Paraquat, Pendimethalin, Prodiamine + Chlorimuron, Prometryn, Simazine or Trifluralin, fluid fertilizers may replace all or part of the water as carrier, except in the Atrazine postemergence tank mixes. For tank mixtures with Atrazine, see additional mixing instructions on the Atrazine label.

For directions on how to conduct a compatibility test, see the "COMPATABILITY TEST" section below.

\*Follow the mixing instructions for tank mixtures with Fluometuron under the appropriate tank mixture section.

#### **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 gallons per acre. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure:

- 1. Add 1 pint of fertilizer to each of 2 one-quart jars with tight lids.
- 2. To one of the jars, add 1/4 teaspoon or 1.2 milliliters of a compatibility agent approved for this use, such as [Innvictis Envelop™, or other appropriate name] (1/4 teaspoon is equivalent to 2 pints per 100 gallons 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 1/2 teaspoon or 2.5 milliliters to each jar.

For this product in tank mixtures with Atrazine + Simazine, use 1/3 to 1/2 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 1/2 of the compatibility agent to the fertilizer and the other 1/2 to the emulsifiable concentrate or flowable herbicide before addition to the mixture. If incompatibility is still observed, **DO NOT** use the mixture.

#### **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:

Coarse	Medium	Fine
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.

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.

## APPLICATION PROCEDURES Application Timing

This product alone or in some tank mixtures with other labeled herbicides may be applied for weed control in certain crops 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 certain crops. Use only split applications for treatments made 30 to 45 days before planting, with 2/3 the specified broadcast rate for the crop and soil texture applied initially and the remaining 1/3 at planting. Treatments less than 30 days before planting may be made either as a split or a single application. Refer to individual crop to determine if early preplant surface application is directed. If weeds are present at the time of treatment, apply in a tank mixture combination with a contact herbicide (for example, Paraquat or Glyphosate).
  - 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.

D. **Postemergence (For Cotton and Soybean Application):** One application of this product will provide preemergence control or partial control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label. This product alone will not control emerged weeds, so it must be applied to a weed-free surface or in a tank mixture with products that provide postemergence weed control. If weeds are present at the time of application, tank mix with a labeled postemergence herbicide and observe all directions for use, precautions and restrictions on the label of the tank mix partner. For additional postemergence information, follow the crop specific label requirements identified on this label.

## **SPECIAL APPLICATION PROCEDURES**

- A. **Preplant Incorporated: CA Only Corn (Field, Pop, Sweet), Pod Crops, Safflowers:** Broadcast this product alone or with tank mix partners listed on this label to the soil and thoroughly incorporate with a disk 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 so 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, and North of Route 20 in the state of NE, and North of Route 136 in the state of IL): Use on medium and fine soils with greater than 2.5% organic matter that will be planted to Corn (Field, Pop, Sweet) and Soybeans the next Spring. Ground may be tilled before or after application. Restrictions: DO NOT apply to frozen ground. DO NOT exceed 2 to 3 inch incorporation depth if tiled after treatment. 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 gallons 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

Row width in inches

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

For information on applying in lower volumes of carrier, see the section "LOW CARRIER APPLICATION". For application by air or through center pivot systems, see "AERIAL APPLICATION" and "CENTER PIVOT IRRIGATION APPLICATION" sections.

For information on impregnating dry fertilizer, see the section "DRY BULK GRANULAR FERTILIZERS".

# LOW CARRIER APPLICATION For Broadcast Ground Application Only

Use sprayers, such as Ag-Chem RoGator, Hagie, John Deere HiCycle™, Melroe Spra-Coupe, Tyler Patriot™, 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 gallons of spray mixture per acre. Maximum 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. Place all nozzles 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°. Always read and follow the manufacturer's directions for optimum setup and performance of their nozzles or tips.

#### **AERIAL APPLICATION**

Apply this product in water alone or in tank mixtures with Atrazine, Linuron or Metribuzin in a minimum total volume of 2 gallons per acre by aircraft. This product may also be applied by air in combination with Benfluralin, Pendimethalin or Trifluralin. 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 or Metribuzin 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.

## MANDATORY SPRAY DRIFT MANAGEMENT

## **Aerial Applications:**

- **DO NOT** release spray at a height greater than 10 feet above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to select the nozzle and pressure that deliver medium or coarser droplets (ASABE S641).
- If the wind speed is 10 miles per hour or less, applicators must use 1/2 swath displacement upwind at the downwind edge of the field. When the wind speed is between 11 to 15 miles per hour, applicators must use 3/4 swath displacement upwind at the downwind edge of the field.
- **DO NOT** apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- **DO NOT** apply during temperature inversions.

## **Ground Boom Applications:**

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to select the nozzles and pressure that deliver medium or coarser droplets (ASABE S572).
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

## **Boomless Ground Applications:**

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

## **SPRAY DRIFT ADVISORIES**

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

#### IMPORTANCE OF DROPLET SIZE

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

### **Controlling Droplet Size – Ground Boom**

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

## **Controlling Drop Size – Aircraft**

• **Adjust Nozzles** - Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

## **Boomless Ground Applications:**

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

## **Handheld Technology Applications**

Take precautions to minimize spray drift.

## **BOOM HEIGHT – Ground Boom**

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

## **RELEASE HEIGHT – Aircraft**

Higher release heights increase the potential for spray drift.

#### **SHIELDED SPRAYERS**

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

#### **TEMPERATURE AND HUMIDITY**

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

#### **TEMPERATURE INVERSIONS**

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

#### WIND

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

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

#### 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 1/2 inch of rainfall has occurred between application and the first irrigation.

#### **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 specified on this label. Apply this product only through a center pivot irritation 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.
- 5. 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 1/2 to 1 inch of water. Use the lower water volume (1/2 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.

#### **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 mixtures of this product with dry bulk granular fertilizers, follow all directions for use and use precautions on the respective product labels regarding target crops, 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 mixtures of this product 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, Simazine, Metribuzin, Linuron or Ethafluralin by the following formula:

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

**Precautions:** (1) Use mixtures of this product and Aromatic 200 on dry fertilizer only. Poor results or crop injury may result if a mixture of this product and Aromatic 200 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. Use [Agsorb FG or other appropriate product name] or drying agents of 6/30 particle size.

**Restrictions:** To avoid potential for explosion, (1) **DO NOT** impregnate this product or mixtures of this product on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers. (2) **DO NOT** use this product or mixtures of this product on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated. (3) **DO NOT** use drying agents with the On-The-Go impregnation equipment.

### **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.

**Precaution:** To avoid crop injury, **DO NOT** use the herbicide/ fertilizer mixture on crops where bedding occurs.

## THIS PRODUCT APPLIED ALONE

## **Weeds Controlled**

Foxtail millet

Barnyardgrass (watergrass) Galinsoga Robust foxtails (purple, white) Bristly foxtail Giant foxtail Signalgrass (Brachiaria) Carpetweed Goosegrass Southwestern cupgrass Crabgrass Green foxtail Waterhemp (Common, Tall) Crowfootgrass Wild proso millet\*\* Italian ryegrass Eastern black nightshade Witchgrass (Lolium multiflorum)\* Woolly cupgrass\*\* Fall panicum Pigweed Florida pusley Prairie cupgrass Yellow foxtail

Red rice

Yellow nutsedge

<sup>\*</sup> For control of this weed, apply in the Fall using 1.67 pints (1.63 lb ai) per acre of this product on medium soils and 2 pints (1.95 lb ai) per acre of this product on fine soils after harvest of the previous crop but prior to emergence of this weed. A tillage operation may precede application of this product. **DO NOT** apply to frozen ground. 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 the specified maximum allowable rate of this product for a crop growing season.

\*\*For control of these weeds in Corn (Field, Pop, Sweet) refer to the "Woolly Cupgrass and Wild Proso Millet Control Program" section of this label.

## **Weeds Partially Controlled\***

Common purslaneSandburVolunteer sorghumEcliptaSeedling JohnsongrassWild proso milletFlorida beggarweed\*\*ShattercaneWoolly cupgrass

Hairy nightshade Texas panicum\*\*\*

- \* 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. In Corn (Field, Pop, Sweet) use 2 to 2.67 pints (1.95 2.60 lb ai) per acre or the preplant surface-applied rates for this product alone or in tank mixture, if allowed, when making preplant incorporated or preemergence applications.
- B. 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 specified under "APPLICATION PROCEDURES".
- C. Plant crop into moist soil immediately after tillage. If this product is to be used preemergence, apply at planting or immediately after planting.
- D. If available, sprinkler irrigate within 2 days after application. Apply 1/2 to 1 inch of water. Use lower water volume (1/2 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.
- E. 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 pints (1.95 lb ai) per acre and apply preemergence.
- \*\*\* For partial control of this weed, use a minimum of 2 pints (1.95 lb ai) per acre and apply through a center pivot irrigation system.

#### **ROTATIONAL CROPS**

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

- 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 Barley, Buckwheat, Cabbage, Milo, Oats, Peppers, Rice, Root crops, Rye, Tobacco, or Wheat may be planted in the Spring following treatment. Clover may be seeded 9 months following application. **Restriction: DO NOT** graze or feed forage or fodder from Cotton to livestock.
- D. Following a lay-by treatment or multiple treatments applied the previous season, any crop on this label, in addition to Cabbage, Peppers or Tobacco may be planted in the Spring. All other rotational crops may be planted 12 months after a lay-by application.

### This Product in Tank Mixtures:

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

#### Restrictions:

- To avoid injury to rotational Alfalfa or Clover: (1) **DO NOT** apply more than 2 pints (1.95 lb ai) per acre of this product preemergence (including preplant surface, preplant incorporated, etc.), and (2) **DO NOT** make lay-by or other postemergent applications of this product.
- **DO NOT** make a second broadcast application of this product.
- **DO NOT** graze or feed forage or fodder from Cotton to livestock.

## CORN (FIELD, SWEET, POP) — THIS PRODUCT ALONE

Apply this product either preplant surface, preplant incorporated or preemergence using the appropriate rate specified below.

#### PREPLANT SURFACE-APPLIED

Refer to instructions for use of this product alone under "APPLICATION PROCEDURES".

- A. 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 31 north of Route 136 in 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 pints (1.63 1.95 lb ai) per acre on medium-textured and 2 pints (1.95 lb ai) per acre on fine-textured soils. 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.
  - **Restrictions: DO NOT** apply to frozen ground. If a Spring application is made, the total rate of the Fall plus Spring applications must not exceed the maximum total rate for Corn, or illegal residues may result.
- B. Use on medium and fine-textured soils with minimum-tillage or no-tillage systems in CO, IA, IL, IN, KS, KY, MN, MO, MT, ND, NE, SD, TN, WI, and WY. Apply 2/3 of the specified rate of this product (1.67 pints (1.63 lb ai) per acre on medium soils and 2 pints (1.95 lb ai) per acre on fine soils) as a split treatment 30 to 45 days before planting and the remainder at planting. Applications made less than 30 days prior to planting may be as either a split or single treatment. Apply 1.33 pints (1.30 lb ai) per acre on coarse soils not more than 2 weeks prior to planting.
- C. On medium- and fine-textured soils with minimum- or no-tillage systems in CT, DE, MA, MD, ME, MI, NH, NY, OH, PA, RI, VA, VT, and WV, preplant surface applications may be applied following the directions for use above. If the amount of rainfall results in unsatisfactory length of weed control following the earlier treatment, a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide may be used, i.e., Atrazine, Atrazine + Metolachlor/S-metolachlor, Bentazon, Bromoxynil, Dicamba, Nicosulfuron, Primsulfuron, or 2,4-D. **Restrictions:** If the postemergence treatment includes the herbicide used preplant surface-applied, **DO NOT** exceed the total labeled rate for Field corn, Sweet corn, and Popcorn on a given soil texture.

#### PREPLANT INCORPORATED OR PREEMERGENCE

Follow instructions for use of this product alone under "APPLICATION PROCEDURES". On coarse soils, apply 1 to 1.33 pints (0.98-1.30 lb ai) per acre of this product if organic matter content is less than 3%, or 1.33 pints (1.30 lb ai) per acre if organic matter content is 3% or greater. On medium soils, apply 1.33 to 1.67 pints (1.30-1.63 lb ai) per acre of this product. On fine soils, apply 1.33 to 1.67 pints (1.30-1.63 lb ai) per acre of this product if organic matter content is less than 3%, or 1.67 to 2 pints (1.63-1.95 lb ai) per acre if organic matter content is 3% or greater.

#### **POSTEMERGENCE OR LAY-BY**

To extend the duration of weed control in Field corn, Sweet corn, and Popcorn, a maximum rate of 2 pints per acre of this product may be applied after Corn emergence until the Corn plants reach 40 inches in height, following any preplant surface-applied, preplant incorporated, or preemergence herbicide

application, including this product. For best results, applications should be made to soil free of emerged weeds and directed towards the base of Corn plants in excess of 5 inches tall. **DO NOT** apply more than 4 pints (3.9 lb ai) per acer per year on Field corn, Sweet corn, and Popcorn, depending on soil texture.

**Restrictions for all applications to Corn:** To avoid possible illegal residues, **DO NOT** graze or feed forage from treated areas for 30 days following application. **DO NOT** use on peat or muck soils.

## Shattercane, Wild Proso Millet, Woolly Cupgrass, and Eclipta - Partial Control

For more consistent partial control of Shattercane, Wild proso millet, Woolly cupgrass, or Eclipta, apply 2 to 2.55 pints (1.95-2.49 lb ai) per acre as a single application; or apply 1 to 1.33 pints (0.98-1.30 lb ai) per acre of this product preplant incorporated followed by 1 to 1.33 pints (0.98-1.30 lb ai) per acre of this product preemergence; however, **DO NOT** apply more than a total of 2.55 pints (2.49 lb ai) per acre. Make the preemergence application during or after planting, but before weeds and Corn emerge. Apply the 1.33 pints (1.30 lb ai) per acre rate of this product when a heavy infestation of Shattercane, Wild proso millet, Woolly cupgrass, or Eclipta is expected. A shallow cultivation may be needed to control any late emerging weeds.

## **Woolly Cupgrass and Wild Proso Millet Control Program:**

For control of these species, use the following 3-step program:

- 1. Apply this product early preplant, preplant incorporated, or preemergence at 1.67 pints (1.63 lb ai) per acre on medium soils and 2 pints (1.95 lb ai) per acre on fine-textured soils up to the maximum label rate. Lightly incorporate with a rotary hoe if rainfall does not occur within 5 to 7 days.
- 2. Apply a postemergence tank mix of Nicosulfuron, Primisulfuron-Methyl, Primisulfuron-methyl + Prosulfuron at labeled rates plus 1 quart of crop oil concentrate plus 1 gallon per acre of 28% nitrogen, or the equivalent amount of ammonium sulfate, when grasses are 2 to 3 inches tall and the Field corn, Sweet corn, and Popcorn is at least 4 inches tall.
- 3. Cultivate 14 to 21 days after the postemergence application.

#### **Additional Use Instructions:**

- 1. In Field corn, Sweet corn, and Popcorn, this product may be used up to 2.75 pints (2.68 lb ai) per acre as either a preplant surface, preplant incorporated, or preemergence treatment on soils having an organic matter content between 6% and 20% or up to 2 pints per acre on any soil for extended residual control and where severe stands of problem weeds are expected.
- 2. In the event of escape of annual weeds following a preplant surface, preplant incorporated, or preemergence treatment of this product, follow with a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide, e.g., Atrazine, Atrazine + Metolachlor/S-metolachlor, Bentazon, Bromoxynil, Dicamba, Nicosulfuron, Primisulfuron-methyl, or 2,4-D. Restriction: If the postemergence treatment includes the herbicide used in earlier treatment, e.g., Atrazine, DO NOT exceed the total labeled rate for Field corn, Sweet corn, and Popcorn on a given soil texture.
- 3. Bromoxynil may be applied postemergence alone or in tank mix combination with Atrazine. **Restriction: DO NOT** exceed 1.2 lbs. of Atrazine per acre in tank mix combination with Bromoxynil postemergence.

**Restrictions:** (1) **DO NOT** use this product on peat or muck soils. (2) **DO NOT** apply more than the labeled application rate for a given soil texture per year, either as a single or split treatment, or illegal residues may result.

#### THIS PRODUCT IN TANK MIXTURES\*

This product in any tank mixture for Field corn, Sweet corn, and Popcorn (except this product + Atrazine postemergence and this product + Dicamba postemergence) may be applied in water or fluid fertilizer. Use only water in this product + Atrazine or this product + Dicamba postemergence tank mixes.

\*This product may be tank mixed with the herbicides listed on this label provided the specific product(s) tank mixed is registered for use on Field corn, Sweet corn, and Popcorn.

**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 specified on this label, broadleaf weed control may be affected. Refer to the Atrazine label for weeds controlled at the reduced rates.

**Table 1: This Product in Tank Mixtures** 

	This Product	This Product	This Product	This Product	This Product	This Product	This Product
	Atrazine and/or Simazine (Preplant Surface, PPI, PRE)	+ Atrazine	+ Dicamba (Field Corn)	+ Atrazine + Linuron	+ Atrazine or Simazine + Pendimethalin	+ Atrazine + Dicamba	+ Isoxaflutole
Special Mixing Instructions					1		
Comments	2,3,4,5	2,3		2,3	2,3	4	4
Browntop panicum	X			Х	Х		Х
Cocklebur	X	0	0	Х	Х	Х	0-X
Common purslane	X			Х	Х	Х	Х
Hairy nightshade	X			Х	Х	Х	Х
Jimsonweed		Х	0			Х	Х
Kochia		Х				X	Х
Lambsquarters	X	Х	Х	Х	Х	Х	Х
Morningglory	X	0	0	Х	Х	Х	Х
Mustard		Х				Х	Х
Pigweed				Х	Х	Х	Х
Prickly sida		Х				Х	
Ragweed	X	Х	Х	Х	Х	Х	Х
Smartweed	Х	Х	Х	Х	Х	Х	Х
Velvetleaf	Х	Х	0	X	X	0-X	0-X

X = control; 0 = partial control; 0-X = partial to full control depending on ratio of products used or on weed population

## Instructions —Table 1: This Product in Tank Mixtures

- 1. Special Mixing Instructions for this product + Atrazine or Simazine and Pendimethalin.
  - A. Fill the spray tank 1/4 full with water or fluid fertilizer and start agitation.
  - B. To aid compatibility, add a compatibility agent, at 4 pints per 100 gallons of spray mixture.
  - C. Then add the Atrazine or Simazine and allow it to become dispersed.
  - D. Then add this product and Pendimethalin.
  - E. Add the rest of the water.
- 2. See additional mixing instructions on the Atrazine label.
- 3. **Restriction: DO NOT** exceed a total of 2.5 lb ai of Atrazine per acre per year. However, 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.
- 4. 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.
- 5. Refer to label section on specific directions for 2,4-D or Dicamba burndown combinations in Minimum-Tillage and No-Tillage systems.

This product in any tank mixture for Field corn, Sweet corn, and Popcorn may be applied in water or fluid fertilizer, except as specified.

#### **Restrictions:**

- 1. For all applications to Field corn, Sweet corn, and Popcorn, **DO NOT** graze or feed forage from treated areas for 30 days following application, or possible illegal residues may result.
- 2. When applying this product in tank mixture with Atrazine, **DO NOT** exceed a total of 2.5 lb ai of Atrazine per acre per year.

- 3. Refer to "POSTEMERGENCE OR LAYBY" under "CORN (FIELD, SWEET, POP) THIS PRODUCT ALONE", section for recommended sequential postemergence treatments if escape weeds develop.
- 4. This product may be used up to 2 pints (1.95 lb ai) per acre in combinations on any soil for extended residual control and where severe stands of problem weeds are expected.

## TANK MIXTURE WITH ATRAZINE OR SIMAZINE, OR ATRAZINE + SIMAZINE — PREPLANT SURFACE, PREPLANT INCORPORATED, OR PREEMERGENCE

In addition to the weeds controlled by this product alone, this product + Atrazine or Simazine, or this product + Atrazine + Simazine, applied preplant surface, preplant incorporated, or preemergence, also controls the following weeds: Browntop panicum, Cocklebur, Common purslane, Hairy nightshade, Lambsquarters, Morningglory, Ragweed, Smartweed, and Velvetleaf. Apply this product + Atrazine or Simazine, or this product + Atrazine + Simazine either preplant surface, preplant incorporated, or preemergence.

**Preplant Surface-Applied:** Follow instructions for use of this product alone under "APPLICATION PROCEDURES" and under application instructions for this product alone on Field corn, Sweet corn, and Popcorn. Apply labeled rates Atrazine or Simazine, or Atrazine + Simazine combined with 1.67 pints (1.63 lb ai) per acre of this product on medium soils or with 1.67 to 2 pints (1.63 – 1.95 lb ai) per acre of this product on fine soils in minimum tillage and no-tillage systems in CO, IA, IL, IN, KS, KY, MN, MO, MT, ND, NE, SD, TN, WI, and WY. Apply the tank mixtures as a split or single treatment in those states and as indicated in the "PREPLANT SURFACE-APPLIED" section of the label for Corn. On coarse soils, apply 1.33 pints (1.30 lb ai) per acre of this product and labeled rates of Atrazine or Simazine, or Atrazine + Simazine combined.

**Preplant Incorporated or Preemergence:** Follow instructions for use of this product alone under "APPLICATION PROCEDURES". This product may be applied in tank mix combination with labeled rates of Atrazine or Simazine or Atrazine + Simazine. Apply this product according to the rates in Table 2. **Restriction: DO NOT** apply more than the labeled rate for a given soil texture per year, either as a split or single treatment, or illegal residues may result.

## Shattercane, Wild Proso Millet, Woolly Cupgrass, and Eclipta — Partial Control

For more consistent partial control of Shattercane, Wild proso millet, Woolly cupgrass, or Eclipta, where this product is applied in tank mixture or sequentially with other registered Field corn, Sweet corn, and Popcorn herbicides apply 2 to 2.33 pints (1.95 - 2.27 lb ai) as a single application or, the following applications may be made:

- 1. Apply 1 to 1.33 pints (0.98 1.30 lb ai) per acre of this product plus 2 lb ai per acre of Atrazine or Simazine preplant incorporated, followed by 1 to 1.33 pints (0.98 1.30 lb ai) per acre of this product preemergence. Make the preemergence application during or after planting, but before weeds and Corn emerge.
- 2. Apply this product at 1.33 pints (1.30 lb ai) per acre alone or in tank mix combination with up to 2 lb ai per acre of Atrazine or Simazine preplant incorporated. **DO NOT** exceed the total rate of triazine herbicide specified for Field corn, Sweet corn, and Popcorn grown on a given soil texture. Follow with a post-directed application of Ametryn at labeled rates. Refer to the Ametryn label for specific directions for the post-directed application.
- 3. Apply EPTC or Butylate formulations at labeled rates preplant incorporated, followed by a preemergence application of this product at 1 to 1.33 pints (0.98 1.30 lb ai) per acre. **Restriction: DO NOT** use EPTC or Butylate on soils where rapid degradation has been shown to occur. Make the preemergence application during or after planting, but before weeds and Corn emerge.

**Precaution:** When following the application regimes in numbers 1 to 3 above, a shallow cultivation may be needed after the preemergence or postemergence application to help control any late emerging Shattercane or Wild proso millet plants.

Table 2: This Product + Atrazine or Simazine, or This Product + Atrazine + Simazine, Preplant

Incorporated, or Preemergence — Corn (Field, Sweet, Pop)

		Broadcast Ra	ates Per Acre	
	Less Than	3% Organic Matter	3% Organi	c Matter or Greater
Soil Texture	This Product + Atrazine* OR Simazine*	- OR - This Product + Atrazine** + Simazine**	This Product + Atrazine* OR Simazine*	- OR - This Product + Atrazine** + Simazine**
COARSE	0.85-1.0 pt. (0.83 – 0.98 lb ai) + See label for application rates	0.85-1.0 pt. (0.83 – 0.98 lb ai) + Use 1:1 ratio See label for application rates	1.0 pt. (0.98 lb ai) + See label for application rates	1.0 pt. (0.98 lb ai) + Use 1:1 ratio See label for application rates
MEDIUM	1.0-1.33 pts. (0.98 – 1.30 lb ai) + See label for application rates	1.0-1.33 pts. (0.98 – 1.30 lb ai)  + Use 1:1 ratio See label for application rates	1.33 pts. (1.30 lb ai) + See label for application rates	1.33 pts. (1.30 lb ai)  + Use 1:1 ratio See label for application rates
FINE	1.33 pts. (1.30 lb ai) + See label for application rates	1.33 pts. (1.30 lb ai) + Use 1:1 ratio See label for application rates	1.33-1.67 pts. (1.30 – 1.63 lb ai) + See label for application rates.***	1.33-1.67 pts. (1.30 – 1.63 lb ai)  + Use 1:1 ratio See label for application rates
Muck or Peat (soils with more than 20% organic matter)			OT USE	, , , , , , , , , , , , , , , , , , , ,

- \* Use Simazine in preference to Atrazine when heavy infestations of Crabgrass or Fall panicum are expected. On soils having between 6% and 20% organic matter, this product may be used up to 2.33 pints (2.27 lb ai) per acre in tank mix combination with Atrazine. Refer to the Atrazine label for rates, restrictions and limitations.
- \*\* When using the tank mixture of this product + Atrazine + Simazine, use a 1:1 ratio of each when heavy broadleaf weed infestations are expected. When heavy infestations of Crabgrass or Fall panicum are expected, use a 1:2 ratio of Atrazine + Simazine.
- \*\*\* For Cocklebur, Yellow nutsedge, and Velvetleaf control on fine-textured soils above 3% organic matter, apply 1.33 to 1.67 pints (1.30 1.63 lb ai) per acre of this product with labeled rate of Atrazine, or the same total amount of Atrazine + Simazine.

## Tank Mixture with Atrazine – Postemergence

Weeds Controlled		Weeds Partially Controlled
Barnyardgrass (watergrass)	Mustard	Cocklebur
Crabgrass	Pigweed	Morningglory
Crowfootgrass	Prickly sida	Yellow nutsedge
Fall panicum	Purslane	
Giant foxtail	Ragweed	
Green foxtail	Smartweed	
Jimsonweed	Velvetleaf	
Kochia	Waterhemp (Common, Tall)	
Lambsquarters	Yellow foxtail	

Apply labeled rate of Atrazine with 1 pint (0.98 lb ai) per acre of this product on coarse soils, with 1.33 pints per (1.30 ai) acre on medium soils or with 1.33 to 1.67 pints (1.30 – 1.63 lb ai) per acre on fine soils\*. Apply this tank mixture before grass and broadleaf weeds pass the 2-leaf stage and before Field corn, Sweet corn, and Popcorn exceeds 5 inches in height. Application to weeds larger than the 2-leaf stage will generally result in unsatisfactory control.

**Lay-by:** Apply to Field corn, Sweet corn, and Popcorn plants not more than 12 inches tall. Applications to Corn in excess of 5 inches should be directed to the base of the Corn plants; whereas, applications to Corn plants less than 5 inches tall may be made over the top. Occasionally, some Corn leaf burn may result, but this should not affect later growth or yield. **Precaution: DO NOT** apply this postemergence tank mixture in fluid fertilizer, or severe crop injury may occur.

\*For better control of Cocklebur, Morningglory, Velvetleaf, and Yellow nutsedge on fine-textured soils above 3% organic matter, apply higher labeled rate of Atrazine with 1.33 to 1.67 pints (1.30 – 1.63 lb ai) per acre of this product.

Tank mixtures of this product + Atrazine may be applied following use of any registered preplant surface-applied, preplant incorporated, or preemergence Field corn, Sweet corn, and Popcorn herbicide, including this product + Atrazine.

**Restriction: DO NOT** apply more than 4 pints (3.90 lb ai) of this product or more than 2.5 lb ai of Atrazine per acre per year, or illegal residues may result. Refer to the Atrazine label for geographic, soil texture, and rotational restrictions.

#### **Tank Mixture with Dicamba**

**Preemergence:** Use this tank mixture only on Field corn which is flat planted (no furrows) in CO, IA, IL, IN, KS, MN, NE, OH, SD, and WI. In addition to the weeds controlled by this product alone, this product + Dicamba, applied preemergence, also controls Lambsquarters, Ragweed, Smartweed, Cocklebur\*, Jimsonweed\*, Morningglory\*, and Velvetleaf\*.

\*Partially controlled.

Apply this product + Dicamba preemergence. Broadcast labeled rate of Dicamba with 1.33 pints (1.30 lb ai) per acre of this product on medium soils, or with 1.33 to 1.67 pints (1.30 - 1.63 lb ai) per acre of this product on fine soils. Apply this tank mixture to the soil surface at planting or after planting, but before Field corn emerges. Plant seed at least 1.5 inches deep and apply behind planting equipment, avoiding incorporation by the planter wheel or other seed-covering device.

**Precautions:** (1) Avoid drift to sensitive non-target plants, such as Soybeans, during application, or injury may occur.

**Restrictions:** (1) **DO NOT** incorporate before Field corn plants emergence. If it is necessary for rotary hoe to break the soil crust, **DO NOT** disturb the soil more than 1/2 inch deep. (2) **DO NOT** apply on coarse soils or on soils with less than 2.5% organic matter. (3) **DO NOT** apply with aircraft.

**Postemergence for Control of Pigweed (Mid-Atlantic states including DE, MD, PA, VA, and WV):** Apply 1 to 1.5 pints (0.98 – 1.46 lb ai) of this product + labeled rate of Dicamba by ground equipment when Pigweed plants are less than 3 inches tall and before Field corn exceeds 5 inches in height in a minimum of 20 gallons of spray per acre. Use the lower rate on coarse-textured and low organic matter soils. Use the higher rate on fine-textured and high organic matter soils.

**Precaution:** Avoid drift to sensitive non-target plants, such as Soybeans, during application, or injury may occur.

**Restriction: DO NOT** apply with aircraft.

## Tank Mixture with Atrazine and Linuron for Control of Lambsquarters And Pigweed

For prolonged control of Lambsquarters and Pigweed in DE, MD, NJ, NY, PA, VA, and WV, this product may be applied preemergence in tank mix combination with labeled rates of Atrazine + Linuron. Apply this product according to the rates in Table 2.

## Tank Mixture with Atrazine or Simazine + Pendimethalin for Prolonged Control of Lambsquarters and Pigweed in Field Corn Only (Northeast U.S., Including MI, IN, KY, and States East of These)

For prolonged control of Lambsquarters and Pigweed in addition to a broad spectrum of annual broadleaf and grass weeds, this product in tank mix combination with labeled rates of Atrazine or Simazine + Pendimethalin may be applied after planting, but before Field corn or weeds emerge. Apply this product according to rates in Table 2.

See Comment No. 1 under Table 1 for special mixing instructions.

## Tank Mixture with Atrazine, or Simazine, Atrazine + Simazine, With Paraquat, Glyphosate + 2,4-D, or Glyphosate for Minimum-Tillage or No-Tillage Systems

In minimum-tillage or no-tillage systems where Field corn, Sweet corn and Popcorn 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 added to a tank mix of this product, Atrazine or Simazine or this product + Atrazine + Simazine. See Comment No. 7 under Table 1.

This product + Atrazine or Simazine, or this product + Atrazine + Simazine portion of the tank mixture provides preemergence control of the weeds listed on this label in the tank mixture section "THIS PRODUCT + ATRAZINE OR SIMAZINE, OR THIS PRODUCT + ATRAZINE + SIMAZINE-PRE-PLANT SURFACE, PREPLANT INCORPORATED, OR PREEMERGENCE".

See Comment No. 1 under Table 1 for special mixing instructions.

**Application:** Apply before, during, or after planting, but before the Field corn, Sweet corn, and Popcorn emerges, at the rates specified in the Paraquat, Glyphosate + 2,4-D, or Glyphosate label.

**Paraquat:** See the Paraquat label for weeds controlled and specified rates. This treatment will not control weeds taller than 6 inches. **Restriction: DO NOT** apply combinations containing Paraquat in suspension-type liquid fertilizers because the activity of paraquat will be reduced.

**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, specified rates, and other use precaution directions.

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

Apply labeled rate of Atrazine\* or Simazine\* or Atrazine\*\* + Simazine\*\* with 1 pint (0.98 lb ai) per acre of this product on coarse soils, with 1.33 pints (1.30 lb ai) per acre on medium soils or with 1.33 to 1.67 pints (1.30 – 1.63 lb ai) per acre on fine soils\*\*\*.

- \*Use Simazine in preference to Atrazine when heavy infestations of Crabgrass or Fall panicum are expected.
- \*\* When using the tank mixture of this product and Atrazine + Simazine, use equal rates of Atrazine and Simazine (1:1 ratio) when heavy broadleaf weed infestations are expected. When heavy infestations of Crabgrass or Fall panicum are expected, use a 1:2 ratio of Atrazine + Simazine.
- \*\*\* For Cocklebur, Yellow nutsedge, and Velvetleaf control on fine-textured soils above 3% organic matter, apply 1.33 to 1.67 pints (1.30 1.63 lb ai) per acre of this product with labeled rate of Atrazine, or the same total amount of Atrazine + Simazine.

# Tank Mixture with Atrazine; or Atrazine + 2,4-D; or Atrazine + 2,4-D + Dicamba for Minimum-Tillage or No-Tillage Systems

In minimum-tillage or no-tillage systems where Field corn, Sweet corn, and Popcorn is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, this product applied in combination

with Atrazine will kill most emerged small annual weeds. Apply this product + labeled rate of Atrazine before, during, or after planting, but before Field corn, Sweet corn, and Popcorn emerges. Apply this product according to rates in Table 2. Where heavy crop residues exist, add labeled rate of 2,4-D amine to the spray tank last and apply in a minimum of 25 gallons of carrier per acre.

As carriers, nitrogen solutions and complete liquid fertilizers, applied before Corn emergence, enhance burndown of existing weeds, and therefore, are preferred instead of water. Add surfactant at 1 to 2 quarts per 100 gallons of diluted spray, or another appropriate surfactant at its specified rate, or add crop oil concentrate plus 28% liquid nitrogen (or equivalent). Apply before weeds exceed 3 inches in height. If Alfalfa is present, add Dicamba to the spray mixture at labeled rates and apply before Alfalfa exceeds 6 inches in height.

For fields with existing sod grasses (e.g., Bromegrass, Orchardgrass, Rye, or Timothy), when existing weeds exceed 3 inches in height or when very dry conditions exist, add Paraquat at the specified rate in place of or in addition to 2,4-D, as indicated above. **Restriction: DO NOT** apply Paraquat in suspension-type liquid fertilizer.

## Tank Mixture with Atrazine + Dicamba in Conservation Tillage - Field Corn

In conservation tillage systems where Field corn is planted directly into a cover crop or previous crop residue, this product plus Atrazine + Dicamba will kill most emerged small annual weeds. Apply this product plus Atrazine + Dicamba before, during, or after planting, but before Corn emergence on medium and fine soils with greater than 2.5% organic matter. For fields with existing vegetation exceeding 3 inches in height or when very dry conditions exist, add Paraquat at its standard rate. This product plus Atrazine + Dicamba may be applied postemergence to Field corn less than 3 inches tall and before weedy grasses exceed the 2-leaf stage. As carriers, nitrogen solutions and complete liquid fertilizers, applied before Corn emergence, enhance burndown of existing weeds. **Restriction: DO NOT** apply Paraquat in suspension-type liquid fertilizer or use on emerged Corn.

#### Tank Mixture with Isoxaflutole - Field Corn Only

This product and Isoxaflutole have a complementary response and weed control profile which allows various tank mix rate combinations to be considered. The addition of Isoxaflutole will improve the control of certain problem weeds including Texas panicum, Woolly cupgrass and Wild proso millet. This product improves both the duration and spectrum of annual grass and small-seeded broadleaf weed control, in particular Foxtails (Yellow foxtail), Witchgrass and Yellow nutsedge.

The rates of this product and Isoxaflutole are inversely proportional. Higher rates of this product are used with lower rates of Isoxaflutole and vice versa. The appropriate rate is selected based on your specific conditions, the weeds being targeted and your level of acceptance for potential crop damage.

**Examples:** (1) Where Texas panicum, Woolly cupgrass or Wild proso millet is a primary target weed, use a tank mix combination with a higher Isoxaflutole rate for the given soil type. (2) If your acceptance of an adverse crop response risk is low and/or a more general weed spectrum is targeted (especially Yellow foxtail, Witchgrass or Yellow nutsedge), use a tank mix combination with a higher rate of this product for the given soil type. (3) If target weed is listed as controlled on both product labels, a tank mix consisting of intermediate rates of both products may be used.

**Precautions:** (1) To minimize risk to crops, refer to the Isoxaflutole label for specific restrictions regarding soil textures, pH, percent organic matter and other important considerations. (2) Where a target weed is listed as controlled on only one of these two products, **DO NOT** apply less than the application rate for that weed as recommended in the individual product label or unacceptable control may result. The most restrictive combination of instructions, limitations and other restrictions from all the products being applied must be followed.

**For coarse-textured soils:** Apply labeled rate of Isoxaflutole with 1.0 to 1.33 pints (0.98 - 1.30 lb ai) per acre of this product. **Restriction: DO NOT** use Isoxaflutole on coarse-textured soils with less than 1.5% organic matter.

**For medium-textured soils:** Where lower labeled rate of Isoxaflutole is used, rates as low as 1.33 pints (1.30 lb ai) per acre of this product may be applied. Where higher labeled rate of Isoxaflutole is used, rates as low as 1.0 pint (0.98 lb ai) per acre of this product may be applied. This product can be used in combination with Isoxaflutole at rates up to 1.67 pints (1.63 lb ai) per acre on medium-textured soils.

**For fine-textured soils:** Where lower labeled rate of Isoxaflutole is used, rates as low as 1.33 pints (1.30 lb ai) per acre of this product may be applied if the soil organic matter is less than 3%. If the soil organic matter is 3% or greater, 1.67 pints (1.63 lb ai) per acre of this product should be applied. Where higher labeled rate of Isoxaflutole is used, rates as low as 1.0 (0.98 lb ai) pint per acre of this product may be applied. This product can be used in combinations with Isoxaflutole at rates up to 2.0 pints (1.95 lb ai) per acre on fine-textured soils if the organic matter is 3% or greater.

#### TANK MIXTURES FOR POSTEMERGENCE SALVAGE WEED CONTROL IN FIELD CORN ONLY

For postemergence control of weeds in specific types of field corn, the combinations listed below may be used. Full season weed control from early preplant, preplant incorporated or preemergence treatments can lead to maximum yield potential under competition-free conditions. However, if control of emerged weeds is needed, a postemergence program listed below can be applied to provide residual control for the remainder of the season.

**Precautions:** (1) Follow all label directions, instructions, precautions and limitations for each product used. (2) For each tank mixture with this product, apply only to the specific Field corn type specified on the tank mix product label. (3) In-row weed control may be reduced because of lack of coverage when applied to Corn over 4 inches tall.

**Restriction:** (1) **DO NOT** use fluid fertilizer with these mixtures or Corn injury may occur.

This Product + Glufosinate: Postemergence Use in Corn Warranted as Being Glufosinate-Resistant These tank mixtures can be applied postemergence to weeds and Corn from seed designated as Glufosinate-resistant. Glufosinate provides postemergence control of a broad spectrum of grass and broadleaf weeds and this product provides residual control of grasses and certain broadleaf weeds listed in the section "THIS PRODUCT APPLIED ALONE". Refer to "PREPLANT INCORPORATED OR PREEMERGENCE" under the section "CORN (FIELD, POP, SWEET) - THIS PRODUCT ALONE" and use the minimum rate per soil texture and organic matter classification for season-long residual control from this tank mix combination with Glufosinate. Refer to the Glufosinate label for the postemergence application rates according to weed species and their maximum height at the time of postemergence application. Where multiple weed species are present, use the highest specified rate to control the species and growth stages present.

Follow all applicable use directions, limitations, precautions and information regarding application to Corn on this product and Glufosinate labels. Where difficult species and/or severe weed populations are expected, use the maximum rate where rate ranges are listed.

## This Product + Glyphosate for Postemergence Application to Glyphosate-Resistant Corn

The tank mixture of this product + Glyphosate can be applied postemergence to weeds and to Corn designated as glyphosate-resistant.

Application may be applied postemergence to glyphosate-resistant Corn from emergence until Corn reaches 30 inches tall or the V8 stage (8 leaves with collars), whichever comes first. This mixture will provide postemergence control of weed species on the Glyphosate label and residual control of weed species on this label. Use the minimum rate of this product postemergence with Glyphosate in glyphosate-resistant Corn as specified in "PREPLANT INCORPORATED OR PREEMERGENCE" under the section "CORN (FIELD, POP, SWEET) - THIS PRODUCT ALONE" according to soil texture and organic matter. Refer to the Glyphosate label and follow appropriate use directions, application procedures, precautions and limitations. Refer to the Glyphosate label for directions to control problem species. Where difficult species and/or severe weed populations are expected, use the maximum rate where rate ranges are listed.

This Product + Glyphosate + Atrazine for Postemergence Application to Glyphosate-resistant Corn The tank mixture of this product + Atrazine + Glyphosate can be applied postemergence to weeds and to Corn designated as glyphosate-resistant.

Application may be applied postemergence to glyphosate-resistant Corn from emergence up to 12 inches in height. This mixture will provide postemergence control of weed species on the Glyphosate label and residual control of weed species on this label + Atrazine label. Use the minimum rate postemergence of this product + Atrazine with Glyphosate in glyphosate-resistant Corn as specified in "Preplant Incorporated or Preemergence" under the "TANK MIXTURE WITH ATRAZINE OR SIMAZINE, OR ATRAZINE + SIMAZINE" section and Table 2 of this label according to soil texture and organic matter. Follow all applicable use directions, limitations, precautions and information regarding application to Corn on this label, Atrazine and Glyphosate labels for application to glyphosate-tolerant Corn. Where difficult species and/or severe weed populations are expected, use the maximum rate where rate ranges are listed.

#### **COTTON — THIS PRODUCT ALONE**

**Application:** Apply this product preemergence only in Area 1\* at the rate of 0.75 to 1 pint (0.73 – 0.98 lb ai) per acre on sandy loams, 1 to 1.33 pints (0.98 - 1.30 lb ai) per acre on medium soils or 1 to 1.33 pints (0.98 - 1.30 lb ai) per acre on fine soils. Apply this product preplant incorporated or preemergence in Area 2\*\* at 1 pint (0.98 lb ai) per acre on sandy loams, 1 to 1.33 pints (0.98 - 1.30 lb ai) per acre on medium soils or 1.33 pints (1.30 lb ai) per acre on fine soils.

Apply this product postemergence to Cotton and preemergence to weeds at 0.75 to 1.33 pints (1.30 lb ai) per acre according to the state rate limitations in the following "Postemergence" section below.

**Restriction: DO NOT** use on sands and loamy sand.

\* Area 1 = AR, LA, MS, TN and Bootheel of MO

**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. Plant Cotton 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.

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 1/2 to 1 inch of water (1/2 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 1/2 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.

**VA, NC, SC, GA, FL and AL:** Apply this product at 1 to 1.33 pints (0.98 - 1.30 lb ai) per acre when Cotton is 3 to 6 inches tall.

<sup>\*\*</sup> Area 2 = NM, OK and TX

**TN, AR, MS, MO and LA:** Apply this product at 0.75 to 1.33 pints (0.73 - 1.30 lb ai) per acre 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 pints (0.98 - 1.30 lb ai) per acre 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 Table 4.

**Table 4: Multiple Applications of This Product to Cotton** 

	This Product - Multiple Applications to Cotton
State	Preplant incorporated or Preemergence Pints per acre
State	+
	Postemergence and Height Pints per acre
	0.75 to 1.33 (0.73 - 1.30 lb ai) (Preemergence Only)
MS, LA, TN, AR, MO	+
	0.75 to 1.33 (0.73 - 1.30 lb ai) to 3 to 12" Cotton
	1.0 to 1.33 (0.98 - 1.30 lb ai)
TX, OK, NM	+
	1.0 to 1.33 (0.98 - 1.30 lb ai) to 3 to 12" Cotton before August 1
	1.0 to 1.33 (0.98 - 1.30 lb ai) (Preemergence Only)
NC, VA	+
	1.0 to 1.33 (0.73 - 1.30 lb ai) to 3 to 12" Cotton

In sprinkler-irrigated areas, sprinkler irrigate after application with 1/2 to 1 inch of water (1/2 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 1/2 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. These treatments may be applied over previous registered herbicide treatments.

**Restrictions:** (1) To avoid crop injury, **DO NOT** apply this product on sand or loamy sand soils or in areas where water is likely to "pond" over the bed; (2) 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; (3) 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. (4) **DO NOT** apply over-the-top in fluid fertilizer or any other adjuvant, surfactant, oil or other pesticide not directed in the Cotton section of this label or injury may occur; (5) **DO NOT** apply on Taloka silt loam; (6) **DO NOT** use in Gaines County, TX. (7) **DO NOT** graze or feed forage or fodder from Cotton to livestock or illegal residues may result. (8) **DO NOT** apply more than a total of 2 pints (1.95 lb ai) per acre on coarse soils or 4 pints (3.90 lb ai) per acre of this product on medium and fine soils per year.

#### **COTTON — THIS PRODUCT IN COMBINATIONS**

Tank Mixture with Glyphosate for Use on Roundup 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 "Postemergence" under the section "COTTON — THIS PRODUCT ALONE" 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.

**Precaution: 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.

**Restrictions:** (1) **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. 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. (2) **DO NOT** apply Glyphosate postemergence over-the-top to Cotton past the growth stage limit as specified on the glyphosate label. (3) **DO NOT** use on sand or loamy sand soils in Gaines County, TX.

#### Tank Mixture with Glufosinate Ammonium 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 a Glufosinate label and residual preemergence weed control of the weeds listed on this label. See "Postemergence" under the section "COTTON — THIS PRODUCT ALONE" for the use rates and timings of this product and follow the Glufosinate label for its specified rates, method of application, and timing of application restrictions. **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.

**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.

**Restrictions:** (1) **DO NOT** apply Glufosinate postemergence over-the-top to Cotton beyond early bloom stage. (2) **DO NOT** apply this tank mixture postemergence to any variety of Cotton unless it is designated tolerant. (3) **DO NOT** use in Gaines County, TX on sand or loamy sand soils. (4) **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.

#### **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: Annual morningglory, Groundcherry, Hairy nightshade, Junglerice, Lambsquarters, Malva, Mustard, Prickly sida (Teaweed), Purslane, Ragweed, Wild oats and shallow-germinating seedlings of Cocklebur and Coffeeweed. As a 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 Table 5. Plant Cotton 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 5: This Product + Prometryn — Cotton (NM, OK, TX)

		Broadcast Rate per Acre		
Use Areas	Soil Texture	This Product	Prometryn	
ALL	Sand, Loamy sand	DO NOT	USE	
OK and Blacklands and	Loom	0.85 to 1.33 pts.	See Prometryn	
Gulf Coast of TX	Loam	(0.83 – 1.30 lb ai)	label of product	

	Clay	1.33 pts. (1.30 lb ai)	being used for application rates
Die Crande Valley of TV	Loam	0.85 to 1.33 pts. (0.83 – 1.30 lb ai)	
Rio Grande Valley of TX	Clay	1.33 pts. (1.30 lb ai)	
	Sandy loam	0.85 to 1.0 pt. (0.83 – 0.98 lb ai)	
NM; High Plains, Rolling Plains, Edwards Plateau of TX	Loam	0.85 to 1.33 pts. (0.83 – 1.30 lb ai)	
and Southwest TX	Sandy clay loam	1.33 pts. (1.30 lb ai)	
	Other clay soils	1.33 pts. (1.30 lb ai)	

**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 gallons 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 "Post- emergence" under the section "COTTON — THIS PRODUCT ALONE".

**Restrictions:** (1) 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, (2) **DO NOT** apply on sand or loamy sand soils or in areas where water is likely to "pond" over the bed; (3) **DO NOT** apply in cut areas of newly leveled fields or in areas of excess salt; (4) **DO NOT** apply to glandless Cotton varieties; and (5) **DO NOT** apply on Taloka silt loam (6 **DO NOT** use in Gaines County, TX. (7) **DO NOT** graze or feed forage or fodder from Cotton to livestock or illegal residues may result.

Refer to the Prometryn label for further instructions and limitations.

#### **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 in the Fluometuron label. This combination will also control Hyssop spurge, Nodding spurge, Prostrate spurge and Spotted spurge. Apply to the soil surface at planting or after planting, but before weeds or crop emerge using the appropriate rates from Table 6. The tank mixture may be applied to Cotton, but preemergence to weeds or it may be applied postemergence to both Cotton and broadleaf weeds for control of weeds in 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 weed 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 1/4 full with water of fluid fertilizer and start agitation, add Fluometuron and allow to become dispersed. Add [Verifact, Voyager 90-10, Immerse 90/10 or other appropriate product name] at 0.5% volume/volume final spray (4 pints per 100 gallons), 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 6: This Product + Fluometuron — Cotton

		Broadcast Rates Per	Acre		
Soil Texture	This Product (Pts.)		Fluometuron		
	Area 1*	Area 2**	Fluometuron		
Sand, Loamy sand		DO NOT USE			
Sandy loam	0.75 to 1.0	0.85 to 1.0			
Sandy Ioani	(0.73 – 0.98 lb ai)	(0.83 – 0.98 lb ai)	See Fluometuron label		
Loam, Silt Ioam, Silt	1.0 to 1.33	1.0 to 1.33	of product being used		
Loam, Siit Ioam, Siit	(0.98 – 1.30 lb ai)	(0.98 – 1.30 lb ai)	for application rates		
Fine soil	1.0 to 1.33	1.33	ioi application rates		
Fille Soll	(0.98 – 1.30 lb ai)	(1.30 lb ai)			
* Area 1 = AR, LA, MS, TN and Bootheel of MO.					
** Area 2 = Eastern OK, Gulf Coast, Rio Grande Valley 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 weed 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.

**Precautions:** The use of Fluometuron following the use of a systemic insecticide at planting may result in crop injury.

**Restrictions:** (1) **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. (2) 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. (3) **DO NOT** use on Taloka silt loam or crop injury may occur. (4) **DO NOT** use in Gaines County, TX. (5) To avoid possible illegal residues, **DO NOT** feed treated forage or gin trash to livestock or graze treated areas.

Refer to the Fluometuron label 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 APPLIED ALONE" and "TANK- MIXTURE WITH 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 pint (0.83 - 0.98 lb ai) per acre on sandy loams, medium and fine textured soils. Refer to Table 6 for the Fluometuron rates.

## **Add Paraquat or Glyphosate:**

**Paraquat:** See the Paraquat label for weeds controlled, specified rates and other use directions. Add surfactant at 1 or 2 pints per 100 gallons of spray mixture with 75% or greater or 50 to 74% non-ionic 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, specified rates and other use directions. **Restriction: DO NOT** apply this product + Fluometuron + Glyphosate in tank mixture because of compatibility problems.

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

**Precautions:** (1) 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. (2) Refer to the Fluometuron labels and the "TANK MIXTURE WITH FLUOMETURON" section of this label for further instructions, use precautions and limitations. **Restriction: 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 to control emerged weeds listed on the MSMA product label and residual preemergence control of weeds controlled by this product. The addition of Prometryn or Fluometuron 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 "Postemergence" under the section "COTTON — THIS PRODUCT ALONE". These treatments may be applied over previous registered treatments, including this product, provided the maximum label rate of any product is not exceeded. Prometryn or Fluometuron 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 + Prometryn or Fluometuron and then add the MSMA product.

**Restrictions:** (1) **DO NOT** apply after first Cotton bloom. (2) **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 the section "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, preemergence or lay-by at a broadcast rate of 1 to 1.33 pints (0.98 - 1.30 lb ai) per acre in the Southeast\* and 0.85 to 1.33 pints (0.83 - 1.30 lb ai) per acre in NM, OK and TX.

\*In the Southeast, use 1.33 to 2 pints (1.30 – 1.95 lb ai) per acre 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.

**Restrictions:** (1) **DO NOT** graze or feed Peanut forage or fodder to livestock for 30 days following application; (2) **DO NOT** apply within 90 days of harvest or illegal residues may result.

#### PEANUTS — THIS PRODUCT IN COMBINATIONS

#### Tank Mixture with Benfluralin

This product + Benfluralin tank mixture applied preplant incorporated controls those weeds listed under the section "THIS PRODUCT APPLIED ALONE" and those weeds as listed on the Benfluralin label. Apply 1 to 1.33 pints (1.30 lb ai) per acre of this product + labeled rate of Benfluralin in a minimum of 10 gallons of spray volume per acre for ground application or in a minimum of 5 gallons of spray volume per acre for aerial application. Follow the 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.

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 pints (0.98 – 1.95 lb ai) per acre 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.

**Restrictions:** (1) **DO NOT** apply more than the equivalent of 2.66 pints (2.59 lb ai) of this product per acre per year or illegal residues may result. (2) **DO NOT** graze or feed Peanut forage or fodder to livestock for 30 days following application. (3) **DO NOT** apply within 90 days of harvest or illegal residues may result

## 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 the section "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.

**Restrictions:** (1) **DO NOT** apply more than the equivalent of 2.67 pints (2.60 lb ai) of this product per acre per year or illegal residues may result. (2) **DO NOT** graze or feed Peanut forage or fodder to livestock for 30 days following application. (3) **DO NOT** apply within 90 days of harvest or illegal residues may result.

## 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 the Imazethapyr label for weeds controlled by Imazethapyr.

Refer to the respective labels for application methods, timing, rates, restrictions and use precautions. 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 Ethalfluralin**

The tank mixture controls all weeds controlled by this product alone and by Ethalfluralin alone. Refer to the "THIS PRODUCT APPLED ALONE" section for weeds controlled by this product and the Ethalfluralin label for weeds controlled by Ethalfluralin. Apply this product + Ethalfluralin preplant incorporated using the appropriate rate from Table 7. Follow the soil preparation procedures for Ethalfluralin. Refer to the Ethalfluralin label for incorporation directions.

Table 7: This Product + Ethalfluralin — Peanuts

		Broadcast Rates Per Acre			
Soil Texture	Sout	Southeast		OK, TX	
	This Product	Ethafluralin	This Product	Ethafluralin	
Coarse		See Ethafluralin		See Ethafluralin	
Medium	1.0 to 1.33	label of product	0.85 to 1.33	label of product	
Fine	(0.98 – 1.30 lb ai)		(0.83 – 1.30 lb ai)	being used for	
		application rates		application rates	

**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 Annual spurge, Field sandbur, Johnsongrass from seed, Kochia, Lambsquarters and other weed 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 Table 8.

Table 8: This Product + Pendimethalin — Peanuts

	Broadcast Rates Per Acre			
Soil Texture	NM, OK, TX	Other Peanut Growing States		
	This Product + Pendimethalin	This Product + Pendimethalin		
Sand, Loamy sand	0.85 pt. (0.83 lb ai)	1.0 to 1.33 pts (0.98 – 1.30 lb ai)		
	+ label rate	+ label rate		
Sandy loam	0.85 to 1.0 pt (0.83 – 0.98 lb ai)	1.0 to 1.33 pts. (0.98 – 1.30 lb ai)		
	+ label rate	+ label rate		
Fine soil	1.33 pts. (1.30 lb ai)	1.33 pts. (1.33 lb ai)		
	+ label rate	+ label rate		
Notes Follow all use di	rections limitations use prescutions of	nd information regarding application to		

**Note:** Follow all use directions, limitations, use precautions, and information regarding application to Peanuts on this product and Pendimethlin 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 APPLIED ALONE" section in a minimum spray volume of 20 gallons per acre with ground equipment. A second application of this product + Paraquat may be made 28 days after ground cracking. (Refer to "Multiple Applications" under the "PEANUTS – THIS PRODUCT IN COMBINATIONS" section of this label for geographical areas where multiple applications are directed.) 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 Bristly starbur, Cocklebur, Prickly sida and Smartweed. 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 labeled rates of Bentazon + Paraquat with the appropriate rate of this product from the "PEANUTS - THIS PRODUCT ALONE" section in a minimum spray volume of 20 gallons per acre with ground equipment. A second application of this product + Paraquat + Bentazon may be made 28 days after ground cracking. (Refer to "Multiple Applications" under the "PEANUTS – THIS PRODUCT IN COMBINATIONS" section of this label for geographical areas where multiple applications are directed.) 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 Paraguat + 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 Cocklebur, Morningglory and Sicklepod. 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 gallons per acre with ground equipment. A second application of this product + Paraquat + 2,4-DB may be made 28 days after ground cracking. (Refer to "Multiple Applications" under the "PEANUTS – THIS PRODUCT IN COMBINATIONS" section of this label for geographical areas where multiple applications are directed.) 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 weed species on the Bentazon label and provide residual control of weed species listed in the "THIS PRODUCT APPLIED ALONE" section of this label. Apply labeled rate of Bentazon in 20 gallons per acre depending on weed species and stage of growth as specified on the Bentazon label with the appropriate rate of this product from "PEANUTS - THIS PRODUCT ALONE" section. A second application of the combination may be made before Peanut pegging. (Refer to "Multiple Applications" under the "PEANUTS – THIS PRODUCT IN COMBINATIONS" section of this label for geographical areas where multiple applications are directed.) 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 weed species on the Bentazon and 2,4-DB labels, especially Morningglories.

Apply labeled rates of Bentazon + 2,4-DB in 20 gallons per acre 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 "Multiple Applications" under the "PEANUTS – THIS PRODUCT IN COMBINATIONS" section of this label for geographical areas where multiple applications are directed.) 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 plus Bentazon + Acifluorfen applied at ground cracking through 2 expanded tetra-foliate leaves or this product applied according to the directions for "PEANUTS - 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 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, String, Wax), 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 the section "APPLICATION PROCEDURES". On coarse soils with less than 3% organic matter, apply 1 to 1.33 pints (0.98 - 1.30 lb ai) per acre of this product or 1.33 pints (1.30 lb ai) per acre if organic matter is 3% or greater. On medium soils, apply 1.33 to 1.67 pints (1.30 – 1.63 lb ai) per acre of this product. On fine soils, apply 1.33 to 1.67 pints (1.30 – 1.63 lb ai) per acre of this product if organic matter content is less than 3% or 1.67 to 2 pints (1.63 – 1.95 lb ai) per acre if organic matter content is 3% or greater.

**Restrictions:** (1) \*On English peas, use only preemergence applications. **DO NOT** use on English peas in Northeastern U.S. or injury may occur. (2) To avoid possible illegal residues, (a) **DO NOT** cut for hay within 120 days following application of this product; and (b) **DO NOT** apply more than 3 pints (2.9 lb ai) per acre of this product per year.

## POD CROPS — THIS PRODUCT IN COMBINATIONS

**Restriction:** 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 the EPTC label for weeds controlled by EPTC.

**Preplant Incorporated:** Follow instructions for use of this product alone under the section "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 below:

- On coarse soils, apply 0.85 pint (0.83 lb ai) per acre of this product if organic matter content is less than 3% or 1 pint (0.98 lb ai) per acre if organic matter content is 3% or greater. On medium soils, apply 1 pint (0.98 lb ai) per acre of this product if organic matter content is less than 3% or 1.33 pint (1.30 lb ai) per acre if organic matter content is 3% or greater. On fine soils, apply 1.33 pints (1.30 lb ai) per acre of this product if organic matter is less than 3% or 1.33 to 1.67 (1.30 1.63 lb ai) pints per acre 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.

**Restriction: DO NOT** apply more than 3 lb ai per acre of EPTC on small white beans or green beans grown on coarse textured 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 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.

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 pints (0.98 – 1.95 lb ai) per acre 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. Post-plant 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 pints (0.98 – 1.95 lb ai) per acre either after planting as a preemergence, delayed preemergence, after drag-off or hilling treatment, but before weeds emerge. Up to 2.75 pints (2.68 lb ai) per acre of this product alone may be used where soil organic matter is between 6% and 20%.

**After Hilling/Lay-by:** Apply 1.67 pints (1.63 lb ai) per acre of this product after hilling/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 pints (3.6 lb ai) per acre of this product per year.

**Restrictions**: (1) **DO NOT** harvest Potatoes treated with this product within 60 days after the at-planting to drag-off application or within 40 days after a lay-by application or illegal residues may result; (2) **DO NOT** use on muck or peat soils. 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; (3) To avoid crop injury, **DO NOT** use on Sweet potatoes or Yams; (4) **DO NOT** apply both as a preemergence and an incorporated treatment; (5) **DO NOT** use in Kern County, CA.

## 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, will also control 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 pints (0.98 - 1.95 lb ai) per acre plus the labeled Metribuzin use rate may be used preemergence through after last hilling. Apply 1 to 1.33 pints (0.98 - 1.30 lb ai) per acre of this product on coarse soils and 1.33 to 2 pints (1.30 - 1.95 lb ai) per acre 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 label for precautionary statements, restrictions, application information and weeds controlled.

**Precautions:** To avoid chlorosis, minor necrosis or leaf distortion, postemergence applications to Potatoes should be made only as a directed or semi-directed spray.

**Restrictions:** (1) To avoid crop injury, **DO NOT** use this product + Metribuzin on Potatoes in Kern County, CA; and (2) **DO NOT** apply to Sweet potatoes or Yams. (3) **DO NOT** use this tank mixture on muck or peat soils. (4) Potatoes treated with this product in tank mixture with Metribuzin cannot be harvested within 60 days after application or illegal residues may result. (5) Potatoes may not be harvested within 40 days after a lay-by application of this product or illegal residues may result.

### Tank Mixture with Linuron (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 Table 9.

Table 9: This Product + Linuron — Potatoes (East of Rocky Mountains)

Table 0: This I reduct: Elitarett — I ctatoes (East of Rocky Meditalits)					
	Broadcast Rates Per Acre				
Cail Tayfura	1% to Less Than 3% Organic Matter		3 - 5% Organic Matter		
Soil Texture	This Product	Linuron	This Product	Linuron	
Coarse Sandy loam	1 pt. (0.98 lb ai)	See Linuron label of product being used for application rates	1.33 pts. (1.30 lb ai)	See Linuron label of product being used for application rates	
Medium Loam, Silt loam, Silt	1.33 pts. (1.30 lb ai)		1.67 to 2 pts. (1.63 – 1.95 lb ai)		

**Restrictions:** To avoid crop injury, (1) **DO NOT** use on sands or loamy sands; and (2) **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 Annual spurge, Kochia, Lambsquarters, Purslane, Stinging nettle and others specified on the Pendimethalin label. Apply this product + Pendimethalin preemergence, preemergence incorporated or early postemergence according to the specific directions on the Pendimethalin label using the rates in Table 10.

Table 10: This Product + Pendimethalin — Potatoes

	iot - i oriannounami i otatooo			
	Broadcast Rates Per Acre			
Soil Texture	Less than 3% Organic Matter	More than 3% Organic Matter		
	This Product + Pendimethalin	This Product + Pendimethalin		
Coarse	1.0 to 1.33 pts. (0.98 – 1.30 lb ai)	1.0 to 1.33 pts. (0.98 – 1.30 lb ai)		
	+ label rate	+ label rate		
Medium	1.33 pts. (1.30 lb ai)	1.33 to 1.67 pts. (1.30 – 1.63 lb ai)		
	+ label rate	+ label rate		
Fine	1.33 to 1.67 pts. (1.30 – 1.63 lb ai)	1.67 to 2.0 pts. (1.63 – 1.95 lb ai)		
	+ label rate	+ label rate		

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.

# **Tank Mixture with Pendimethalin + EPTC**

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

#### SAFFLOWERS – THIS PRODUCT ALONE

**Preplant Incorporated or Preemergence:** Follow instructions for use of this product alone under the section "APPLICATION PROCEDURES". On coarse soils, apply 1 to 1.33 pints (0.98 - 1.30 lb ai) per acre of this product if organic matter content is less than 3% or 1.33 pints (1.30 lb ai) per acre if organic matter is 3% or greater. On medium soils, apply 1.33 to 1.67 pints (1.30 - 1.63 lb ai) per acre of this product. On fine soils, apply 1.33 to 1.67 pints (1.30 - 1.63 lb ai) per acre of this product if organic matter content is less than 3% or 1.67 to 2 pints (1.63 - 1.95 lb ai) per acre if organic matter content is 3% or greater.

# SORGHUM (GRAIN OR FORAGE) SEED TREATED WITH A SEED SAFENER (e.g. CONCEP OR SCREEN) 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.

**Preplant Surface Applied:** Refer to the 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 2/3 of the broadcast rate applied initially and the remaining 1/3 at planting.

Apply 1.5 pints (1.46 lb ai) per acre of this product on medium soils or 1.67 pints (1.63 lb ai) per acre on fine soils. Treatments less than 30 days prior to planting may be either as split or single application. Apply 1.33 pints (1.30 lb ai) per acre of this product on coarse soils not more than 2 weeks prior to planting. Under dry conditions, irrigate after application to move this product into the soil.

**Preplant Incorporated or Preemergence:** Refer to the instructions for use of this product under the section "APPLICATION PROCEDURES". Broadcast 1 to 1.33 pints (1.30 lb ai) per acre of this product on coarse soils, 1.33 to 1.5 pints (1.30 -1.46 lb ai) per acre on medium soils or 1.33 to 1.67 pints (1.30 - 1.63 lb ai) per acre on fine soils.

**Precautions:** (1) If Sorghum seed is not properly treated with a seed safener that provides tolerance to Metolachlor, this product will severely injure the crop. (2) 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.

**Restrictions:** (1) **DO NOT** use this product on Sorghum grown under dry mulch tillage or injury may occur. (2) 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 OR SCREEN) 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 lower rates, broadleaf weed control may be affected. Refer to the Atrazine label for weeds controlled at the reduced rates.

**Precautions:** (1) Applications of this product + Atrazine on highly alkaline soils or on eroded areas where calcareous subsoils are exposed may cause Sorghum injury. (2) If Sorghum seed is not properly treated with a seed safener that provides tolerance to Metolachlor, this product + Atrazine may severely injure the crop. (3) 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.

**Restrictions:** (1) **DO NOT** use this product + Atrazine on Sorghum grown under dry mulch tillage, or injury may occur. (2) 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, Lambsquarter, Morningglory, Ragweed, Smartweed and Velvetleaf.

**Preplant Surface-Applied:** Refer to the instructions for use of this product under the section "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 2/3 of the broadcast rate applied initially and the remaining 1/3 applied at planting. Apply labeled rate of Atrazine with 1.5 pints (1.46 lb ai) per acre of this product on medium soils with 1.5% organic matter or greater or with 1.5 pints (1.46 lb ai) per acre of this product 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, irrigate after application to move this product + Atrazine into the soil.

**Restrictions:** To avoid crop injury, (1) **DO NOT** use on coarse soils; and (2) **DO NOT** use on medium soils with less than 1.5% organic matter.

**Preplant Incorporated or Preemergence:** Refer to the instructions for use of this product under the section "APPLICATION PROCEDURES". Apply labeled rate of Atrazine with 1 pint (0.98 lb ai) per acre of this product on medium soils with 1.5 % organic matter or greater or with 1 pint (0.98 lb ai) per acre of this product on fine soils with less than 1.5% organic matter or greater or with 1.2 to 1.33 pints (1.17 - 1.30 lb ai) per acre of this product on fine soils with 1.5% organic matter or greater.

**Restrictions:** To avoid crop injury, (1) **DO NOT** use on coarse soils; (2) **DO NOT** use on medium soils with less than 1.5% organic matter; (3) **DO NOT** use in NM, OK, or TX, except in Northeast OK and the TX Gulf Coast and the Blacklands areas; and (4) **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. Apply this product at the specified rates listed under "SORGHUM (GRAIN OR FORAGE) SEED TREATED WITH SEED SAFENER (e.g. CONCEP OR SCREEN) – THIS PRODUCT ALONE" or "Tank mixture with Atrazine" under "SORGHUM (GRAIN OR FORAGE) SEED TREATED WITH SEED SAFENER (e.g. CONCEP OR SCREEN) – THIS PRODUCT IN COMBINATIONS" sections, respectively. Apply Atrazine at labeled rates. Add Paraquat, Glyphosate + 2,4-D or Glyphosate:

**Paraquat:** See the Paraquat label for weeds controlled, specified rates and other use directions. Add surfactant at 1 or 2 pints per 100 gallons of spray mixture with 75% or greater or 50 to 74% non-ionic active ingredient, respectively. 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, specified rates and other use directions. Apply in a minimum of 20 gallons of water per acre with conventional spray equipment.

#### **SOYBEANS — THIS PRODUCT ALONE**

Apply this product either preplant surface-applied, preplant incorporated, preemergence or postemergence using the appropriate rate specified below.

# Preplant Surface-Applied, Preplant Incorporated or Preemergence, Postemergence

For preplant surface-applied, preplant incorporated or preemergence, follow the instructions for use of this product alone under the section "APPLICATION PROCEDURES". For postemergence, follow the tank mixture instructions under "Postemergence Applications" below.

# **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 pints (1.63 1.95 lb ai) per acre on medium textured and 2 pints (1.95 lb ai) per acre on fine textured soils. Restrictions: 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. 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 2/3 the specified rate of this product (1.67 pints (1.63 lb ai) per acre on medium soils and 2 pints (1.95 lb ai) per acre 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 pints (1.30 lb ai) per acre on coarse soils not more than 2 weeks prior to planting.

# **Preplant Incorporated or Preemergence:**

On coarse soils, apply 1 to 1.33 pints (0.98 - 1.30 lb ai) per acre of this product if organic matter content is less than 3% or 1.33 pints (1.30 lb ai) per acre if organic matter content is 3% or greater. On medium soils, apply 1.33 to 1.67 pints (1.30 - 1.63 lb ai) per acre of this product. On fine soils, apply 1.33 to 1.67 pints (1.30 - 1.63 lb ai) per acre of this product if organic matter content is less than 3% or 1.67 to 2 pints (1.63 - 1.95 lb ai) per acre if organic matter content is 3% or greater.

**Note:** On Soybeans, this product may be used up to 2.75 pints (2.68 lb ai) per acre as a preplant surface-applied, preplant incorporated or preemergence treatment on soils having an organic matter content between 6% and 20%.

**Restriction:** DO NOT apply more than 2.75 pints (2.68 lb ai) per acre per year to soybeans.

#### **Postemergence Applications:**

# Postemergence (From emergence up through the 3rd trifoliate leaf stage) (Except CA)

Apply 1.0 to 1.33 pints (1.30 - 1.63 lb ai) per acre as a postemergence treatment to Soybeans from emergence up through the 3rd trifoliate leaf stage. This product 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.

# Postemergence (From emergence up through the 5th trifoliate leaf stage) (Except CA)

Apply 1.0 to 1.33 pints (0.98 - 1.30 lb ai) per acre as a postemergence treatment to Soybeans from emergence up through the 5th trifoliate leaf stage. This product 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.

#### **Restrictions**

To avoid possible illegal residues when this product is applied postemergence to Soybeans, (1) **DO NOT** apply more than 1.33 pints (1.3 lb ai) per acre postemergence; (2) **DO NOT** graze or feed treated forage or hay from Soybeans to livestock following a postemergence application of this product; (3) **DO NOT** apply a postemergence application of this product if a preplant surface, preplant incorporated or preemergence application of products containing Metolachlor/S-metolachlor has already been applied. (4) 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 Metribuzin, Linuron, Prodiamine + Isoxaben, Metribuzin + Chlorimuron, Imazethapyr, Imazaquin, Ethalfluralin or Clomazone.

For all of the following combinations, this product may be used up to 2.5 pints (2.44 lb ai) per acre on soils having an organic matter content between 6% and 20%. **Restriction: DO NOT** apply more than 2.75 pints (2.68 lb ai) per acre per year to soybeans.

# PREPLANT / PREEMERGENCE APPLICATIONS 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.

Apply this product and Metribuzin preplant incorporated or preemergence using the appropriate rates from Table 11.

**Sequential:** Apply this product alone preplant incorporated as specified in Table 11 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 11: This Product + Metribuzin — Soybeans

	Broadcast Rates Per Acre		
	0.5 to Less Than 3% Organic	3% Organic	
Soil Texture*	Matter	Matter or Greater	
	This Product +	This Product +	
	Metribuzin	Metribuzin	
Coarse	0.85 to 1.0 pt (0.83 – 0.98 lb ai)	1.0 pt. 0.98 lb ai)	

<sup>\*</sup> Partially controlled.

Loamy sand (over 2% organic matter), Sandy loam	+ label rate	+ label rate
Medium	1.0 to 1.33 pts. (0.98 – 1.30 lb ai) + label rate	1.33 pts. (1.30 lb ai) + label rate
Fine	1.33 pts. (1.30 lb ai) + label rate	1.33 to 1.67 pts. (1.30 - 1.63 lb ai) + label rate
Mississippi Delta Only Silty clay, Clay	1.33 pts. (1.30 lb ai) + label rate	1.33 to 1.67 pts. (1.30 - 1.63 lb ai) + label rate
Muck or Peat (soils with more than 20% organic matter)	DO NO	DT 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.

**Precaution:** If heavy rain occurs soon after application, crop injury may result especially in poorly drained areas where water stands for several days.

**Restriction: 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.

#### **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 Table 12.

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

Table 12: This Product + Linuron — Sovbeans

	Broadcast Ra	ates Per Acre	
Soil Texture*	0.5 to Less Than 3% Organic Matter	3% Organic Matter or Greater	
Son rexture	This Product + Linuron	This Product + Linuron	
Coarse**	0.85 pt. (0.83 lb ai) + ***	1.0 pt. (0.98 lb ai) + ***	
Medium	1.0 pt. (0.98 lb ai) + ***	1.33 pts. (1.30 lb ai) + ***	
Fine	1.33 pts. (1.30 lb ai) + ***	1.33 to 1.67 pts. (1.30 – 1.63 lb ai) + ***	
Muck or Peat (soils with more than 20% organic matter)	DO NO	DT USE	

<sup>\*</sup> **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 Trifluralin label. This product + Trifluralin may be applied by ground or by aerial equipment and incorporated up to 14 days before planting.

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

<sup>\*\*\*</sup>Refer to the linuron label for appropriate rate according to geographical location, soil and organic matter classification limitations.

Follow the 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 on the Trifluralin label for the specified soil texture/organic matter classification and weed species expected. To control Dinitroaniline-resistant (DNA-resistant) Goosegrass\* and other species on the respective labels where the soil organic matter is 3% or less, apply the rate in Table 13.

Table 13: This Product + Trifluralin — Organic Matter Content Less Than 3%

	Broadcast Rates Per Acre			
Soil Texture	This Product	Trifluralin Organic Matter		
	Organic Matter			
	Less than 3%	Less than 2%	2 to 3%	
Coarse*	0.85 to 1.0 (0.83 – 0.98 lb ai)	See Trifluralin label of product being used for application rates		
Medium	1.0 (0.98 lb ai)			
Fine	1.33 (1.30 lb ai)			

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

Follow all restrictions and use precautions on the respective Trifluralin label and in the "SOYBEANS — THIS PRODUCT ALONE" section of this label.

# **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 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 Table 14. Follow use directions and 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 label.

Table 14: This Product + Imazaguin — Sovbeans

	Broadcast Rates Per Acre			
Soil Texture	Less Than 3% Organic Matter		3% or More Organic Matter	
	This Product	lmazaquin	This Product	Imazaquin
Coarse	0.85 pt. (0.83 lb ai)	See Imazaquin	1.0 pt. (0.98 lb ai)	See Imazaquin
Medium	1.0 pt. (0.98 lb ai)	label of product being used for	1.33 pts. (1.30 lb ai)	label of product being used for
Fine	1.33 pts. (1.30 lb ai)	pts. application rates	1.33 to 1.67* pts. (1.30 – 1.63 lb ai)	application rates
Muck or Peat (soils with more than 20% organic matter)		DO NO	OT USE	
* Use the higher rate	e of this product if he	eavy weed infestations	s are expected.	

**Restrictions:** (1) **DO NOT** apply within 90 days of harvest; and (2) **DO NOT** graze or feed treated Soybean forage, hay or straw to livestock or illegal residues may result.

# 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 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 Table 15.

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

Table 15: This Product + Prodiamine + Isoxaben — Soybeans

	Broadcast Rates Per Acre		
Soil Texture	0.5 to 3%	Organic Matter	
	This Product Prodiame + Iso		
Coarse: Sandy loam only	0.85 pt. (0.83 lb ai)	See Prodiame + Isoxaben label	
Medium	1.0 pt. (0.98 lb ai)	of product being used for	
Fine	1.33 pts. (1.30 lb ai)	application rates	

**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.

#### 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 the Metribuzin + Chlorimuron label for weeds controlled by Metribuzin + Chlorimuron. Apply preplant incorporated or preemergence, using the appropriate rates from Table 16.

**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.

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 16: This Product + Metribuzin + Chlorimuron— Sovbeans

Soil Texture	E	Broadcast Rates Per Acre			
	This Pi	This Product			
	Less than 3% Organic Matter	3% or More Organic Matter			
Coarse	0.85 pt (0.83 lb ai)	1.0 pt. (0.98 lb ai)			
Medium	1.0 pt. (0.98 lb ai)	1.33 pts (1.30 lb ai)	*		
Fine	1.33 pts. (1.30 lb ai)	1.33 to 1.67 pts. (1.30 – 1.63 lb ai)			

<sup>\*</sup> Refer to the Metribuzin + Chlorimuron label for appropriate rate according to geographical location, soil and organic matter classification and pH limitations.

**Restriction: DO NOT** apply to sand, to any soil with less than 0.5% organic matter or to any soil with pH greater than 7 except as noted on the Metribuzin + Chlorimuron label.

#### **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 the Clomazone label for weeds controlled by Clomazone. Apply this product + Clomazone preplant incorporated using rates in Table 17. Follow all Clomazone application instructions as to incorporation interval, geographical location, equipment operation, soil moisture conditions, etc.

\*Before making applications, read and strictly follow all use directions, limitations, use precautions and information regarding application to Soybeans and rotational restrictions on this product and the Clomazone labels.

Table 17: This Product + Clomazone — Soybeans

	Broadcast Rates Per Acre				
Soil Texture	This F	This Product		Clomazone	
	0.5 - 3% Organic Matter	Greater than 3% Organic Matter	Northern Area	Southern Area	
Coarse	0.85 pt (0.83 lb ai)	1.0 pt. (0.98 lb ai)			
Medium	1.0 pt. (0.98 lb ai)	1.33 pts (1.30 lb ai)	See Clomazone label of product being used for application rates		
Fine	1.33 pts. (1.30 lb ai)	1.33 to 1.67 pts. (1.30 – 1.63 lb ai)			

#### Tank Mixture with Ethalfluralin

This tank mixture controls all weeds controlled by this product alone and by Ethalfluralin alone. Refer to the "THIS PRODUCT APPLIED ALONE" section for weeds controlled by this product and the Ethalfluralin label for weeds controlled by Ethalfluralin. Apply this product and Ethalfluralin preplant incorporated using the appropriate rates from Table 18.

**Preplant Incorporated:** Follow soil preparation procedures for Ethalfluralin. Refer to the Ethalfluralin label for incorporation directions.

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

Table 18: This Product + Ethalfluralin — Soybeans

		Broadcast Rates Per Acre			
Less Than 3% Organic Matter		3% or More Organic Matter			
This Product	Ethafluralin	This Product	Ethafluralin		
1.0 to 1.33 pts.		1.33 pts			
(0.98 – 1.30 lb ai)	See Ethalfluralin	(1.30 lb ai)	See Ethalfluralin		
1.33 to 1.67 pts	label of product	1.33 to 1.67 pts.	label of product		
(1.30 – 1.63 lb ai)	being used for	(1.30 – 1.63 lb ai)	being used for		
1.33 to 1.67	application rates	1.67 to 2.0 pts.	application rates		
(1.30 – 1.63 lb ai)		(1.63 – 1.95 lb ai)			
	DO NO	T LIGE			
	DO NO	)   USE			
	This Product 1.0 to 1.33 pts. (0.98 – 1.30 lb ai) 1.33 to 1.67 pts (1.30 – 1.63 lb ai) 1.33 to 1.67 (1.30 – 1.63 lb ai)	This Product  1.0 to 1.33 pts. (0.98 – 1.30 lb ai)  1.33 to 1.67 pts (1.30 – 1.63 lb ai)  1.33 to 1.67 (1.30 – 1.63 lb ai)  DO NO	This Product         Ethafluralin         This Product           1.0 to 1.33 pts.         1.33 pts           (0.98 – 1.30 lb ai)         See Ethalfluralin label of product         (1.30 lb ai)           1.33 to 1.67 pts.         being used for application rates         (1.30 – 1.63 lb ai)           1.33 to 1.67 pts.         1.67 to 2.0 pts.		

\*For Eastern black nightshade on these soils, apply Ethafluralin at labeled rate and follow with 2 incorporation passes.

Follow all use directions, limitations, use precautions and information regarding application to Soybeans on this product and Ethalfluralin 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 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 Table 19. 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.

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

Table 19: This Product + Imazethapyr— Soybeans

	E	Broadcast Rates Per Acre			
Cail Taytura	This Pi	This Product			
Soil Texture	Less than 3% Organic Matter	3% or More Organic Matter			
Coarse	0.85 pt (0.83 lb ai)	1.0 pt. (0.98 lb ai)			
Medium	1.0 pt. (0.98 lb ai)	1.33 pts (1.30 lb ai)	*		
Fine	1.33 pts. (1.30 lb ai)	1.33 to 1.67 pts. (1.30 – 1.63 lb ai)			

<sup>\*</sup> Refer to the Imazethapyr label for appropriate rate according to geographical location, soil and organic matter classification and pH limitations.

**Sequential:** Apply this product early preplant, preplant incorporated or preemergence after planting at 0.85 pint (0.83 lb ai) per acre on coarse soils and 1 pint per (0.98 lb ai) acre 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 with Metribuzin, Imazaquin, Linuron, Prodiamine + Isoxaben, Metribuzin + Chlorimuron or 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 this product plus one of the following:

Imazaquin Linuron Imazethapyr Metribuzin

Isoxaben + Prodamine Metribuzin + Chlorimuron

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 + tank mix herbicides listed above portion of the tank mixture provides preemergence control of the weeds listed on this label in the tank mixture section for this product + each respective herbicide.

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.

**Application:** Apply before, during or after planting, but before the Soybeans emerge. When adding Paraguat or Glyphosate:

**Paraquat:** See the Paraquat label for weeds controlled, specified rates and other use directions. Add surfactant at 1 or 2 pints per 100 gallons of spray mixture with 75% or greater or 50 to 74% non-ionic 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, specified rates and other use directions.

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

**This Product + Imazaquin + Paraquat or Glyphosate:** Apply 1 pint per (0.98 lb ai) acre of this product on coarse soils, 1.33 pints (1.30 lb ai) per acre of this product on medium soils or 1.67 pints (1.63 lb ai) per acre 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.

**Restrictions:** (1) **DO NOT** apply within 90 days of harvest; and (2) **DO NOT** graze or feed treated Soybean forage, hay, or straw to livestock or illegal residues may result.

**This Product + Imazethapyr + Paraquat or Glyphosate:** Apply 1 pint (0.98 lb ai) per acre of this product on coarse soils, 1.33 pints (1.30 lb ai) per acre of this product on medium soils or 1.67 pints (1.63 lb ai) per acre of this product on fine soils. Refer to the Imazethapyr label for weeds controlled, specified rates and other use directions.

**This Product + Linuron + Paraquat or Glyphosate:** Apply 1 pint (0.98 lb ai) per acre of this product on coarse soils\*, 1.33 pints (1.30 lb ai) per acre of this product on medium soils or 1.33 to 1.67 pints (1.30 – 1.63 lb ai) per acre 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.

**Restrictions:** \*(1) **DO NOT** use on loamy sand, except in the Northeastern U.S. on loamy sand with over 1% organic matter or injury may occur. (2) **DO NOT** use on sand, gravelly soils or exposed subsoils or injury may occur. (3) **DO NOT** use on soil with less than 0.5% organic matter or crop injury may occur.

**This Product + Metribuzin + Chlorimuron + Paraquat or Glyphosate:** Use only where soils have 0.5 to 5% organic matter. Apply 1 pint (0.98 lb ai) per acre of this product on coarse soils (except sand), 1.33 pints (1.30 lb ai) per acre of this product on medium soils or 1.33 to 1.67 pints (1.30 – 1.63 lb ai) per acre of this product 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.

**Restrictions: DO NOT** apply to 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 Metribuzin + Chlorimuron label.

**This Product + Metribuzin + Paraquat or Glyphosate:** Apply 1 pint (0.98 lb ai) per acre of this product on loamy sand with over 2% organic matter, 1.33 pints (1.30 lb ai) per acre of this product on medium soils or 1.33 to 1.67 pints (1.30 – 1.63 lb ai) per acre 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.

**Precaution:** Crop injury may result if heavy rain occurs soon after application especially in poorly drained areas where water stands for several days or where the seeding slit has not been properly closed.

**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 + Prodiamine + Isoxaben + Paraquat or Glyphosate:** Use only where soils have 0.5 to 3% organic matter. Apply 1 pint per (0.98 lb ai) acre of this product on coarse soils (sandy loam only), 1.33 pints (1.30 lb ai) per acre of this product on medium soils or 1.33 to 1.67 pints (1.30 – 1.63 lb ai) per acre of this product 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.

**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.

# POSTEMERGENCE APPLICATIONS (Except CA)

# **Tank Mixture with Glyphosate Products**

This product at 1.0 to 1.33 pints (0.98 - 1.30 lb ai) per acre may be tank mixed with Glyphosate products at labeled rates and applied from emergence up through the (3rd) (5th) trifoliate leaf stage of Roundup Ready or glyphosate-tolerant soybeans. This product alone will not control emerged weeds. Use this treatment only on Soybeans designated for use with glyphosate (e.g., Roundup Ready or glyphosate-tolerant Soybeans). The glyphosate product must be registered for postemergence use in Roundup Ready or glyphosate-tolerant soybeans.

#### **Tank Mixture with Glufosinate Ammonium Products**

This product at 1.0 to 1.33 pints (0.98 - 1.30 lb ai) per acre may be tank mixed with Glufosinate products at labeled rates and applied from emergence up through the (3rd) (5th) trifoliate leaf stage of Soybeans. This product alone will not control emerged weeds. Use this treatment only on Soybeans designated for use with Glufosinate (e.g., Liberty Link).

**Precaution**: The use of adjuvants such as COC or UAN with this product may result in temporary crop injury. Follow the tank mix product label for adjuvant directions.

**Restrictions**: To avoid possible illegal residues when this product is applied postemergence to Soybeans, (1) **DO NOT** apply more than 1.33 pints (1.3 lb ai) per acre postemergence; (2) **DO NOT** graze or feed treated forage or hay from Soybeans to livestock following a postemergence application of this product. (3) Make postemergence application at least 90 days before harvest.

### 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. 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 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this 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. AXION AG PRODUCTS, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or AXION AG PRODUCTS. LLC. and TO

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