



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

October 4, 2021

Patricia McFadden
Registrant Manager
Sipcam Agro USA, Inc.
2525 Meridian Parkway
Durham, NC 27713

Subject: Label Amendment – Adds the use on cotton in Kansas, incorporating Metolachlor Interim Registration Review Decision Changes, and other minor changes
Product Name: Metolachlor 7.8
EPA Registration Number: 60063-24
Application Date: 07/15/20 & 04/19/21
Decision Number: 565120 & 573221

Dear Mrs. McFadden:

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

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 Metolachlor Interim Registration Review Decision, and has concluded that your submission is acceptable.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under 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.

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Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

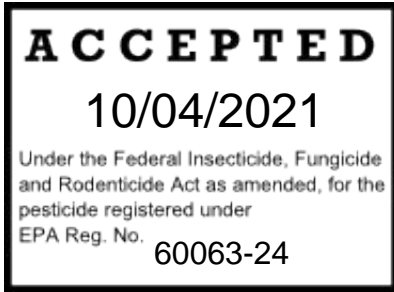
Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Andrés Garzón by phone at (703) 347-8547, or via email at GarzonMoreno.Andres@epa.gov.

Sincerely,

A handwritten signature in cursive script that reads "Paul Di Salvo".

Paul Di Salvo, MPS, AWB®
Special Assistant / Wildlife Biologist
Registration Division (7505P)
Office of Pesticide Programs

Enclosure: Stamped Label



Metolachlor 7.8 Herbicide

Metolachlor	Group	15	Herbicide
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For weed control in [Cotton,] [Peanuts,] [Pod Crops Group 6 – Legume Vegetables,] [Potatoes,] [Safflowers,] [Sorghum,] [Soybeans,] and [Tomatoes]

Active Ingredient:

Metolachlor: 2-chloro- N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) acetamide 86.4%

Other Ingredients: 13.6%

Total: 100.0%

This product contains 8 pounds of active ingredient per gallon.

[Alternate brand name: Stalwart Herbicide]

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
IF INHALED	<ul style="list-style-type: none"> •Move person to fresh air. •If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible. •Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> •Take off contaminated 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 style="list-style-type: none"> •Hold eye open and rinse slowly and gently with water for 15-20 minutes. •Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. •Call a poison control center or doctor for treatment advice.
IF SWALLOWED	<ul style="list-style-type: none"> •Call a poison control center or doctor immediately for treatment advice. •Have affected person sip a glass of water if able to swallow. •Do not induce vomiting unless told to do so by a poison control center or doctor. •Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
Emergency phone numbers	(800) 424-9300 CHEMTREC (transportation and spills) (800) 900-4044 Poison Control Center (human health)

SHAKE WELL BEFORE USING

Net Contents: _____ [Gallons] [gal.] [(Liters)]
EPA Est. No. _____
[Lot number begins with xxx]

EPA Reg. No. 60063-24
[label date/lot code]

Not for sale, use, or distribution in Nassau County or Suffolk County, New York.

Read label carefully before opening the container.
See additional Precautionary Statements and Directions for Use inside [the] book[let].

Manufactured For:
Sipcam Agro USA, Inc.
2525 Meridian Parkway
Durham, NC 27713

OPTIONAL LANGUAGE FOR LABEL

[Peel back [label] [book] here] [Pull back [label] [book] here] [Open book [label] here]
[Application Type AG Agricultural]
[Formulated in the United States of America, with U.S. and imported ingredients.]
[Product of ____] [Note: if manufactured in a country other than U.S., country name will appear here]
[Herbicide]

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. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

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.

User Safety Recommendations

Users should:

- Wash hands after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Engineering Control Statements

Mixers and loaders supporting aerial applications are required to use closed systems. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(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.

ENVIRONMENTAL HAZARDS

For terrestrial uses, **DO NOT** apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean highwater mark. **DO NOT** contaminate water when disposing of equipment wash waters or rinsate.

Groundwater Advisory

Metolachlor is known to leach through soil into groundwater under certain conditions as a result of agricultural 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 rainwater. 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 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 Sipcam Agro at 919-226-1295.

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 sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 ft. 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 rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above-specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site.

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.

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.

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 12 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
- Shoes plus socks

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

Not for sale, use, or distribution in Nassau County or Suffolk County, New York.

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

PRODUCT INFORMATION

Metolachlor 7.8 is a selective herbicide registered for use as a preplant surface-applied, preplant incorporated, or preemergence treatment in water or fluid fertilizer for control of most annual grasses and certain broadleaf weeds in cotton, peanuts, crop group 6 legume vegetables (succulent and dried), potatoes, safflowers, sorghum, and soybeans. This product is also registered as a postemergence treatment on cotton, potatoes, soybeans, and tomatoes.

USE 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.
- To prevent off-site movement due to runoff or wind erosion:
 1. **DO NOT** treat powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, the soil surface must first be settled by rainfall or irrigation.
 2. **DO NOT** apply to impervious substrates, such as paved or highly compacted surfaces.

3. **DO NOT** use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least one-half inch of rainfall has occurred between application and the first irrigation.

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

FOR ALL 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.

Where directions on this label specify a tank mixture of this product with atrazine, follow the rates, restrictions, and use precautions on the labeling of the atrazine product used.

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

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

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

USE PRECAUTIONS

- Injury may occur following the use of this product under abnormally high soil moisture conditions during early development of the crop.
- Dry weather following preemergence application of this product or a tank mixture may reduce effectiveness. Cultivate if weeds develop.

WEED RESISTANCE MANAGEMENT

For resistance management, metolachlor 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.

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 a 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 a 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 after herbicide application to monitor weed population 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 mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting or 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 the product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Sipcam Agro at 919-226-1195.

INTEGRATED WEED PEST MANAGEMENT

Integrate this product 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.

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	Sandy clay
Loamy sand	Silt loam	Silty clay loam	Silty clay
Sandy loam	Silt	Clay loam	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 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.

MIXING INSTRUCTIONS

Metolachlor 7.8 Alone: Mix this product with water or fluid fertilizer (as specified in the individual crop sections) and apply as a spray. Fill the spray tank one-half to three-quarters full with water or fluid fertilizer, add the proper amount of this product, then add the rest of the water or fluid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

Tank Mixtures: Fill the spray tank one-quarter full with water, and start agitation; add tank mix partners (with the exception of paraquat dichloride or glyphosate), allow it to become dispersed; then add this product; then add paraquat dichloride or glyphosate if these products are being used; and finally the rest of the water.

In some tank mixtures with atrazine*, chlorimuron-ethyl+metribuzin, prometryn clomazone, fluometuron*, EPTC, prodiamine+isoxaben, pendimethalin*, imazethapyr, imazaquin, metribuzin, ethalfuralin, or trifluralin, fluid fertilizers may replace all or part of the water as carrier. For each tank mixture with atrazine, see additional mixing instructions on the atrazine label. For each tank mixture, conduct a compatibility test as described in Compatibility Test Section of this label. For all tank mixtures, agitate during mixing and application to maintain a uniform suspension.

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.

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

APPLICATION PROCEDURES

Application Timing

Metolachlor 7.8 alone or in tank mixtures with other labeled herbicides may be applied for weed control in crops listed on this label. Refer to the individual crop sections of the label to determine if application timings listed below are applicable.

- a) **Preplant Surface-Applied:** For minimum-tillage or no-tillage systems only, this product alone and some tank mixtures of this product may be applied up to 45 days before planting. Use only split applications for treatments made 30 to 45 days before planting, with two-thirds the specified broadcast rate for the crop and soil texture applied initially and the remaining one-third at planting. Treatments less than 30 days before planting may be made either as a split or a single application. Refer to individual crop sections to determine if early preplant surface application is allowed. If weeds are present at the time of treatment, apply in a tank-mixture combination with a contact herbicide (for example, paraquat dichloride or glyphosate). Observe directions for use, precautions, and restrictions on the label of the contact herbicide. To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.
- b) **Preplant Incorporated:** Apply this product to the soil and incorporate into the top 2 inches of soil within 14 days before planting, using a finishing disk, harrow, rolling cultivator, or similar implement capable of providing uniform 2-inch incorporation. Use a preplant incorporated application if furrow irrigation is used or when a period of dry weather after application is expected. If the 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 (cotton and soybean use only):** For pre-emergence or partial control of the weeds listed in the **WEEDS CONTROLLED – METOLACHLOR 7.8 APPLIED ALONE** section and in the **WEEDS PARTIALLY CONTROLLED** section of this label, use one application of this product at the rate specified in the cotton or soybean sections 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, limitations, 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

- 1) **Preplant Incorporated - CA Only (Safflowers, Crop Group 6 Legume Vegetables (succulent and dried)):** 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 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 (**Metolachlor 7.8** treated) soil on the beds.

- 2) **Preemergence:** Apply this product after planting. Water with sprinkler or flood irrigation within 7-10 days.
- 3) **Fall Application (only in IA, MN, ND, SD, WI, North of Route 20 in the state of NE, and North of Route 136 in the state of IL) – See specific instructions in the individual crop sections of this label for timing of application and other information):** Use on medium and fine soils with greater than 2.5% organic matter that will be planted to soybeans the next spring. Ground may be tilled before or after application.

USE RESTRICTIONS – Fall applications

1. **DO NOT** apply to frozen ground.
 2. **DO NOT** exceed a 2 to 3-inch incorporation depth if tilled after treatment.
 3. 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.
- 4) **Ground Application:** Apply this product alone or in tank mixtures by ground equipment in a minimum of 10 gals. of spray mixture per acre, unless otherwise specified.
Use sprayers that provide accurate and uniform application. For tank mixtures of this product with wettable powder or dry flowable formulations, screens and strainers should be no finer than 50-mesh. Rinse sprayer thoroughly with clean water immediately after use.

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

$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \text{broadcast rate per acre} = \text{amount needed per acre of field}$$

For information on applying in lower volumes of carrier, see **Low Carrier Application Section**.

For application by air or through center pivot systems, see the **Aerial Application** section or **Center Pivot Irrigation Application** section.

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

WEEDS CONTROLLED – METOLACHLOR 7.8 APPLIED ALONE

Barnyardgrass (watergrass)	Fall panicum	Pigweed	Southwestern cupgrass
Bristly foxtail	Florida pusley	Prairie cupgrass	Tall waterhemp
Carpetweed	Foxtail millet	Red rice	Tropical spiderwort
Common waterhemp	Galinsoga	Robust foxtails (purple, white)	Witchgrass
Crabgrass	Giant foxtail	Signalgrass	Yellow foxtail
Crowfootgrass	Goosegrass	(<i>Brachiaria</i>)	Yellow nutsedge
Eastern black nightshade	Green foxtail		

WEEDS PARTIALLY CONTROLLED*:

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

** For partial control of this weed, use a minimum of 2 pts./A and apply preemergence.

*** For partial control of this weed, use a minimum of 2 pts./A and apply through a center pivot irrigation system.

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. Control of these weeds can be erratic, due partially to variable weather conditions. Control may be improved by following these suggested procedures:

1. **Thoroughly till moist soil** to destroy germinating and emerged weeds. If this product is to be applied preplant incorporated, this tillage may be used to incorporate this product if uniform 2-inch incorporation is achieved as recommended under **Application Procedures**.
2. Plant crop into moist soil **immediately after tillage**. If this product is to be used preemergence, apply at planting or immediately after planting.
3. If available, **sprinkler irrigate** within 2 days after application. Apply one-half to 1 inch of water. Use lower water volume (one-half inch) on *coarse-textured* soils and higher volume (1 inch) on *fine-textured soils*. Also, refer to the section on **Center Pivot Irrigation Application** for this method of applying this product.
4. 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.

ROTATIONAL CROPS

METOLACHLOR 7.8 ALONE

Replanting if a crop is lost:

If crop treated with this product alone is lost, any crop on this label may be replanted immediately if the rate from the previous crop does not exceed the rate for the crop to be planted. **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.

Rotational Crop Directions

1. Barley, oats, rye, or wheat may be planted 4.5 months following treatment.
2. Alfalfa may be planted 4 months following application.
3. Any crop on this label, in addition to corn, root crops, tobacco, barley, buckwheat, milo, oats, rice, rye, wheat, cabbage, or peppers, may be planted in the next spring following treatment.
4. Clover may be seeded 9 months following application.
5. **DO NOT** graze or feed forage or fodder from cotton to livestock.
6. All other rotational crops may be planted 12 months after a lay-by application.
7. Following a lay-by treatment or multiple treatments applied the previous year, any crop on this label, in addition to corn, tobacco, cabbage, or peppers, may be planted in the spring. All other rotational crops may be planted 12 months after a lay-by application.

METOLACHLOR 7.8 TANK MIXTURES:

For **Rotational Crops** 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. See individual crop sections for application rates.

USE RESTRICTIONS

- **DO NOT** make lay-by or other postemergence applications of this product.
- **DO NOT** graze or feed forage or fodder from cotton to livestock.

SPRAY EQUIPMENT

LOW CARRIER APPLICATION

For Broadcast Ground Application Only

Use sprayers that provide accurate and uniform application. **Only water may be used as a carrier.** Screens in suction and in-line strainers should be 50-mesh. Manufacturers may require that tip

screens as fine as 100-mesh be used with some nozzles. Use a pump with capacity to: (1) maintain up to 35 to 40 psi at the nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension. Use a minimum of 5 gals. of spray mixture per acre. Maximum recommended sprayer speed is 15 mph. Rinse sprayer thoroughly with clean water immediately after each use.

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

AERIAL APPLICATION

Apply this product in water alone or in tank mixtures with atrazine, metribuzin in a minimum total volume of 2 gals./A by aircraft. This product may also be applied by air in combination with 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 ft., 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 **Metolachlor 7.8** + atrazine by aircraft at a minimum upwind distance of 400 ft. from sensitive plants, or apply **Metolachlor 7.8** + metribuzin at a minimum upwind distance of 300 ft. from sensitive plants.

DO NOT allow application to humans or animals. Flagmen and loaders should not inhale spray mist and avoid prolonged contact with skin.

Aerial Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses, or to applications using dry formulations.

1. The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees.

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

The applicator should be familiar with and take into account the information covered in the **Mandatory Spray Drift Management** section below.

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Applications:

- **DO NOT** release spray at a height greater than 10 ft 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 11-15 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 select the nozzle and pressure that deliver medium or coarser droplet size (ASABE S572.3) 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 Droplet 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.

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

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.

Sensitive Areas

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

DO NOT allow application to humans or animals. Flagmen and loaders should not inhale spray mist and avoid prolonged contact with skin.

CENTER PIVOT IRRIGATION APPLICATION

Metolachlor 7.8 alone or 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. This product also may be applied postemergence to the crop(s) and preemergence to weeds in crop(s) where postemergence applications are allowed on this label. Follow all label restrictions (height, timing, rate, etc.). **Apply this product only through a center pivot irrigation system. DO NOT apply this product through any other type of irrigation system.** Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, 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 the system down and make 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 a 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 **Metolachlor 7.8** tank mixtures which are registered for preplant incorporated or preplant surface application, or postemergence applications 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 **Metolachlor 7.8** alone or **Metolachlor 7.8** mixtures with dry bulk granular fertilizers, follow all directions for use and 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 **Metolachlor 7.8** and **Metolachlor 7.8** mixtures onto the fertilizer must be placed to provide uniform spray coverage. Care should be taken to aim the spray directly onto the fertilizer only and to avoid spraying the walls of the blender.

If the herbicide/fertilizer mixture is too wet, add a highly absorptive material, such as Agsorb® or Celatom MP-79®, or similar granular clay or diatomaceous earth materials, to obtain a dry, free-flowing mixture. Absorptive materials should be added only after the herbicide has been thoroughly blended into the fertilizer mixture. Best application results will be obtained by using a granule of 6/30 particle size or 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 **Metolachlor 7.8**, atrazine, metribuzin, or ethalfluralin by the following formula:

$$\frac{2000}{\text{lbs. of fertilizer per acre}} \times \text{pts./A of liquid or flowable product} = \text{pts. of liquid or flowable product per ton of fertilizer}$$
$$\frac{2000}{\text{lbs. of fertilizer per acre}} \times \text{lbs./A of dry product} = \text{lbs. of dry product per ton of fertilizer}$$

Pneumatic (Compressed Air) Application (Metolachlor 7.8 Alone): High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer may cause fertilizer mixture to build up or plug the distributor head, air tubes, or nozzle deflector plates. To minimize buildup, premix this product with Exxon Aromatic 200 at a rate of 1 to 4 pts./gal. of this product. Aromatic 200 is a noncombustible /nonflammable petroleum product. Aromatic 200 may be used in either a fertilizer blender or through direct injection systems. Drying agents should not be used when using Aromatic 200.

USE PRECAUTIONS

- Mixtures of this product and Aromatic 200 must be used on dry fertilizer only. Poor results or crop injury may result if these mixtures are used in water or liquid fertilizer solutions for spraying applications.
- When impregnating this product in a blender before application, a drier mixture can be attained by substituting a drying agent for Aromatic 200. The use of Agsorb FG or drying agents of 6/30 particle size are recommended.
- Drying agents are not recommended for use with On-The-Go impregnation equipment.

USE RESTRICTIONS

To avoid potential for explosion,

- **DO NOT** impregnate **Metolachlor 7.8** or **Metolachlor 7.8** mixtures on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers.
- **DO NOT** use **Metolachlor 7.8** or **Metolachlor 7.8** mixtures on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

Application

Apply 200-700 lbs. of the herbicide/fertilizer mixture per acre. For best results, apply the mixture uniformly to the soil with properly calibrated equipment immediately after blending. Uniform application of the herbicide/fertilizer mixture is essential to prevent possible crop injury. Non-uniform application may also result in unsatisfactory weed control. In areas where conventional tillage is practiced, a shallow incorporation of the mixture into the soil may improve weed control. On *fine- or medium-textured soils* in areas where soil incorporation is not planned, i.e., reduced tillage situations or in some conventional till situations, make applications approximately 30 days before planting to allow moisture to move the herbicide/fertilizer mixture into the soil. On *coarse-textured soils*, make applications approximately 14 days prior to planting.

USE PRECAUTION:

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

COMPATIBILITY TEST

Since liquid fertilizers can vary, even within the same analysis, always **check compatibility with herbicide(s) each time before use**. Be especially careful when using **complete** suspension or fluid fertilizers, as serious compatibility problems are more likely to occur. Commercial application equipment may improve compatibility in some instances. The following test assumes a spray volume of 25 gals./A. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure:

1. Add 1.0 pt. of fertilizer to each of 2 one-qt. jars with tight lids.
2. To **one** of the jars, add 1 /4 tsp. or 1.2 milliliters of a compatibility agent approved for this use (1 /4 tsp. is equivalent to 2.0 pts./100 gals. spray). Shake or stir gently to mix. When an adjuvant is to be used with this product, Sipcam Agro USA recommends the use of Compex®, Unite® or a Chemical Producers and Distributors Association (CPDA) certified adjuvant.
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 0.5 teaspoon or 2.5 milliliters to each jar.
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.

CROPS

COTTON – METOLACHLOR 7.8 ALONE

USE RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 1.33 pts.product/A (1.33 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 4.0 pts.product/A (4.0 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 2
- **RETREATMENT INTERVAL:** 14 days

Application: Apply this product preemergence only in Area 1* at the rate of 0.75 to 1 pt./A on sandy loams, 1 to 1.33 pts./A on *medium soils*, or 1 to 1.33 pts./A on *fine soils*. Apply this product preplant incorporated or preemergence in Area 2** at 1 pt./A on sandy loams, 1 to 1.33 pts./A on *medium soils*, or 1.33 pts./A on *fine soils*. Apply this product postemergence to cotton and preemergence to weeds at 0.75 to 1.33 pts./A according to the state rate limitations in the following **Postemergence** section below.

DO NOT use on sands and loamy sand.

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

** Area 2 = NM, OK, and TX

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

USE RESTRICTION:

- 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 this product to the soil surface at planting or after planting, but before weeds or crop emerge.

Postemergence: Apply this product broadcast over-the-top or directed to the soil surface, according to the rate and cotton height limitations listed below by state. Application before weeds emerge or after clean cultivation to remove existing weeds is necessary as this product will not control emerged weeds. This product postemergence may be applied over any previous registered herbicide treatment. In sprinkler-irrigated areas, sprinkler irrigate after application with one-half to 1 inch of water (one-half inch on *coarse-textured soils* to 1 inch on *fine-textured soils*). To incorporate this product in furrow-irrigated areas, apply this product, incorporate with a rolling cultivator or similar implement that provides uniform shallow incorporation (2 inches or less), and then irrigate. In non-irrigated areas, if at least one-half inch of rainfall does not occur within 10 days after application, cultivate with a rolling cultivator or similar implement that provides uniform shallow incorporation of this product.

VA, NC, SC, GA, FL, and AL: Apply this product at 1 to 1.33 pts./A when cotton is 3 to 6 inches tall.
TN, AR, KS, MS, MO, and LA: Apply this product at 0.75 to 1.33 pts./A when cotton is 3 to 12 inches tall.

TX, OK, NM, AZ, CA, and Clay Soils in AR: Apply this product at 1 to 1.33 pts./A when cotton is 3 to 12 inches tall, but before August 1.

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

State	Metolachlor 7.8 Multiple Applications to Cotton		
	Preplant incorporated or Preemergence Pts./A		Postemergence and Height Pts./A
MS, LA, TN, AR, KS, MO	0.75 – 1.33 (Preemergence Only)	+	0.75 – 1.33 to 3-12" cotton
TX, OK NM	1.0 – 1.33	+	1.0– 1.33 to 3-12" cotton before August 1
NC, VA	1.0 – 1.33 (Preemergence Only)	+	1.0– 1.33 to 3-12" cotton

In sprinkler-irrigated areas, sprinkler irrigate after application with one-half to 1 inch of water (one-half inch on *coarse-textured soils* to 1 inch on *fine-textured soils*) to incorporate this product. In furrow-irrigated areas, apply this product, incorporate with a rolling cultivator or similar implement that provides uniform shallow incorporation (2 inches or less), and then irrigate. In non-irrigated areas, if at least one-half inch of rainfall does not occur within 10 days after application, cultivate with a rolling cultivator or similar implement that provides uniform shallow incorporation of this product.

For best control of Yellow nutsedge and suppression of seedling Johnsongrass, apply this product preplant incorporated, preemergence, or postemergence to cotton and preemergence to weeds at the maximum rate for the soil texture, whether applied alone or in combinations. **DO NOT** apply more than a total of 2 pts./A/year on *coarse soils* or 4 pts./A of this product on *medium* and *fine soils* (**DO NOT** make tandem applications of metolachlor and s-metolachlor herbicides). These treatments may be applied over previous application of herbicides.

USE RESTRICTIONS:

- **DO NOT** graze or feed forage or fodder from cotton to livestock, or illegal residues may result.
- 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.
- 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 must not exceed the width of the bottom of the furrow;
- In furrow-planted cotton, to avoid concentration in the furrow and potential injury, **DO NOT** apply this product postemergence until after first "knifing" or cultivation to level soil surface.
- **DO NOT** apply over-the-top in fluid fertilizer or any other adjuvant, surfactant, oil, or other pesticide not specified in the cotton section of this label, or injury may occur;
- **DO NOT** apply on Taloka silt loam.
- **DO NOT** use in Gaines County, TX.

COTTON – METOLACHLOR 7.8 COMBINATIONS

USE RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 1.33 pts.product/A (1.33 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 4.0 pts.product/A (4.0 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 2
- **RETREATMENT INTERVAL:** 14 days

TANK MIXTURE WITH PROMETRYN

Metolachlor 7.8 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, **Metolachlor 7.8** + prometryn, applied preplant incorporated or preemergence, also controls the following weeds: junglerice, wild oats, annual morningglory, groundcherry, hairy nightshade, lambsquarters, malva, mustard, prickly sida (teaweed), purslane, ragweed, and shallow-germinating seedlings of cocklebur and coffeeweed. As a postemergence-directed application, prometryn provides postemergence control and residual control

of weeds on its label, while this product provides residual control of weed species on its label. This product will not control emerged weeds.

Preplant Incorporated or Preemergence: Apply **Metolachlor 7.8** + prometryn, either preplant incorporated or preemergence, using the appropriate rate from Table 1. Cotton should be planted below the zone of incorporation; i.e., at least 1 inch on *fine soils* and 1.5 inches on *coarse* and *medium soils*. If incorporated before planting, use a planter that will result in a minimum of soil disturbance.

Table 1: METOLACHLOR 7.8 + PROMETRYN – COTTON (NM, OK, TX)

Use Areas	Soil Texture	Broadcast Rates Per Acre	
		Metolachlor 7.8	Prometryn
ALL	Sand, Loamy sand	DO NOT USE	
OK, and Blacklands, Gulf Coast, and Rio Grande Valley of TX	Loams	0.85-1.33 pts.	Label rate
	Clays	1.33 pts.	Label rate
NM; High Plains, Rolling Plains, Edwards Plateau of TX; and Southwest TX	Sandy loam	0.85-1.0 pt.	Label rate
	Loams	0.85-1.33 pts.	Label rate
	Sandy clay loams	1.33 pts.	Label rate
	Other clay soils	1.33 pts.	Label rate

Postemergence-Directed (AR, AZ, CA, LA, MO, MS, NM, OK, TN, and TX): **Metolachlor 7.8** 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 application of herbicides, including this product, provided the maximum label rate of any product is not exceeded (**DO NOT** make tandem applications of metolachlor and s-metolachlor herbicides). **DO NOT** apply over-the-top of cotton or injury may occur.

Apply **Metolachlor 7.8** + prometryn in a minimum of 20 gals. of spray volume per acre. Follow the directions, limitations, and use precautions on the prometryn label when prometryn is applied as a postemergence-directed application. Refer to the directions, limitations, and precautions for use of this product under the **Cotton — Metolachlor 7.8 Alone — Postemergence** section.

USE PRECAUTIONS:

- 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,
 - a. **DO NOT** apply on sand or loamy sand soils, or in areas where water is likely to “pond” over the bed;
 - b. **DO NOT** apply in cut areas of newly leveled fields, or in areas of excess salt;
 - c. **DO NOT** apply to glandless cotton varieties; and
 - d. **DO NOT** apply on Taloka silt loam.

USE RESTRICTIONS:

- **DO NOT** use in Gaines County, TX.
- **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 restrictions.

TANK MIXTURE WITH FLUOMETURON

Metolachlor 7.8 may be applied in tank mixture with fluometuron preemergence for control of those weeds controlled by this product alone and those as listed on the fluometuron label. This combination will also control spotted spurge, hyssop spurge, nodding spurge, and prostrate spurge. Apply to the soil surface at planting or after planting, but before weeds or crop emerge, using the appropriate rates from Table 2. The tank mixture may be applied postemergence to cotton, but preemergence to weeds, or it may be applied postemergence to both cotton and broadleaf weeds for control of weeds on the fluometuron label. Apply as a directed, semi-directed, or over-the-top spray. This product will not control emerged weeds but will provide preemergence control of species on its label.

Mixing Instructions: Incompatibility may occur when tank mixing this product and fluometuron. To help overcome this condition, fill the spray tank one-quarter full with water or fluid fertilizer and start agitation, add the fluometuron and allow it to become dispersed. Add X-77® at 0.5% volume/volume final spray (4 pts./100 gals.), then add this product and finally the rest of the water or fluid fertilizer. Agitate during mixing and application to maintain a uniform suspension. **DO NOT** use fluid fertilizer as a carrier for postemergence applications.

Table 2: Metolachlor 7.8 + Fluometuron – Cotton

Soil Texture	Broadcast Rates Per Acre		
	Metolachlor 7.8 (pts.)		Fluometuron
	Area 1*	Area 2**	
Sand, Loamy sand	DO NOT USE		
Sandy loam	0.75-1.0	0.85-1.0	Label rate
Loam, Silt loam, Silt	1.0-1.33	1.0-1.33	Label rate
Fine soil	1.0-1.33	1.33	Label rate

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

** 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 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 application of herbicides, including this product, provided the maximum label rate of any product is not exceeded (**DO NOT** make tandem applications of metolachlor and s-metolachlor herbicides).

USE PRECAUTIONS

- To avoid concentration in the seed furrow, **DO NOT** make broadcast applications of this product + fluometuron to cotton planted in furrows more than 2 inches deep. Band applications may be made to cotton planted in furrows deeper than 2 inches, but band width should not exceed the width of the bottom of the furrow.
- The use of fluometuron following the use of a systemic insecticide at planting may result in crop injury.

USE RESTRICTIONS

- To avoid possible illegal residues, **DO NOT** feed treated forage or gin trash to livestock, or graze treated areas.
- **DO NOT** apply **Metolachlor 7.8** + fluometuron on sand or loamy sand soils, or in areas where water is likely to “pond” over the bed, or crop injury may occur.
- **DO NOT** use on Taloka silt loam, or crop injury may occur.
- **DO NOT** use in Gaines County, TX.

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

TANK MIXTURE OF METOLACHLOR 7.8 OR METOLACHLOR 7.8 + FLUOMETURON WITH PARAQUAT DICHLORIDE 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 dichloride or glyphosate may be added to a tank mix of either **Metolachlor 7.8** or **Metolachlor 7.8** + fluometuron. When used as directed, the paraquat dichloride 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. **Metolachlor 7.8** and **Metolachlor 7.8** + fluometuron portion of the tank mixture provides preemergence control of the weeds listed on each label, 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 **Tank Mixture with fluometuron** section.

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

Add paraquat dichloride or glyphosate at the following broadcast rates:

Paraquat dichloride: 1.5 to 2, 2 to 2.5, or 2.5 to 3 pts./A to 1 to 3, 3 to 6, or 6-inch tall weeds, respectively. Apply surfactant at 1 or 2 pts./100 gals. of spray mixture with 75% or greater or 50 to 74% nonionic active ingredient, respectively. This treatment will not control weeds taller than 6 inches.

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

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

USE RESTRICTIONS:

- **DO NOT** apply combinations containing paraquat dichloride in suspension-type liquid fertilizers, as the activity of paraquat dichloride will be reduced.
- **DO NOT** apply this product + fluometuron + glyphosate in tank mixture because of compatibility problems.
- If heavy rain occurs soon after application, crop injury may result, especially in poorly drained areas where water stands for several days, or where the seeding slit has not been properly closed.
- Refer to the fluometuron labels and the **Tank Mixture with Fluometuron** section of this label for further instructions, use precautions, and limitations.
- **DO NOT** use in Gaines County, TX.

TANK MIXTURE OF METOLACHLOR 7.8 WITH GLYPHOSATE FOR USE ON ROUNDUP READY® COTTON AND ROUNDUP READY FLEX COTTON ONLY

Metolachlor 7.8 may be tank mixed with glyphosate in water and applied postemergence over-the-top or postemergence-directed spray only to RoundUp Ready or RoundUp Ready Flex cotton or other cotton varieties or cultivars warranted as tolerant to glyphosate. This tank mixture will control emerged weeds listed on the glyphosate label and residual preemergence control of weeds listed on this label.

See the **Cotton – Metolachlor 7.8 Alone – Postemergence** section for proper rates and timing of **Metolachlor 7.8**. Also follow the glyphosate label for appropriate use rate, method of application, and restrictions of application timing. For postemergence over-the-top application, **DO NOT** add any

adjuvants, surfactants, fertilizers, or other pesticides to this tank mixture as unacceptable injury may occur.

USE RESTRICTIONS:

- **DO NOT** apply this tank mixture postemergence to any cotton variety unless it is designated glyphosate tolerant and unless the glyphosate formulation being used is registered for postemergence use in Roundup Ready Cotton or glyphosate tolerant cotton.
- Postemergence over-the-top applications of this tank mixture may cause temporary injury in the form of necrotic spotting to exposed cotton leaves, which will not affect normal plant development.
- **DO NOT** apply glyphosate postemergence over-the-top to cotton past the growth stage limit specified on the label.
- **DO NOT** use on sand or loamy sand soils in Gaines County, TX.

TANK MIXTURE OF METOLACHLOR 7.8 WITH GLUFOSINATE FOR USE ON GLUFOSINATE TOLERANT COTTON

Metolachlor 7.8 may be tank mixed with glufosinate in water and applied as a postemergence, broadcast over-the-top spray or as a postemergence-directed spray only to LibertyLink® cotton or other cotton varieties or cultivars warranted as tolerant to glufosinate. This tank mixture will control emerged weeds listed on the glufosinate label and provide residual preemergence control of weeds listed on this label. See the **Cotton – Metolachlor 7.8 Alone – Postemergence** section for proper rates and timing of **Metolachlor 7.8**. Also follow the glufosinate label for appropriate use rate, method of application, and restrictions of application timing. For postemergence over-the-top application, **DO NOT** add any adjuvants, surfactants, fertilizers, or other pesticides to this tank mixture as unacceptable injury may occur.

USE RESTRICTIONS:

- **DO NOT** apply this tank mixture postemergence to any cotton variety unless it is designated glufosinate tolerant.
- Postemergence over-the-top applications of this tank mixture may cause temporary injury in the form of necrotic spotting to exposed cotton leaves, which will not affect normal plant development.
- **DO NOT** apply glufosinate postemergence over-the-top to cotton past early bloom stage.
- **DO NOT** use on sand or loamy sand soils in Gaines County, TX.

PEANUTS – METOLACHLOR 7.8 ALONE

Apply **Metolachlor 7.8** either preplant incorporated, postplant incorporated, preemergence, or lay-by, using the appropriate rate specified below.

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

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

Lay-by: Apply **Metolachlor 7.8** to the soil immediately after the last normal cultivation. Apply this product alone, preplant incorporated, postplant incorporated, or pre-emergence, or lay-by, at a broadcast rate of 1 to 1.33 pts./A in the Southeast* and 0.85 to 1.33 pts./A in NM, OK, and TX.

*In the Southeast, use 1.33 to 2 pts./A and apply preemergence for partial control of Florida beggarweed.

USE RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 1.33 pts.product/A (1.33 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 2.0 pts.product/A (2.0 lbs.AI/A)

- **MAXIMUM NUMBER OF APPLICATIONS:** 1
- **PRE-HARVEST INTERVAL (PHI): DO NOT** apply within 90 days of harvest, or illegal residues may result.
- **Metolachlor 7.8** alone may be applied as directed after any of the following preplant incorporated herbicides when used according to their label directions : trifluralin at the labeled rate; ethalfluralin at the labeled rate; imazethapyr at the labeled rate; or pendimethalin at the labeled rate.
- **DO NOT** graze or feed Peanut forage or fodder to livestock for 30 days following application.

PEANUTS – METOLACHLOR 7.8 COMBINATIONS

USE RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 2.0 pts.product/A (2.0 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 2.0 pts.product/A (2.0 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1
- **PRE-HARVEST INTERVAL (PHI): 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 Metolachlor 7.8 and imazethapyr controls all weeds controlled by this product alone and by imazethapyr alone. Refer to the **Metolachlor 7.8 Applied Alone** section for weeds controlled by this product and to the imazethapyr label for weeds controlled by imazethapyr.

Refer to the respective labels for application methods, timing, rates, restrictions, and use precautions; and use in accordance with the most 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 **Metolachlor 7.8** alone and by ethalfluralin alone. Refer to the **Metolachlor 7.8 Applied Alone** section for weeds controlled by this product and to the ethalfluralin label for weeds controlled by ethalfluralin.

Apply **Metolachlor 7.8** + ethalfluralin preplant incorporated, using the appropriate rate from Table 3. Follow label recommended soil preparation and soil-incorporation procedures for ethalfluralin.

Table 3: Metolachlor 7.8 + Ethalfluralin – Peanuts

Soil Texture	Broadcast Rates Per Acre (pts.)			
	Southeast		NM, OK, TX	
	Metolachlor 7.8	Ethalfluralin	Metolachlor 7.8	Ethalfluralin
COARSE	1.0-1.33	Label rate	0.85-1.33	Label rate
MEDIUM	1.0-1.33	Label rate	0.85-1.33	Label rate
FINE	1.0-1.33	Label rate	0.85-1.33	Label rate

Follow all use directions, restrictions, and use precautions regarding application to peanuts on this product and ethalfluralin labels.

TANK MIXTURE WITH PENDIMETHALIN

Metolachlor 7.8 + pendimethalin applied preplant incorporated controls all weeds controlled by this product alone plus Texas panicum, field sandbur, Johnsongrass from seed, lambsquarters, kochia, annual spurge, and other species on the pendimethalin label. Apply **Metolachlor 7.8** + 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 Metolachlor 7.8 + pendimethalin preplant incorporated, using the appropriate rates from Table 4.

Table 4: Metolachlor 7.8 + Pendimethalin – Peanuts

Soil Texture	Broadcast Rates of Metolachlor 7.8 (pints per acre)			
	NM, OK, TX		Other Peanut Growing States	
	Metolachlor 7.8	Pendimethalin	Metolachlor 7.8	Pendimethalin
Sand, Loamy sand	0.85	Label rate	1.0-1.33	Label rate
Sandy loam	0.85-1.0	Label rate	1.0-1.33	Label rate
Fine soil	1.33	Label rate	1.33	Label rate

Follow all use directions, limitations, use precautions, and information regarding application to Peanuts on **Metolachlor 7.8** and pendimethalin labels.

TANK MIXTURE OR SEQUENTIALLY WITH PARAQUAT DICHLORIDE

Metolachlor 7.8 + paraquat dichloride 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 **Metolachlor 7.8 Applied Alone** section of this label. Apply 11 fl. ozs./A of paraquat dichloride with the appropriate rate of this product from the Peanuts – Metolachlor 7.8 Alone section in a minimum spray volume of 20 gals./A with ground equipment. A second application of this product + paraquat dichloride may be made 28 days after ground cracking. (Refer to the **Peanuts – Metolachlor 7.8 Combinations – Multiple Applications** section of this label for geographical areas where multiple applications are recommended.) A second paraquat dichloride 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 DICHLORIDE + BENTAZON

The addition of bentazon to **Metolachlor 7.8** + paraquat dichloride mixture will result in improved control of such problem broadleaf weeds as prickly sida, cocklebur, smartweed, and bristly starbur. **Metolachlor 7.8** + paraquat dichloride + 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 **Metolachlor 7.8 Applied Alone** section of this label. Apply the labeled rate of bentazon + the labeled rate of paraquat dichloride with the appropriate rate of this product from the **Peanuts – Metolachlor 7.8 Alone** section in a minimum spray volume of 20 gals./A with ground equipment. A second application of **Metolachlor 7.8** + paraquat dichloride + bentazon may be made 28 days after ground cracking. (Refer to the **Peanuts – Metolachlor 7.8 Combinations – Multiple Applications** section of this label for geographical areas where multiple applications are recommended.) A second paraquat dichloride + bentazon application may be made in all peanut growing areas, if needed. Refer to the respective labels and follow all directions, limitations, and restrictions for each product.

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

The addition of 2,4-DB to **Metolachlor 7.8** + paraquat dichloride mixture will result in improved control of such problem broadleaf weeds as sicklepod, morning glory, and cocklebur. **Metolachlor 7.8** + paraquat dichloride + 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 **Metolachlor 7.8 Applied Alone** section of this label. Apply the labeled rate of paraquat dichloride + the labeled rate of 2,4-DB with the appropriate rate of this product from the **Peanuts – Metolachlor 7.8 Alone** section in a minimum spray volume of 20 gals./A with ground equipment. A second application of **Metolachlor 7.8** + paraquat dichloride + 2,4-DB may be made 28 days after

ground cracking. (Refer to the **Peanuts — Metolachlor 7.8 Combinations — Multiple Applications** section of this label for geographical areas where multiple applications are recommended.) A second paraquat dichloride + 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

Metolachlor 7.8 + bentazon applied at ground cracking or sequentially will control species on the bentazon label and provide residual control of species listed in the Metolachlor 7.8 Applied Alone section of this label. Apply the labeled rate of bentazon in 20 gals./A, depending on weed species and stage of growth as specified on the bentazon label, with the appropriate rate of this product from the Peanuts – Metolachlor 7.8 Alone section. A second application of the combination may be made before peanut pegging. (Refer to the Peanuts – Metolachlor 7.8 Combinations – Multiple Applications section of this label for geographical areas where multiple applications are recommended.) A second bentazon application may be made in all peanut growing areas, if needed. Refer to the respective labels and follow all directions, limitations, and restrictions for each product.

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

Metolachlor 7.8 + bentazon + 2,4-DB applied at ground cracking or sequentially will control species on the bentazon label and on the 2,4-DB labels, especially morning glories. Apply the labeled rate of bentazon + the labeled rate of 2,4-DB in 20 gals./A, depending on weed species and stage of growth as specified on the bentazon label, with the appropriate rate of this product from the Peanuts – Metolachlor 7.8 Alone section. A second application of the combination may be made before peanut pegging. (Refer to the Peanuts – Metolachlor 7.8 Combinations – Multiple Applications section of this label for geographical areas where multiple applications are recommended.) A second bentazon + 2,4-DB application may be made in all peanut growing areas, if needed. Refer to the respective labels and follow all directions, limitations, and restrictions for each product.

TANK MIXTURE OR SEQUENTIALLY WITH BENTAZON+ACIFLUORFEN

Metolachlor 7.8 + bentazon+acifluorfen applied at ground cracking through 2 expanded tetrafoliate leaves or **Metolachlor 7.8** applied according to the directions for **Metolachlor 7.8 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 **Metolachlor 7.8 Applied Alone** section of this label. This product will not control emerged weeds. Refer to the **Peanuts – Metolachlor 7.8 Alone** section and to the bentazon+acifluorfen label and follow all directions, limitations, and restrictions for each product.

CROP GROUP 6 – LEGUME VEGETABLES (succulent and dried) – METOLACHLOR 7.8 ALONE

Crop Group 6 – Legume Vegetables (Succulent or Dried) Group – Beans, peas and lentils (includes grain lupin, sweet lupin, white lupin, white sweet lupin, field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean, adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean, Broad bean (fava bean), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean, Lentil, dwarf pea, edible-pod pea, English pea*, field pea, garden pea, green pea, snow pea, sugar snap pea, Pigeon pea, and Sword bean.)

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

USE RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 2.0 pts.product/A (2.0 lbs.AI/A)

- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 3.0 pts.product/A (3.0 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 2 (at the 1.33 lbs. AI/A rate)
- **RETREATMENT INTERVAL:** 10-14 days
- **PRE-HARVEST INTERVAL:** – 120 days (hay) and 60 days (forage)

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

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

CROP GROUP 6 LEGUME VEGETABLES (succulent and dried) – METOLACHLOR 7.8 COMBINATIONS

USE RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 2.0 pts.product/A (2.0 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 3.0 pts.product/A (3.0 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 2 (at the 1.33 lbs. AI/A rate)
- **RETREATMENT INTERVAL:** 10-14 days
- **PRE-HARVEST INTERVAL:** – 120 days (hay) and 60 days (forage)

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 **Metolachlor 7.8 Applied Alone** section of this label for weeds controlled by this product alone and to the EPTC label for weeds controlled by EPTC.

Preplant Incorporated: Follow instructions for use of this product alone under **Application Procedures**. **Sequential:** Apply EPTC alone preplant incorporated, as specified on that label. Follow with a preemergence application of this product at rates specified for this product alone, during planting (behind the planter) or after planting, but before the weeds or crop emerge.

Refer to the **Product Information** section of this label and to the EPTC label for weather, cultural practices, and all other use precautions and limitations that affect performance of these products. Apply the labeled rate of EPTC with this product as specified. On *coarse soils*, apply 0.85 pts./A of this product if organic matter content is less than 3%, or 1 pt./A if organic matter content is 3% or greater. On *medium soils*, apply 1 pt./A of this product if organic matter content is less than 3%, or 1.33 pts./A if organic matter content is 3% or greater. On *fine soils*, apply 1.33 pts./A of this product if organic matter is less than 3%, or 1.33 to 1.67 pts./A if organic matter is 3% or greater.

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

USE RESTRICTIONS

- **DO NOT** exceed the labeled rate 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)

Metolachlor 7.8 + Trifluralin tank mix applied preplant incorporated controls those weeds listed under **Metolachlor 7.8 Applied Alone** and those weeds listed for Trifluralin alone on the Trifluralin label. **Metolachlor 7.8 + 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 **Metolachlor 7.8 + 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 **Group 6 Legume Vegetables (Succulent and Dried) – Metolachlor 7.8 Alone** section of this label.

POTATOES – METOLACHLOR 7.8 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.

USE RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 2.75 pts.product/A (2.75 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 3.7 pts.product/A (3.7 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 2
- **MINIMUM RETREATMENT INTERVAL:** 14 days
- **PRE-HARVEST INTERVAL:** – Potatoes treated with this product must not be harvested 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.
- **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.
- To avoid crop injury, **DO NOT** use on sweet potatoes or yams.
- To avoid crop injury, **DO NOT** apply both as a preemergence and an incorporated treatment.
- **DO NOT** use in Kern County, CA.

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

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

After Hilling/Lay-by: Apply 1.67 pts./A of this product after hilling/at lay-by to control species sensitive to this product for remainder of the growing season. This application will not control emerged

weeds. It may be applied over a previous application of this product, but **DO NOT** apply more than 3.7 pts./A of this product in a single year.

POTATOES – METOLACHLOR 7.8 COMBINATIONS

USE RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 2.75 pts.product/A (2.75 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 3.7 pts.product/A (3.7 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 2
- **PRE-HARVEST INTERVAL:** – Potatoes treated with this product must not be harvested 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.
- **MINIMUM RETREATMENT INTERVAL:** 14 days
- **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.
- To avoid crop injury, **DO NOT** use on sweet potatoes or yams.
- To avoid crop injury, **DO NOT** apply both as a preemergence and an incorporated treatment.
- **DO NOT** use in Kern County, CA.

TANK MIXTURE WITH METRIBUZIN

In addition to those weeds controlled by **Metolachlor 7.8** alone, this product applied in tank mix combination with, or sequentially with, any of the registered metribuzin formulations, also controls the following broadleaf weeds: cocklebur*, hairy nightshade*, hemp sesbania, jimsonweed*, lambsquarters, prickly sida, ragweed, smartweed, velvetleaf, venice mallow, and wild mustard.

*Partially controlled.

Metolachlor 7.8 at 1 to 2 pts./A plus the labeled metribuzin use rate may be used preemergence through after last hilling. Apply 1 to 1.33 pts./A of this product on *coarse soils* and 1.33 to 2 pts./A on other soil textures. Within this rate range, use the lower rate on soils relatively coarse-textured or low in organic matter; use the higher rate on soils relatively fine-textured or high in organic matter. Effectiveness will be reduced if later cultural practices expose untreated soil. This product will not control emerged weeds.

Refer to the metribuzin label for precautionary statements, restrictions, application information, and weeds controlled.

USE PRECAUTIONS

- Postemergence applications to potatoes should be made only as a directed or semi-directed spray to avoid chlorosis, minor necrosis, or leaf distortion.
- To avoid crop injury, **DO NOT** use this product + metribuzin on potatoes in Kern County, CA.
- To avoid crop injury, **DO NOT** apply to sweet potatoes or yams.

USE RESTRICTIONS

- **DO NOT** use this tank mixture on muck or peat soils.
- **Pre-Harvest Interval:** Potatoes treated with this product in tank mixture with metribuzin cannot be harvested within 60 days after application, or illegal residues may result.
- **Pre-Harvest Interval:** Potatoes may not be harvested within 40 days after a lay-by application of this product, or illegal residues may result.

METOLACHLOR 7.8 + LINURON TANK MIXTURE (EAST OF ROCKY MOUNTAINS)

Metolachlor 7.8 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 5.

Table 5: Metolachlor 7.8 + Linuron – Potatoes (East of Rocky Mountains)

Soil Texture	Broadcast Rates Per Acre			
	1% to Less Than 3% Organic Matter		3-5% Organic Matter	
	Metolachlor 7.8	Linuron *	Metolachlor 7.8	Linuron *
COARSE Sandy loam	1 pt.	Labeled rate	1.33 pts.	Labeled rate
MEDIUM Loam, Silt loam, Silt	1.33 pts.	Labeled rate	1.67-2 pts.	Labeled rate

USE RESTRICTIONS

To avoid crop injury,

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

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

TANK MIXTURE WITH PENDIMETHALIN

In addition to the weeds controlled by **Metolachlor 7.8** alone, this tank mixture with pendimethalin controls such problem species as kochia, lambsquarters, purslane, annual spurge, stinging nettle, and others specified on the pendimethalin label. Apply **Metolachlor 7.8** + pendimethalin preemergence, preemergence incorporated or early postemergence according to the specific directions on the pendimethalin label, using the rates in Table 6.

Table 6: Metolachlor 7.8 + Pendimethalin – Potatoes

Soil Texture	Broadcast Rates Per Acre (pts.)	
	Less Than 3% Organic Matter	More Than 3% Organic Matter
	Metolachlor 7.8 + pendimethalin	Metolachlor 7.8 + Pendimethalin
COARSE	1.0-1.33 + Labeled rate	1.0-1.33 + Labeled rate
MEDIUM	1.33 + Labeled rate	1.33-1.67 + Labeled rate
FINE	1.33-1.67 + Labeled rate	1.67 + Labeled 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 and follow the most restrictive.

TANK MIXTURE WITH PENDIMETHALIN + EPTC

In addition to the weeds controlled by **Metolachlor 7.8** alone, this tank mixture will control those species on the pendimethalin and EPTC labels. Refer to the **Metolachlor 7.8** + pendimethalin labels for rates of those products and add EPTC at 3.5 to 7 pts./A, depending on geographical area. Refer to the respective Metolachlor 7.8, pendimethalin and EPTC labels and observe all directions, limitations, use precautions, and restrictions concerning the use of these products on potatoes and follow the most restrictive.

SAFFLOWERS – METOLACHLOR 7.8 ALONE

USE RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 1.67 pts.product/A (1.67 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 1.67 pts.product/A (1.67 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1

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

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

SORGHUM – METOLACHLOR 7.8 ALONE

USE ONLY ON SORGHUM (GRAIN OR FORAGE) SEED TREATED WITH CONCEP® OR SCREEN®

SORGHUM (GRAIN OR FORAGE) SEED TREATED WITH CONCEP® OR SCREEN® – METOLACHLOR 7.8 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 Concep or Screen.

USE RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 1.67 pts.product/A (1.67 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 1.67 pts.product/A (1.67 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1 (except when using the split application)
- If sorghum seed is not properly treated with Concep or Screen, this product will severely injure the crop.
- Under high soil moisture conditions prior to sorghum emergence, injury may occur following the use of this product. The crop will normally outgrow this effect.
- **DO NOT** use this product on sorghum grown under dry mulch tillage, or injury may occur.

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

Preplant Incorporated or Preemergence: Refer to instructions for use of **Metolachlor 7.8** under **Application Procedures**. Broadcast 1 to 1.33 pts./A of this product on *coarse soils*, 1.33 to 1.5 pts./A on *medium soils*, or 1.33 to 1.67 pts./A on *fine soils*.

SORGHUM – METOLACHLOR 7.8 COMBINATIONS

USE ONLY ON SORGHUM (GRAIN OR FORAGE) SEED TREATED WITH CONCEP® OR SCREEN®

SORGHUM (GRAIN OR FORAGE) SEED TREATED WITH CONCEP OR SCREEN – METOLACHLOR 7.8 IN COMBINATIONS

Metolachlor 7.8 tank mixtures 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 Concep or Screen.

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.

USE RESTRICTIONS

- **MAXIMUM SINGLE APPLICATION RATE:** 1.67 pts.product/A (1.67 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 1.67 pts.product/A (1.67 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1 (except when using the split application)
- Applications of this product + atrazine on highly alkaline soils or on eroded areas where calcareous subsoils are exposed may cause sorghum injury.
- If sorghum seed is not properly treated with Concep or Screen, this product + atrazine may severely injure the crop.
- Under high soil moisture conditions prior to sorghum emergence, injury may occur following the use of this product + atrazine. The crop will normally outgrow this effect.
- **DO NOT** use this product + atrazine on sorghum grown under dry mulch tillage, or injury may occur.

TANK MIXTURE WITH ATRAZINE

In addition to the weeds controlled by **Metolachlor 7.8** alone, **Metolachlor 7.8** + atrazine also controls the following broadleaf weeds when applied either preplant surface, preplant incorporated, or preemergence: cocklebur, common purslane, hairy nightshade, lambsquarters, morning glory, ragweed, smartweed, and velvetleaf.

Preplant Surface-Applied: Refer to instructions for use of this product under **Application Procedures**. For minimum-tillage or no-tillage systems only, **Metolachlor 7.8** + atrazine may be applied up to 45 days prior to planting in IA, IL, Eastern KS, MO, NE, and SD. Use only split applications for treatments made 30 to 45 days prior to planting, with two-thirds of the broadcast rate applied initially and the remaining one-third at planting. Apply 1.5 pts./A of **Metolachlor 7.8** + the labeled rate of atrazine on *medium soils* with 1.5% organic matter or greater. Apply 1.5 pts./A of **Metolachlor 7.8** + the labeled rate of atrazine on *fine soils* with less than 1.5% organic matter, or apply 1.67 pts./A of **Metolachlor 7.8** + the labeled rate of atrazine on *fine soils* with 1.5% organic matter or greater. Treatments less than 30 days prior to planting may be made either as a split or single application. Under dry conditions, irrigation after application is recommended to move **Metolachlor 7.8** + atrazine into the soil.

USE RESTRICTIONS

To avoid crop injury,

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

Preplant Incorporated or Preemergence: Refer to instructions for use of this product under **Application Procedures**. On *medium soils* with 1.5% organic matter or greater, apply 1 pt./A of **Metolachlor 7.8** + the labeled rate of atrazine. On *fine soils* with less than 1.5% organic matter, apply

1 pt./A of **Metolachlor 7.8** + the labeled rate of atrazine. On *fine* soils with 1.5% organic matter or greater, apply 1.2-1.33 pts./A of **Metolachlor 7.8** + the labeled rate of atrazine.

USE RESTRICTIONS

To avoid crop injury,

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

MINIMUM-TILLAGE OR NO-TILLAGE SYSTEMS

TANK MIXTURE OF METOLACHLOR 7.8 OR METOLACHLOR 7.8 + ATRAZINE WITH PARAQUAT DICHLORIDE, GLYPHOSATE+2,4-D, OR GLYPHOSATE

In minimum-tillage or no-tillage systems where sorghum (seed treated with Concep or Screen) is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, the contact herbicides paraquat dichloride, glyphosate+2,4-D, or glyphosate may be tank mixed with **Metolachlor 7.8** or **Metolachlor 7.8** + Atrazine. Mix with paraquat dichloride 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. **Metolachlor 7.8** or **Metolachlor 7.8** plus atrazine portion of the tank mixture provides preemergence control of the weeds listed on this label under the respective sections.

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

Application: Apply before, during, or after planting, but before sorghum emerges, at the appropriate rates listed under **Sorghum (Grain or Forage) – Metolachlor 7.8 Alone** or **– Metolachlor 7.8 in Combinations – Tank Mixture with Atrazine**, respectively. Add paraquat dichloride, glyphosate+2,4-D, or glyphosate at the following broadcast rates:

Paraquat dichloride: Use the appropriate label rate depending on the height of the weeds. Apply surfactant at 1 or 2 pts./100 gals. of spray mixture with 75% or greater or 50 to 74% nonionic active ingredient, respectively. This treatment will not control weeds taller than 6 inches.

Glyphosate+2,4-D: Use the label rate depending on weed species and size. 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 gals. of water per acre with conventional spray equipment.

SOYBEANS – METOLACHLOR 7.8 ALONE

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

USE RESTRICTIONS

- **MAXIMUM SINGLE APPLICATION RATE:** 2.5 pts./product/A (2.5 lbs.A/A)

- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 2.5 pts./product/A (2.5 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1
- **PRE-HARVEST INTERVAL (PHI):** 90 days

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

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

USE RESTRICTIONS (Preplant surface applied, preplant incorporated, preemergence)

- If a pre-plant surface, pre-plant incorporated or pre-emergence application of metolachlor products has already been applied, a postemergence application of this product cannot be used.
- **DO NOT** apply to frozen ground.

POSTEMERGENCE APPLICATIONS

Postemergence (From emergence up through the 3rd trifoliolate leaf stage)

For postemergence treatments, apply 1.0 to 1.33 pints per acre to soybeans from emergence through the 3rd trifoliolate leaf stage. This product will not control emerged weeds, 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.

Make postemergence applications at least 90 days before harvest.

USE RESTRICTIONS (Postemergence)

- **DO NOT** graze or feed treated soybean forage or soybean hay to livestock following a postemergence application of this product;
- **DO NOT** apply a postemergence application of this product if a pre-plant surface, pre-plant incorporated or pre-emergence application of metolachlor products has already been applied.

SOYBEANS – METOLACHLOR 7.8 COMBINATIONS

Preplant Incorporated or Pre-emergence

Water or fluid fertilizer may be used as carrier for **Metolachlor 7.8** in combination with metribuzin, linuron+chlorimuron-ethyl, prodiamine+isoxaben, chlorimuron-ethyl+metribuzin, imazethapyr, imazaquin, ethalfluralin, or clomazone.

USE RESTRICTIONS

For all tank mix combinations:

- **MAXIMUM SINGLE APPLICATION RATE:** 2.5 pts./product/A (2.5 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 2.5 pts./product/A (2.5 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1
- **PRE-HARVEST INTERVAL (PHI):** 90 days
- **DO NOT** apply to frozen ground.

TANK MIXTURE WITH METRIBUZIN

In addition to those weeds controlled by this product alone, **Metolachlor 7.8** + metribuzin, when applied as directed, also controls the following broadleaf weeds: cocklebur*, hairy nightshade, hemp sesbania, jimsonweed*, lambsquarters, prickly sida, ragweed, smartweed, velvetleaf, venice mallow, and wild mustard.

*Partially controlled.

Apply this product and metribuzin preplant incorporated or preemergence, using the appropriate rates from Table 7. **Preplant Incorporated or Preemergence:** Follow instructions for use of this product alone under **Application Procedures**.

Sequential: Apply this product alone **Preplant Incorporated**, as specified in Table 7 for this tank mixture. Follow with a preemergence application of metribuzin during planting (behind the planter) or after planting, but before weeds or soybeans emerge.

Refer to the metribuzin label for planting details and soybean variety restrictions.

Table 7: Metolachlor 7.8 + Metribuzin – Soybeans

Soil Texture*	Broadcast Rates Per Acre			
	0.5% to Less Than 3% Organic Matter		3% Organic Matter or Greater	
	Metolachlor 7.8	+ Metribuzin	Metolachlor 7.8	+ Metribuzin
COARSE Loamy sand (over 2% organic matter), Sandy loam	0.85-1.0 pt.	+ Labeled rate	1.0 pt.	+ Labeled rate
MEDIUM	1.0-1.33 pts.	+ Labeled rate	1.33 pts.	+ Labeled rate
FINE	1.33 pts.	+ Labeled rate	1.33-1.67 pts.	+ Labeled rate
Mississippi Delta only Silty clay, Clay	1.33 pts.	+ Labeled rate	1.33-1.67 pts.	+ Labeled rate
Muck or Peat (soils with more than 20% organic matter)	DO NOT USE			

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

USE RESTRICTIONS

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

TANK MIXTURE WITH LINURON

In addition to those weeds controlled by this product alone, **Metolachlor 7.8** + linuron, applied preemergence, also controls the following broadleaf weeds: cocklebur*, jimsonweed*, lambsquarters, morning glory*, 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 8.

USE RESTRICTIONS

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

Table 8: Metolachlor 7.8 + Linuron – Soybeans

Soil Texture*	Broadcast Rates Per Acre					
	0.5 to Less Than 3% Organic Matter			3% Organic Matter or Greater		
	Metolachlor 7.8	+	Linuron	Metolachlor 7.8	+	Linuron
COARSE**	0.85 pt.	+	Labeled rate	1.0 pt.	+	Labeled rate
MEDIUM	1.0 pt.	+	Labeled rate	1.33 pts.	+	Labeled rate
FINE	1.33 pts.	+	Labeled rate	1.33-1.67 pts.	+	Labeled rate
Muck or Peat (soils with more than 20% organic matter)	DO NOT USE					

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

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

TANK MIXTURE WITH TRIFLURALIN

Metolachlor 7.8 + trifluralin tank mix applied preplant incorporated controls those weeds listed under the **Metolachlor 7.8 Applied Alone** section and those weeds listed for trifluralin alone on the respective trifluralin label. **Metolachlor 7.8** + trifluralin may be applied by ground or by aerial equipment and incorporated up to 14 days before planting. Follow the specified procedures on the trifluralin and **Metolachlor 7.8** labels, using equipment that provides uniform 2-inch incorporation. Apply **Metolachlor 7.8** + trifluralin tank mix, using the appropriate rate from the **Soybeans – Metolachlor 7.8 Alone** section of this label and the Trifluralin Alone section of the trifluralin label for the specific soil texture/organic matter classification and weed species expected. To control DNA-resistant goosegrass* and other species on the respective labels where the soil organic matter is 3% or less, apply the rate in Table 9.

Table 9: Metolachlor 7.8 + Trifluralin – Organic Matter Content Less Than 3%

Soil Texture	Broadcast Rates Per Acre (pts.)		
	Metolachlor 7.8	Trifluralin	
	Organic Matter Less Than 3%	Organic Matter	
		Less Than 2%	2-3%
COARSE*	0.85-1.0	Labeled rate	Labeled rate
MEDIUM	1.0	Labeled rate	Labeled rate
FINE	1.33	Labeled rate	Labeled rate

* 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 – Metolachlor 7.8 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 **Metolachlor 7.8 Applied Alone** section for weeds controlled by this product and to the imazaquin label for weeds controlled by imazaquin. Refer to the imazaquin label for geographical locations where this tank mixture may be applied.

Apply **Metolachlor 7.8** + imazaquin preplant incorporated or preemergence, using rates in Table 10. Follow use directions under **Application Instructions** on the imazaquin label. For preplant incorporated applications, apply and incorporate within 30 days before planting. Observe all other use precautions and limitations on the imazaquin labels.

Table 10: Metolachlor 7.8 + Imazaquin – Soybeans

Soil Texture	Broadcast Rates Per Acre (pts.)			
	Less Than 3% Organic Matter		3% or More Organic Matter	
	Metolachlor 7.8	Imazaquin	Metolachlor 7.8	Imazaquin
COARSE	0.85	Labeled rate	1.0	Labeled rate
MEDIUM	1.0	Labeled rate	1.33	Labeled rate
FINE	1.33	Labeled rate	1.33-1.67*	Labeled rate
Muck or Peat (soils with more than 20% organic matter)	DO NOT USE			

* Use the higher rate of this product if heavy weed infestations are expected.

USE RESTRICTIONS

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

TANK MIXTURE WITH CHLORIMURON-ETHYL+METRIBUZIN

This tank mixture controls all weeds controlled by this product alone and by chlorimuron-ethyl+metribuzin alone. Refer to the **Metolachlor 7.8 Applied Alone** section for weeds controlled by this product and to the chlorimuron-ethyl+metribuzin label for weeds controlled by chlorimuron-ethyl+metribuzin.

Apply preplant incorporated or preemergence, using the appropriate rates from Table 11. **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 **Metolachlor 7.8** and chlorimuron-ethyl+metribuzin labels.

Table 11: Metolachlor 7.8 + Chlorimuron-ethyl+metribuzin – Soybeans

Soil Texture	Broadcast Rates Per Acre		
	0.5% to Less Than 3% Organic Matter	3% or More Organic Matter	
	Metolachlor 7.8	Metolachlor 7.8	chlorimuron-ethyl+metribuzin
COARSE	0.85 pt.	1.0 pt.	*Label rate
MEDIUM	1.0 pt.	1.33 pts.	* Label rate
FINE	1.33 pts.	1.33-1.67 pts.	* Label rate

*Refer to the chlorimuron-ethyl+metribuzin label for appropriate rate according to geographical location, soil and organic matter classification, and pH limitations.

USE 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 chlorimuron-ethyl+metribuzin label.

TANK MIXTURE WITH CLOMAZONE

This tank mixture controls all weeds controlled by this product alone and by clomazone alone. Refer to the **Metolachlor 7.8 Applied Alone** section for weeds controlled by **Metolachlor 7.8** and to the clomazone label for weeds controlled by clomazone.

Apply **Metolachlor 7.8** + clomazone preplant incorporated, using rates in Table 12. 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, restrictions, use precautions, and information regarding application to soybeans, and rotational restrictions on **Metolachlor 7.8** and clomazone labels.

Table 12: Metolachlor 7.8 + Clomazone – Soybeans

Soil Texture	Broadcast Rates Per Acre (pts.)			
	Metolachlor 7.8		Clomazone	
	0.5-3% Organic Matter	Greater Than 3% Organic Matter	Northern Area	Southern Area
COARSE	0.85	1.0	Label rate	Label rate
MEDIUM	1.0	1.33	Label rate	Label rate
FINE	1.33	1.33-1.67	Label rate	Label rate

TANK MIXTURE WITH ETHALFLURALIN

This tank mixture controls all weeds controlled by this product alone and by ethalfluralin alone. Refer to the **Metolachlor 7.8 Applied Alone** section for weeds controlled by **Metolachlor 7.8** and to the ethalfluralin label for weeds controlled by ethalfluralin.

Apply **Metolachlor 7.8** and ethalfluralin preplant incorporated, using the appropriate rates from Table 13.

Preplant Incorporated: Follow label recommended soil preparation and soil-incorporation procedures for ethalfluralin.

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 13: Metolachlor 7.8 + Ethalfluralin – Soybeans

Soil Texture	Broadcast Rates Per Acre (pts.)			
	Less Than 3% Organic Matter		3% or More Organic Matter	
	Metolachlor 7.8	Ethalfluralin	Metolachlor 7.8	ethalfluralin
COARSE	1.0-1.33	Label rate	1.33	Label rate
MEDIUM*	1.33-1.67	Label rate	1.33-1.67	Label rate
FINE*	1.33-1.67	Label rate	1.67-2.0	Label rate
Muck or Peat (soils with more than 20% organic matter)	DO NOT USE			

*For Eastern black nightshade on these soils, apply ethalfluralin at the label rate on *medium* and the label rate on *fine-textured soils*, and follow with 2 incorporation passes.

Follow all use directions, limitations, use precautions, and information regarding application to soybeans on the **Metolachlor 7.8** 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 **Metolachlor 7.8 Applied Alone** section for weeds controlled by **Metolachlor 7.8** and to the imazethapyr label for weeds controlled by imazethapyr. Refer to the imazethapyr label for geographical locations where this tank mixture may be applied.

Apply **Metolachlor 7.8** + imazethapyr early preplant, preplant incorporated, or preemergence after planting, using rates in Table 14. 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 the **Metolachlor 7.8** and imazethapyr labels.

Table 14: Metolachlor 7.8 + Imazethapyr – Soybeans

Soil Texture	Broadcast Rates Per Acre (pts.)		
	Less Than 3% Organic Matter	3% or More Organic Matter	
	Metolachlor 7.8	Metolachlor 7.8	Imazethapyr
COARSE	0.85	1.0	0.25
MEDIUM	1.0	1.33	0.25
FINE	1.33	1.33-1.67	0.25

Sequential: Apply this product early preplant, preplant incorporated, or preemergence after planting at 0.85 pt./A on *coarse soils* and 1 pt./A on *medium-* and *fine-textured soils*. Follow with a sequential postemergence application of imazethapyr to control emerged weeds according to the imazethapyr label. **Metolachlor 7.8** 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, CHLORIMURON-ETHYL+METRIBUZIN, IMAZETHAPYR, PLUS=PARAQUAT DICHLORIDE, 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 dichloride or glyphosate may be added to a tank mix of either **Metolachlor 7.8** + metribuzin, **Metolachlor 7.8** + imazaquin, **Metolachlor 7.8** + linuron, **Metolachlor 7.8** + chlorimuron-ethyl+metribuzin, or **Metolachlor 7.8** + imazethapyr. When used as directed, the paraquat dichloride 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. **Metolachlor 7.8** + metribuzin, imazaquin, linuron, chlorimuron-ethyl+metribuzin, portion of the tank mixture provides preemergence control of the weeds listed on this label in the tank mixture section for **Metolachlor 7.8** + metribuzin, **Metolachlor 7.8** + imazaquin, **Metolachlor 7.8** + linuron, **Metolachlor 7.8** + chlorimuron-ethyl+metribuzin, or **Metolachlor 7.8** + imazethapyr, respectively.

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

Application: Apply before, during, or after planting, but before the soybeans emerge, at their labeled rates. See additional application information below.

Paraquat dichloride: Use labeled rate of paraquat dichloride. Apply surfactant at 1 or 2 pts./100 gals. of spray mixture with 75% or greater or 50 to 74% nonionic active ingredient, respectively. This treatment will not control weeds taller than 6 inches.

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

Glyphosate: See the glyphosate label for weeds controlled, specified rates, and other use directions.

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

Metolachlor 7.8 + Metribuzin +Paraquat dichloride or Glyphosate

On *loamy sand* with over 2% organic matter, apply 1 pt./A of **Metolachlor 7.8** + the labeled rate of metribuzin. On *medium soils*, apply 1.33 pts./A of **Metolachlor 7.8** + the labeled rate of metribuzin. On *fine soils*, apply 1.33 to 1.67 pts./A of **Metolachlor 7.8** + the labeled rate of metribuzin. Use the labeled rate of paraquat dichloride or glyphosate.

USE RESTRICTIONS:

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.
- 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.

Metolachlor 7.8 + Imazaquin + Paraquat dichloride or Glyphosate

On *coarse soils*, apply 1 pt./A of **Metolachlor 7.8** + the labeled rate of Imazaquin. On *medium soils*, apply 1.33 pts./A of **Metolachlor 7.8** + the labeled rate of Imazaquin. On *fine soils*, apply 1.67 pts./A of **Metolachlor 7.8** + the labeled rate of Imazaquin. Use the labeled rate of paraquat dichloride or glyphosate.

USE RESTRICTIONS

1. **PRE-HARVEST INTERVAL: DO NOT** apply within 90 days of harvest.

2. **DO NOT** graze or feed treated soybean forage, hay, or straw to livestock, or illegal residues may result.

Metolachlor 7.8 + Linuron + Paraquat dichloride or Glyphosate

On *coarse soils**, apply 1 pt./A of **Metolachlor 7.8** + the labeled rate of linuron. On *medium soils*, apply the labeled rate of **Metolachlor 7.8** + the labeled rate of linuron. On *fine soils*, apply 1.33 to 1.67 pts./A of **Metolachlor 7.8** + the labeled rate of linuron. Use the labeled rate of paraquat dichloride or glyphosate.

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

USE RESTRICTIONS:

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

Metolachlor 7.8 + Chlorimuron-ethyl+metribuzin + Paraquat dichloride or Glyphosate

Use only where soils have 0.5 to 5% organic matter. On *coarse soils* (except sand), apply 1 pt./A of this product, on *medium soils*, apply 1.33 pts./A of this product, and on *fine soils*, apply 1.33-1.67 pts./A of this product. Refer to the chlorimuron-ethyl+metribuzin label for appropriate rate according to geographical location, soil and organic matter classification, pH limitations, and all other use directions. Use the labeled rate of paraquat dichloride or glyphosate.

USE 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 chlorimuron-ethyl+metribuzin label.

Metolachlor 7.8 + Imazethapyr + Paraquat dichloride or Glyphosate

On *coarse soils*, apply 1 pt./A of **Metolachlor 7.8** + the labeled rate of imazethapyr. On *medium soils*, apply 1.33 pts./A of **Metolachlor 7.8** + the labeled rate of imazethapyr. On *fine soils*, apply 1.67 pts./A of **Metolachlor 7.8** + the labeled rate of imazethapyr. Use the labeled rate of paraquat dichloride or glyphosate.

SOYBEANS – METOLACHLOR 7.8 COMBINATIONS

Postemergence

NOT FOR USE IN CALIFORNIA

USE RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 1.33 pts./product/A (1.33 lbs.A/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 1.33 pts./product/A (1.33 lbs.A/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1
- **PRE-HARVEST INTERVAL (PHI):** 90 days

TANK MIXTURE OF METOLACHLOR 7.8 WITH GLYPHOSATE FOR USE ON GLYPHOSATE TOLERANT SOYBEANS

This product may be tank mixed with glyphosate in water and applied postemergence over-the-top or postemergence-directed spray only up through the 3rd trifoliate leaf stage of soybean varieties or cultivars warranted as tolerant to glyphosate. This tank mixture will control emerged weeds listed on the glyphosate label and residual preemergence control of weeds listed on this label.

See the **Soybean – Metolachlor 7.8 Alone – Postemergence** section for proper rates and timing of this product. Also follow the glyphosate label for appropriate use rate, method of application, and restrictions of application timing. For postemergence over-the-top application, **DO NOT** add any adjuvants, surfactants, fertilizers, or other pesticides to this tank mixture as unacceptable injury may occur.

USE RESTRICTIONS:

- **DO NOT** apply this tank mixture postemergence to any soybean variety unless it is designated glyphosate tolerant and unless the glyphosate formulation being used is registered for postemergence use in Roundup Ready Soybeans or glyphosate tolerant soybeans.
- Following a postemergence application of this product, **DO NOT** graze or feed treated soybean forage or soybean hay to livestock.

TANK MIXTURE OF METOLACHLOR 7.8 WITH GLUFOSINATE FOR USE ON GLUFOSINATE TOLERANT SOYBEANS

This product may be tank mixed with glyphosate in water and applied postemergence over-the-top or postemergence-directed spray only up through the 3rd trifoliolate leaf stage of soybean varieties or cultivars warranted as tolerant to glufosinate. This tank mixture will control emerged weeds listed on the glufosinate label and provide residual preemergence control of weeds listed on this label.

See the **Soybean – Metolachlor 7.8 Alone – Postemergence** section for proper rates and timing of this product. Also follow the glufosinate label for appropriate use rate, method of application, and restrictions of application timing. For postemergence over-the-top application, **DO NOT** add any adjuvants, surfactants, fertilizers, or other pesticides to this tank mixture as unacceptable injury may occur.

TOMATO – METOLACHLOR 7.8 ALONE

USE RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 2.00 pts./product/A (2.00 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 2.00 pts./product/A (2.00 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1
- **PRE-HARVEST INTERVAL (PHI):** 90 days
- **DO NOT** exceed the maximum label rate for the soil texture per year.
- Apply only by ground application.

Transplanted Tomatoes:

Metolachlor 7.8 may be applied preplant incorporated or preplant before transplanting. If the latter method is used, keep soil disturbance to a minimum during transplanting. Application may also be made post-directed to transplants after the first settling rain or irrigation. When an application is made post-directed, apply in a minimum of 20 gallons of water per acre and minimum contact with tomato plants. This product will not control emerged weeds. In bedded transplanted tomatoes, apply this product preplant non-incorporated to the top of the pressed bed, as the last step, prior to laying plastic. This product may also be used to treat row-middles in bedded tomatoes, as long as the total amount of this product does not exceed the maximum allowed per crop.

Seeded Tomatoes:

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

Tomato Use Rates: ***On coarse soils:*** apply 1-1.33 pts./A if organic matter content is less than 3% or 1.33 pts./A if the organic matter is 3% or greater. ***On medium soils:*** apply 1.33-1.67 pts./A. ***On fine soils:*** apply 1.33-1.67 pts./A if organic matter content is less than 3% or 1.67-2.0 pts./A if the organic matter content is 3% or greater.

USE PRECAUTIONS:

- **DO NOT** apply to varieties or cultivars with unknown tolerance to **Metolachlor 7.8**.
- This product may damage transplants that have been weakened by any cause. To prevent damage, plant only healthy transplants. **DO NOT** plant when wet, cool, or unfavorable growing conditions exist.
- In transplanted tomatoes, if this product is applied preplant incorporated, incorporate to a depth less than the depth of transplanting, and use the lower end of the rate range for the given soil type, or damage may occur.
- For row middle applications where tomatoes are grown on sandy soils and where high soil moisture conditions can exist (i.e. low binding and high evaporation conditions), as may be found in the States of Florida, Georgia, Maryland, and Virginia, there is potential for crop injury in the form of leaf epinasty.

The risk of this type of injury can be reduced by:

- a) incorporating this product immediately following application,
- b) applying this product seven or more days before transplanting (but only after the beds have been formed),
- c) minimizing the application of this product onto the plastic of the bed, or
- d) any combination of the above.

USE RESTRICTIONS:

To avoid possible illegal residues:

- **DO NOT** exceed the maximum label rate for the soil texture per year.
- Apply only by ground application.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

STORAGE: This product may be stored at temperatures down to -30°F. For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

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:

[For Containers < 5 gallons:] Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, by incineration.

For Minibulk Containers: [for nonrefillable containers > 5 gallons] Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration.

For Bulk Containers: [For refillable containers > 5 gallons] Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. When the container is empty, replace the cap and seal all openings that have been opened during use; and return to the point of purchase, or to a designated location named at the time of purchase of this product. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting. Do not transport if this container is damaged or leaking. If the container is damaged or leaking, call CHEMTREC. If the container is damaged and leaking or material has been spilled, follow these procedures:

- Cover spill with absorbent material.
- Sweep into disposal container.
- Wash area with detergent and water and follow with clean water rinse.
- Do not allow to contaminate water supplies.
- Dispose of according to instructions.

If not returned to the point of purchase or to a designated location, clean empty container as instructed above and offer for recycling. Disposal of this container must be in compliance with state and local regulations

WARRANTY AND LIMITATION OF DAMAGES

Conditions of Sale: To the extent consistent with applicable law, Sipcam Agro USA, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with the directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to Sipcam Agro USA, Inc. Sipcam Agro USA, Inc. disclaims all other warranties, express or implied. To the extent consistent with applicable law, Sipcam Agro USA, Inc. shall not be liable for consequential, special, or indirect damages resulting from the use or handling of this product, and Sipcam Agro USA, Inc.'s sole liability and buyer's and user's exclusive remedy shall be limited to the refund of the purchase price. Buyer and user acknowledge and assume all risks and liability resulting from handling, storage and use of this product. Sipcam Agro USA, Inc. does not authorize any agent or representative to make any other warranty, guarantee or representation concerning this product.

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