

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

January 5, 2023

Blake Cowen Product Registration Manager Albaugh, LLC PO Box 2127 Valdosta, GA 31604

Subject: Registration Review Label Amendments Incorporating Mitigation Measures from

the Interim Decision for Metolachlor and the National Marine Fisheries Services' (NMFS) Biological Opinion on the Effects of Metolachlor on Pacific Salmonids

Product Name: METOLACHLOR + METRIBUZIN EC

EPA Registration Number: 42750-360

Application Date: 8/25/2021

Decision Numbers: 573335; 589295

Dear Blake Cowen:

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 Decision. The Agency has concluded that your submission is acceptable.

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

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

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

Page 2 of 2 EPA Reg. No. 42750-360 Decision No. 573335; 589295

before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Srijana Shrestha at shrestha.srijana@epa.gov.

Sincerely,

Linda Arrington, Branch Chief Risk Management and Implementation Branch 4

Pesticide Re-Evaluation Division Office of Pesticide Programs

Enclosure

	METRIBUZIN	GROUP	5	HERBICIDE
1	METOLACHLOR	GROUP	15	HERBICIDE

METOLACHLOR + METRIBUZIN EC

[Priority MTZ]

Herbicide for Control of Certain Grasses and Broadleaf Weeds in Potatoes and Soybeans

			DIE	

Metolachlor: 2-chloro- N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) acetamide	58.2%
Metribuzin: 4-Amino-6-tert-butyl-3-methylthio-1,2,4-triazin-5-one	13.8%
OTHER INGREDIENTS:	28.0%
TOTAL	100.0%

This product contains 5.25 lbs. of metolachlor and 1.25 lbs of metribuzin per gallon. Contains Petroleum Distillates. **Do not** store or use near open flame.

KEEP OUT OF REACH OF CHILDREN

CAUTION

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

FIRST AID						
 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. 						
 Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. SWALLOWED DO NOT induce vomiting unless told by a poison control center or doctor. DO NOT give anything by mouth to an unconscious person. 						
IF ON SKIN OR CLOTHING	 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. 					

HOTLINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For 24-Hour Medical Emergency Assistance (Human or Animal), or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call 1-800-424-9300

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 42750-360	EPA Est

NET CONTENTS: ____ gallons

MANUFACTURED FOR:

Albaugh, LLC 1525 NE 36th St Ankeny, IA 50021

ACCEPTED

Jan 05, 2023

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

EPA Reg. No. 42750-360

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Harmful if swallowed. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Avoid contact with eyes, skin, or clothing. Wear protective eyewear.

This product may cause skin sensitization reactions in some people.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- 1. Long sleeved shirt and long pants
- 2. Chemical resistant gloves composed of butyl rubber ≥ 14 mils
- 3. Shoes plus socks

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

ENGINEERING CONTROL STATEMENTS

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

USER SAFETY RECOMMENDATIONS

Users should:

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

PHYSICAL AND CHEMICAL HAZARDS

DO NOT mix or allow to come in contact with oxidizing agents as a hazardous chemical reaction may occur.

ENVIRONMENTAL HAZARDS

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.

GROUND WATER ADVISORY

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

water table is shallow.

Metribuzin is a chemical which can travel (seep or leach) through soil and can enter groundwater which may be used as drinking water. Metribuzin has been found in groundwater as a result of agricultural use. Users are advised not to apply metribuzin where the water table (groundwater) is close to the surface and where the soils are very permeable, i.e., well-drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

SURFACE WATER ADVISORY

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

REPORTING ECOLOGICAL INCIDENTS

To report ecological incidents, including mortality, injury, or harm to plants and animals, call 1 (800)247-8013.

MIXING/LOADING INSTRUCTIONS - Care must be taken when using this product to prevent backsiphoning into wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsates. Check-valves or anti-siphoning devices must be used on all mixing and/or irrigation equipment.

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

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

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 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 24 hours.

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:

- 1. Long sleeved shirt and long pants
- 2. Chemical resistant gloves composed of butyl rubber ≥ 14 mils
- 3. 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.

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

PRODUCT INFORMATION

Note: Tank mixtures are permitted only in those states where the tank mix partner is registered. Refer to and follow the label for each tank mix product used for precautionary statements, directions for use, geographic and other restrictions. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Do not apply under conditions which favor runoff or wind erosion of soil containing this product to nontarget areas.

To prevent off-site movement due to runoff or wind erosion:

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

Mix only enough spray solution for the required application. Ensure that the spray equipment is clean prior to use. Maintain vigorous agitation in the spray tank during mixing and during application. **Do not** allow the spray solution to sit in the spray tank overnight. Always clean the spray system rigorously after each use. Dispose of system rinsate on a previously treated area.

WEED RESISTANCE MANAGEMENT

METRIBUZIN	GROUP	5	HERBICIDE
METOLACHLOR	GROUP	15	HERBICIDE

For resistance management, please note that METOLACHLOR + METRIBUZIN EC contains both a Group 15 and a Group 5 herbicide. Any weed population may contain plants naturally resistant to Group 15 and/or Group 5

herbicides. The resistant individuals may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

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

- Rotate the use of METOLACHLOR + METRIBUZIN EC or other Group 15 and/or Group 5 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 from a different group if such use is permitted; where information on resistance in target weeds species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses
 historical information related to herbicide use and crop rotation, and that considers tillage (or other
 mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application
 method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties
 and other management practices.
- Fields should be scouted prior to application to identify the weed species present and their growth stage
 to determine if the intended application will be effective. Fields should be scouted after application to
 verify that the treatment was effective.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide-resistance include: 1) Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; 2) a spreading patch of non-controlled plants of a particular weed species; 3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance management and/or integrated weed-management recommendations for specific crops and weed biotypes.

Additional Best Management Practices include:

- Plant into weed-free fields and keep fields as weed-free as possible.
- Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action or different management practices.
- To the extent possible do not allow weed escapes to produce seeds, roots or tubers. Manage weed seeds at harvest and postharvest to prevent a buildup of the weed seed-bank.
- Prevent field-to-field and within-field movement of weed seed or vegetative propagules. Thoroughly clean plant residues from equipment before leaving fields.
- Prevent an influx of weeds into the field by managing field borders.
- Identify weeds present in the field through scouting and field history and understand their biology. The weed control program should consider all of the weeds present.
- Difficult to control weeds may require sequential applications of herbicides with differing mechanisms of action.
- Apply this herbicide at the correct timing and rate needed to control the most difficult weed in the field.
- Use a broad-spectrum soil-applied herbicide with a mechanism of action that differs from this product
 as a foundation in a weed-control program. Do not use more than two applications of this or any other
 herbicide with the same mechanism of action within a single growing season unless mixed with an
 herbicide with another mechanism of action with an overlapping spectrum for the difficult-to-control
 weeds
- If resistance is suspected, treat weed escapes with an herbicide with a different MOA or use nonchemical methods to remove escapes.

Report any incidence of non-performance of this product against a particular weed species to your Albaugh, LLC retailer or representative. If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemicals means to remove escapes, as practical, with the goal of preventing further seed production.

Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to these MOAs have been found in your region. Do not assume that each listed weed is being controlled by multiple mechanisms of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product.

MIXING PROCEDURES

METOLACHLOR + METRIBUZIN EC is a liquid that may be mixed with water or fluid fertilizer and applied as a spray. METOLACHLOR + METRIBUZIN EC may also be sprayed onto dry bulk granular fertilizer and applied with the granular fertilizer.

Dry Bulk Granular Fertilizers

Many dry bulk granular fertilizers may be impregnated or coated with METOLACHLOR + METRIBUZIN EC and used to control weeds in corn.

When applying METOLACHLOR + METRIBUZIN EC with dry bulk granular fertilizers, follow all directions for use and precautions on the METOLACHLOR + METRIBUZIN EC label 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 mixture by using any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Nozzles used to spray METOLACHLOR + METRIBUZIN EC 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 of a size similar to that of the fertilizer material being used. Generally, less than 2% by weight of absorptive material will be needed. Avoid using more than 5% absorptive material by weight.

Calculate the amount of METOLACHLOR + METRIBUZIN EC to be used by the following formula:

2,000 PINTS/ACRE pts. of METOLACHLOR + METRIBUZIN EC pts. of fertilizer per acre X METOLACHLOR + METRIBUZIN EC per ton of fertilizer

Pneumatic (Compressed Air) Application

High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer may cause fertilizer mixtures to build up or plug the distributor head, air tubes, or nozzle deflector plates. To minimize buildup, premix METOLACHLOR + METRIBUZIN EC with Exxon Aromatic 200 at a rate of 2.0-2.5 pts./gal. of METOLACHLOR + METRIBUZIN EC. 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. Consult the manufacturer's MSDS for information relating to the flammability of this solvent.

Notes: (1) Mixtures of METOLACHLOR + METRIBUZIN EC and Aromatic 200 must be used on dry fertilizer only. Poor results or crop injury may result if these mixtures are used in water or liquid fertilizer solutions for spraying applications. (2) When impregnating METOLACHLOR + METRIBUZIN EC 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 is recommended. (3) Drying agents are not recommended for use with On-The-Go

impregnation equipment.

Precautions: To avoid potential for explosion, (1) **Do not** impregnate METOLACHLOR + METRIBUZIN EC on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers. (2) **Do not** combine METOLACHLOR + METRIBUZIN EC with a single superphosphate (0-20-0) or treble superphosphate (0-46-0). (3) **Do not** use METOLACHLOR + METRIBUZIN EC 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 in order to prevent possible crop injury or injury to subsequent rotational crops. Nonuniform application may also result in unsatisfactory weed control. In areas where conventional tillage is practiced, a shallow incorporation of the mixture into the soil is needed to obtain satisfactory 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.

Precautions: (1) To help avoid rotational crop injury, make applications as early as possible, since METOLACHLOR + METRIBUZIN EC impregnated onto dry bulk granular fertilizers can be expected to last longer in the soil than when METOLACHLOR + METRIBUZIN EC is applied as a spray in water or fluid fertilizer.

Application in Water or Fluid Fertilizers

METOLACHLOR + METRIBUZIN EC Alone: Fill the spray tank 1/3 full with water or fluid fertilizer. Start the agitator and add the required amount of METOLACHLOR + METRIBUZIN EC followed by the rest of the water or fluid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform suspension.

Tank Mixtures: Fill the spray tank 1/3 full with water or fluid fertilizer. Start the agitator and add the required amounts of tank mix partners. In general, tank mix partners should be added in the following sequence: products packaged in water soluble packages, wettable powders, wettable granules (dry flowables), liquid flowables, liquids such as METOLACHLOR + METRIBUZIN EC and emulsion concentrates. Always allow each tank mix partner to fully disperse before adding the next product. Maintain sufficient agitation while adding the remainder of the water or fluid fertilizer and to ensure the formation of a uniform suspension.

Note: Water soluble packaging will not dissolve in most fluid fertilizers. If products in water soluble packaging are to be tank mixed with METOLACHLOR + METRIBUZIN EC, add the products in water soluble packaging to water only. Ensure that the water-soluble packaging is totally dissolved and the product completely dispersed before adding other tank mix partners and METOLACHLOR + METRIBUZIN EC.

Always refer to the labels of the tank mix partner products for maximum use rates, directions for use, precautionary statements, geographic and other restrictions.

Compatibility Test

Complete a jar test before tank mixing to ensure compatibility of METOLACHLOR + METRIBUZIN EC with other pesticides. The following test assumes a spray volume of 25 gals./A. For other spray volumes, make appropriate changes in the ingredients.

Note: Nitrogen solutions or complete fluid fertilizers may replace all or part of the water in the spray. Since liquid fertilizers vary, even within the same analysis, always check compatibility with pesticide(s) each time before use. Incompatibility of tank mixtures is more common with suspensions of fertilizer and pesticides. Commercial application equipment may improve compatibility in some instances. Check compatibility using this procedure:

1. Add 1.0 pt. of carrier (fertilizer or water) to each of 2 one-qt. jars with tight lids. Note: Use the same source of water that will be used for the tank mix and conduct the test at the temperature the tank mix will be

- applied.
- 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, Albaugh 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 pesticide(s) in their relative proportions based on labeled rates. If more than one pesticide 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 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 15-30 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 pesticide(s) in water before addition, or (B) add 1/2 of the compatibility agent to the fertilizer or water and the other 1/2 to the emulsifiable concentrate or flowable pesticide before addition to the mixture. If incompatibility is still observed, do not use the mixture.
- 5. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the Storage and Disposal section in this label.

APPLICATION INFORMATION

Ground Application:

Use sprayers that provide accurate and uniform application. Screens in nozzles and in suction and in-line strainers should be no finer than 50-mesh. Use a pump with capacity to: (1) maintain 35-40 psi at the nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension. Unless otherwise specified, use a minimum of 10 gals. of spray mixture per acre. Rinse sprayer thoroughly with clean water immediately after use.

For band applications, calculate amount to be applied per acre as follows:

<u>band width in inches</u> X broadcast rate = amount needed row width in inches per acre per acre of field

Center Pivot Irrigation Application

If chemigating, apply this product only through a center pivot irrigation system. **Do not** apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

DO NOT apply this product through irrigation systems connected to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. 'Public water system' means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year.

Controls for both irrigation water and pesticide injection systems must be functionally interlocked, so as to automatically terminate pesticide injection when the irrigation water pump motor stops. A person knowledgeable of the irrigation system and responsible for its operation shall be present so as to discontinue pesticide injection and make necessary adjustments, should the need arise.

The irrigation water pipeline must be fitted with a functional, automatic, quick-closing check valve to prevent the flow of treated irrigation water back toward the water source. The pipeline must also be fitted with a vacuum relief valve and low pressure drain, located between the irrigation water pump and the check valve, to prevent back-siphoning of treated irrigation water into the water source.

Always inject METOLACHLOR + METRIBUZIN EC into irrigation water after it discharges from the irrigation pump and after it passes through the check valve. Never inject pesticides into the intake line on the suction side of the pump.

Pesticide injection equipment must be fitted with a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump. Interlock this valve to the power system, so as to prevent fluid from being withdrawn from the chemical supply tank when the irrigation system is either automatically or manually turned off.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

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.

Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphram pump, or piston pump) effectively designed and constructed of materials that are chemically compatible with pesticides and capable of being fitted with a system interlock.

Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment. Apply in 1/2 to 1 inch of water. Use the lower volume of water on course textured soils and the higher volume on fine textured soils. Use of more than 1 inch of water may reduce weed control by moving the herbicide below the effective zone in the soil.

Fill chemical supply tank of injection equipment with water. Operate system for one complete revolution, measuring time required, amount of water injected, and acreage covered. Thoroughly mix the correct amount of METOLACHLOR + METRIBUZIN EC for acreage to be covered into same amount of water used during calibration and inject into system continuously for one revolution or run. Mixture in the chemical supply tank must be continuously agitated during the injection run. Shut off injection equipment after one revolution but continue to operate irrigation system until METOLACHLOR + METRIBUZIN EC has been cleared from last sprinkler head.

Caution: Where sprinkler irrigation patterns do not overlap sufficiently, unacceptable weed control may result. Where sprinkler irrigation patterns overlap excessively, crop injury may result.

Aerial Application: Apply a minimum of 1.0 gal. of water for each 1.0 gal. of this product applied per acre, but for rates below 1.0 gal./A, use in sufficient water to equal 2.0 gals./A of total spray. Avoid applications 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.

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

MANDATORY SPRAY DRIFT MANAGEMENT

AERIAL APPLICATIONS:

- **DO NOT** release spray at a height greater than 10 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 ½ swath displacement upwind at the downwind edge of the field. When the wind speed is between 11-15 miles per hour, applicators must use ¾ 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.

HANDHELD TECHNOLOGY APPLICATIONS

Take precautions to minimize spray drift.

Boomless Ground Applications:

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

Sensitive Areas

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

Cleaning Equipment after Application

Some non-labeled crops are particularly sensitive to low application rates of METOLACHLOR + METRIBUZIN EC. It is essential, therefore that the complete application system is rigorously cleaned following application of METOLACHLOR + METRIBUZIN EC and prior to use for crops not on this label.

First, flush the whole system (tank, hoses, boom and nozzles) with clean water. Follow this with a solution of 1 gallon of household ammonia in 50 gallons of water, or use a commercial spray tank cleaner. **Do not** use a chlorine (bleach) based cleaner. Fill the spray tank with the cleaning solution to ensure that all surfaces of the spray tank system are contacted with the cleaning solution and circulate this solution for at least 15 minutes until all surfaces are completely clean. Use a pressure washer, if available, to clean the inside of the spray tank, including the upper surface of the tank. Flush hoses, boom and nozzles with the cleaning solution for at least one minute. Repeat the whole cleaning process one time. Clean all screens and nozzles separately in the cleaning solution following the procedure above. Finally flush the whole system with clean water. Dispose of all wash waters according to the directions for such disposal in the Environmental Hazards section of this label.

CROP ROTATION

Table 1: Crop Rotation Intervals^{1,3}

Rotational Interval After Application of METOLACHLOR + METRIBUZIN EC ²						
4.5 Months	8 Months	12 Months	18 Months			
winter barley	corn	Asparagus	onions			
winter wheat	peas rice	cotton	sugar beets			
alfalfa	spring barley spring wheat	forage grasses lentils sainfoin sugarcane	other root crops			
		tomatoes				
		other crops not listed				
		(except root crops)				

¹ Cover crops for soil building or erosion control may be planted at any time, but do not graze or harvest for food or feed. Stand reductions may occur in some areas.

² Crop rotation intervals do not include restrictions for the tank mix partner. Refer to the label of the other product for additional restrictions.

³ Refer to the specific crop use sections for additional crop rotation precautions. **Do not** rotate to food or feed crops other than those listed on this label.

Replanting

If replanting is necessary in fields previously treated with METOLACHLOR + METRIBUZIN EC, the field may be replanted to potatoes or soybeans. Before replanting, refer to the specific crop use sections for directions restrictions and precautions.

Activation

A small amount of rainfall or irrigation is required to activate METOLACHLOR + METRIBUZIN EC following application. In areas of low rainfall, a preemergence application should be followed by light irrigation of 0.25 to 0.5 inch of water. **Do not** apply heavy irrigation immediately after application. As with many surface applied herbicides, weed control and crop tolerance may vary with rainfall and/or soil texture.

POTATOES

METOLACHLOR + METRIBUZIN EC may be used for preemergence weed control prior to or after potato emergence. METOLACHLOR + METRIBUZIN EC has some postemergence activity on weeds, but the consistency and spectrum of weed control is much better preemergence to weeds. **Do not** apply preplant incorporated due to an increased risk of crop injury.

Preemergence Applications

Apply with ground spray equipment, aerial spray equipment, or by center pivot irrigation equipment which is capable of making a uniform broadcast application. Apply after planting but before crop emergence, or apply after drag-off if this operation is part of the usual cultural practice.

Postemergence Applications

Apply post-emergence only in center pivot irrigation water, after drag-off if that is a usual cultural practice, but not closer than 60 days before harvest. Refer to the "Center Pivot Irrigation Application" section of this label for application information.

Table 2: Weeds Controlled by METOLACHLOR + METRIBUZIN EC						
C=Control S=Suspension or Erratic Control P=Poor or No Control O=No information						
(Control may range from poor to excellent)						
ANNUAL BROADLEAF WEEDS		ANNUAL GRASSES				
Black Nightshade (Solanum nigrum)	С	Barnyard Grass (Echinochioa crus-galli)	C			
Bristly Starbur (Acanthospermum hispidium)	С	Bluegrass (Poa annua)	С			
Buffalobur (Solanum rostratum)	Р	Broadleaf Signalgrass (Brachiaria platyphylla)	С			
Carpetweed (Mollugo verticillate)	С	Browntop Millet (Panicum ramosum)	P			
Cocklebur Xanthium pensylvanicum)	S	Crabgrass (Digitaria spp.)	С			
Copperleaf, Hophombeam (Acalypha ostryaefolia)	С	Crowfootgrass (Dactyloctenium aegyptum)	С			
Florida Beggarweed (Desmodium totuosum)	С	Cupgrass (Eriochloa gracillis)	Р			
Florida Pusley (Richardia scabra)	С	Foxtails (Setaria spp.)	С			
Galinsoga (Galinsoga spp.)	С	Goosegrass (Eleusine indica)	С			
Horseweed Marestail (Conyza canadensis)	0	Johnsongrass, Seedling (Sorghum halepense)	С			
Jimsonweed (Datura stramonium)	С	Junglerice (Echinochloa colonum)	С			
Knotweed (Polygonum spp.)	С	Panicum, Taxas (Panicum texanum)	Р			
Kochia (Kochia scoparia)	S	Red Rice (Oryza sativa)	С			
Lambquarters (Chenopodium spp.)	Р	Sandbur (Cenchrus spp.)	P			
Morningglory, Pitted (Ipomoea lacunose)	Р	Shattercane (Sorghum bicolor)	Р			
Morgingglory, Smallflower (Jacquemontia tamnifolia)	Р	Sorghum, Volunteer (Sorghum spp.)	P			
Morningglory, Tall (Ipomoea pupurea)	С	Spangletop (Leptochloa spp.)	Р			
Pigweeds (Amaranthus spp.)	С	Stinkgrass (Eragrostis spp.)	Р			
Prickly Sida/Teaweed (Sida spinosa)	С	Wheat, Volunteer (Triticum spp.)	Р			
Purslane (Portulaca oleracea)	С	Witchgrass (Panicum capillare)	С			
Ragweed, Common (Ambrosia artemisiifolia)	S					
Redweed (Melochia corchorifolia)	С	SEDGES				

Table 2: Weeds Controlled by METOLACHLOR + METRIBUZIN EC						
C=Control S=Suspension or Erratic Control P=Poor or No Control O=No information						
(Control may range from poor to excellent)						
ANNUAL BROADLEAF WEEDS		ANNUAL GRASSES				
Russian Thistle (Salsola kali)	С	Nutsedge, Yellow (Cyperus esculentus)	С			
Sesbania (Sesbania spp.)	С					
Shepherdspurse (Capsella bursa-pastoris)	С					
Sicklepod (Cassia obtusifolia)	С					
Smartweeds (Polygonum spp.)	С					
Spotted Spurge (Euphorbia maculata)	С					
Spurred Anoda (Anoda cristata)	С					
Sunflower (Helianthus spp.)	S					
Velvetleaf (Abutilon theophrasti)	S					
Venice Mallow (Hibiscus trionum)	С					
Wild Mustards (Brassica spp.)	С					

METOLACHLOR + METRIBUZIN EC will not provide acceptable control of triazine-resistant biotypes.

Suspension: weeds may be stunted in growth or be of reduced populations as compared to non-treated areas but control will generally not be commercially acceptable.

Application Rates

The application rates for METOLACHLOR + METRIBUZIN EC for use in potatoes are provided below. Where a rate range is given, use the lower end of the rate range on the more coarse textured soils listed within that group and/or where weed pressures are known to be light; use the high end of the rate range on the more fine textured soils listed within that group and/or where the weeds pressures are known to be heavy.

Table 3: METOLACHLOR + METRIBUZIN EC Preemergence Use Rates in Potatoes						
Soil Texture	0.5 to 3% Organic Matter Pt./A	Over 3% Organic Matter Pt./A				
COARSE ¹ (Sand, loamy sand, sandy loam)	1.5-2.0	2.0-2.4				
MEDIUM or FINE (Loam, silt loam, silt, sandy clay, sandy clay loam, silty clay, silty clay loam, clay, clay loam)	2.4-2.75	2.75-2.9				

On soils that classify as a "sand" texture **DO NOT** use more than 1.5 pt./A of METOLACHLOR + METRIBUZIN EC, or more than 0.5 lbs a.i./A of metribuzin in total, or crop injury may occur.

Table 4: METOLACHLOR + METRIBUZIN EC Postemergence Use Rates in Potatoes (for application in center pivot irrigation water only)					
Soil Texture	0.5% Organic Matter and Above Pt./A				
COARSE ¹ (Sand,loamy sand, sandy loam)	1.5				
MEDIUM or FINE (Loam, silt loam, silt, sandy clay, sandy clay					
loam, silty clay, silty clay loam, clay, clay loam)	1.5-2.2				
Crop injury may occur on soils that classify as a "sand" texture and h	ave less than 0.5% organic matter.				

PRECAUTIONS (Potatoes):

- 1. To avoid crop injury, postemergence applications should be made only on russetted or white skinned varieties of potatoes that are not early maturing. Avoid postemergence applications on Atlantic, Bellchip, Centennial, Chipbelle, Shepody and Superior varieties. Preemergence applications on these varieties may cause crop injury under adverse weather conditions, on coarse soils, under high soil pH and with higher use rates.
- 2. Potato varieties may vary in their response to a given herbicide application. When using METOLACHLOR + METRIBUZIN EC for the first time on a particular variety, always determine crop tolerance before using on a field-scale.
- 3. The planting of sensitive crops including lettuce, cole crops and cucurbits during the next growing season following application of METOLACHLOR + METRIBUZIN EC may result in injury to that crop.
- 4. Certain cereal varieties are sensitive to metribuzin (e.g. see cereal section of the Sencor 4 or Sencor DF label) and should not be planted during the next growing season unless the following cultural practices occur: a.) Potato vines left in the row as a result of harvest must be uniformly distributed over the soil surface prior to

plowing, and b.) Plow with a moldboard plow to a depth sufficient to mix the upper 8 inches of soil.

RESTRICTIONS (Potatoes):

- Two applications may be applied per year. For potatoes grown in soils with organic matter between 3% and 10%, **DO NOT** apply more than 5.1 pints (3.35 lb. a.i. metolachlor) per acre/year; and in soils with organic matter between 0.5% and 3.0% **DO NOT** apply more than 4.95 pints (3.25 lb. a.i. metolachlor) per acre/year. **DO NOT** apply more than 1.0 lb. a.i. of metribuzin per acre/year. **DO NOT** apply METOLACHLOR + METRIBUZIN EC to muck or peat soils.
- 2. **DO NOT** apply METOLACHLOR + METRIBUZIN EC postemergence if the weather in the next 3 days is predicted to be cool, wet or cloudy, as crop injury may occur.
- 3. **DO NOT** harvest within 60 days of the last METOLACHLOR + METRIBUZIN EC application.
- 4. **DO NOT** apply after June 30 in Idaho, Oregon, or Washington if the treated land will be planted to a crop other than potatoes in the fall.
- 5. **DO NOT** apply METOLACHLOR + METRIBUZIN EC to sweet potatoes or yams.
- 6. **DO NOT** apply METOLACHLOR + METRIBUZIN EC as a preplant incorporated application in potatoes, or crop injury may occur.
- 7. **DO NOT** use METOLACHLOR + METRIBUZIN EC on potatoes in Kern county California.

Tank Mixtures with Other Products Registered for Use in Potatoes

For pre-emergence applications in potatoes, METOLACHLOR + METRIBUZIN EC may be tank mixed with other pesticide products registered for use in this way and timing in potatoes. Follow the directions for use, observe the stated precautions, and abide by the limitations and restrictions on the most restrictive of the product labels. If you have no previous experience mixing these products under your conditions, perform a compatibility test before attempting large-scale mixing (see the Compatibility Test section of this label).

For post-emergence applications (center pivot irrigation applications only), i.e. where potato vines are exposed, there may be increased risk of crop injury from certain product mixtures. At this application timing, tank mix METOLACHLOR + METRIBUZIN EC only with pesticide products which allow tank mixing and post-emergence chemigation on their product label. Follow the directions for use, observe the stated precautions, and abide by the limitations and restrictions on the most restrictive of the product labels.

SOYBEAN (Except California)

METOLACHLOR + METRIBUZIN EC is a selective herbicide for the control/suppression of annual grasses and selected broadleaf weeds in soybeans. To broaden the spectrum of weeds controlled or increase residual control, METOLACHLOR + METRIBUZIN EC is recommended for use in tank mixture with or sequentially with additional registered herbicides.

METOLACHLOR + METRIBUZIN EC may be applied preplant surface, preplant incorporated, preemergence, or as a sequential application to control weeds listed on this label.

Grazing and Feeding Treated Soybean Plants

Treated soybean plants may be grazed or fed to livestock 40 days after the last application of METOLACHLOR + METRIBUZIN EC.

Rate Ranges

Where a rate range is shown, use a lower rate on soils that are coarse-textured and/or low in organic matter. Use a higher rate on soils that are relatively fine-textured and/or high in organic matter.

Replanting

If replanting is necessary in fields previously treated with METOLACHLOR + METRIBUZIN EC, the field may be replanted to soybeans. Use a minimum of tillage. **DO NOT** apply a second treatment as injury to soybeans may occur.

PRECAUTIONS (Soybeans)

Injury to soybeans or reduced weed control may occur when METOLACHLOR + METRIBUZIN EC is used under the following conditions; these conditions should be avoided wherever possible.

- When soils have a calcareous surface area or a pH of 7.5 or higher.
- Due to the sensitivity of certain soybean varieties, METOLACHLOR + METRIBUZIN EC is not recommended for use on Altona, AP 55, AP 71, Asgrow 6520, Burlison, Coker 102, Coker 156, Dassel, GL 3202, Govan, Maple Amber, NB 3665, NKS 1884, Paloma 350, Portage, Regal, Semmes, Terra-Vig 505, Terra-Vig 606, Tracy, Vansoy, and Vinton 81. If you choose to plant a newly released soybean variety, consult your seed supplier for information on its tolerance to metribuzin (an active ingredient in METOLACHLOR + METRIBUZIN EC) before using METOLACHLOR + METRIBUZIN EC.
- When applied in conjunction with soil-applied organic phosphate pesticides.
- Uneven application or improper incorporation of METOLACHLOR + METRIBUZIN EC can decrease the level of weed control and/or increase the level of crop injury.
- When applied to any soil with less than 0.5% organic matter.
- Where soil incorporation is deeper than recommended.
- When sprayers were not calibrated accurately.
- When heavy rains occur soon after application, especially in poorly drained areas where water may stand for several days.
- When soybeans are planted less than 1-1/2" deep, particularly when METOLACHLOR + METRIBUZIN EC is applied pre-emergence.
- Where high soil levels of atrazine are present.
- When using poor quality soybean seed.

Table 5: Weeds Controlled by METOLACHLOR + I			
C=Control S=Suspension or Erratic Control P=Poor or No Con	trol O	=No information (Control may	
range from poor to excellent)			
ANNUAL BROADLEAF WEEDS	ļ	ANNUAL GRASSES	
Black Nightshade (Solanum nigrum)	С	Barnyard Grass (Echinochioa crus-galli)	С
Bristly Starbur (Acanthospermum hispidum)	С	Bluegrass (Poa annua)	С
Buffalobur (Solanum rostratum)	Р	Broadleaf Signalgrass (Brachiaria platyphylla)	С
Carpetweed (Mollugo verticillata)	С	Browntop Millet (Panicum ramosum)	Р
Cocklebur (Xanthium pensylvanicum)	S	Crabgrass (Digitaria spp.)	С
Copperleaf, Hophornbeam (Acalypha ostryaefolia)	С	Crowfootgrass (Dactyloctenium aegyptum)	С
Florida Beggarweed (Desmodium tortuosum)	С	Cupgrass (Eriochloa gracillis)	Р
Florida Pusley (Richardia scabra)	С	Foxtails (Setaria spp.)	С
Galinsoga (Galinsoga spp.)	С	Goosegrass (Eleusine indica)	С
Horseweed Marestail (Conyza canadensis)	0	Johnsongrass, Seedling (Sorghum halepense)	С
Jimsonweed (Datura stramonium)	С	Junglerice (Echinochloa colonum)	С
Knotweed (Polygonum spp.)	С	Panicum, Fall (Panicum dichotomiflorum)	С
Kochia (Kochia scoparia)	S	Panicum, Texas (Panicum texanum)	Р
Lambsquarters (Chenopodium spp.)	С	Red Rice (Oryza sativa)	С
Morningglory, Ivyleaf (Ipomoea hederacea)	Р	Sandbur (Cenchrus spp.)	Р
Morningglory, Pitted (Ipomoea lacunose)	Р	Shattercane (Sorghum bicolor)	Р
Morningglory, Smallflower (Jacquemontia tamnifolia)	Р	Sorghum, Volunteer (Sorghum spp.)	Р
Morningglory, Tall (Ipomoea purpurea)	Р	Sprangletop (Leptochloa spp.)	Р
Pigweeds (Amaranthus spp.)	С	Stinkgrass (Eragrostis spp.)	Р
Prickly Sida/Teaweed (Sida spinosa)	С	Wheat, Volunteer (Triticum spp.)	Р
Purslane (Portulaca oleracea)	С	Witchgrass (Panicum capillare)	С
Ragweed, Common (Ambrosia artemisiifolia)	S		
Redweed (Melochia corchorifolia)	С	SEDGES	
Russian Thistle (Salsola kali)	С	Nutsedge, Yellow (Cyperus esculentus)	С
Sesbania (Sesbania spp.)	С		
Shepherdspurse (Capsella bursa-pastoris)	С		
Sicklepod (Cassia obtusifolia)	С		
Smartweeds (Polygonum spp.)	С		
Spotted Spurge (Euphorbia maculata)	С		
Spurred Anoda (Anoda cristata)	С		

Table 5: Weeds Controlled by METOLACHLOR + METRIBUZIN EC			
C=Control S=Suspension or Erratic Control P=Poor or No	Control O=No inf	formation (Control may	
range from poor to excellent)			
ANNUAL BROADLEAF WEEDS		ANNUAL GRASSES	
Sunflower (Helianthus spp.)	S		
Velvetleaf (Abutilon theophrasti)	S		
Venice Mallow (Hibiscus trionum)	С		
Wild Mustards (Brassica spp.)	С		

METOLACHLOR + METRIBUZIN EC will not provide acceptable control of triazine-resistant biotypes.

Suspension: weeds may be stunted in growth or be of reduced populations as compared to non-treated Areas but control will generally not be commercially acceptable.

METOLACHLOR + METRIBUZIN EC Foundation Program for Planned 2-Pass Weed Control Systems

METOLACHLOR + METRIBUZIN EC may be applied preplant incorporated or preemergence at 1.5-1.8 pt./A on all soils to reduce competition from the weeds listed in Table 5 for a 30-day period when followed by a planned postemergence weed control treatment. Recommended postemergence treatments include any product or combination of products labeled to control the specific weeds remaining in the field including glyphosate (for use only on glyphosate-tolerant soybean varieties). Follow all application directions for METOLACHLOR + METRIBUZIN EC used alone, either preplant incorporated or preemergence. For the postemergence herbicide application, consult the selected postemergence herbicide manufacturer's label for weeds controlled, weed size, application rate, additional use directions, precautions, and limitations before use.

Note: On soils with pH above 7.0, use the 1.5 pt./A rate only.

METOLACHLOR + METRIBUZIN EC in Conventional Tillage Systems

Preplant Incorporated Application

Incorporate METOLACHLOR + METRIBUZIN EC uniformly into the top 2 inches of soil within 14 days before planting using a disk, field cultivator, rolling cultivator, or similar implement. Apply METOLACHLOR + METRIBUZIN EC preplant incorporated if furrow irrigation is used or when a period of dry weather after application is expected. If soybeans are planted on beds, apply and incorporate the tank mixture after bed formation.

Preemergence Application

Rainfall (1/2 inch or more) is necessary for herbicide activation. Dry weather following preemergence application of METOLACHLOR + METRIBUZIN EC may reduce effectiveness. If weeds develop, cultivate uniformly with shallow tilling equipment such as a rotary hoe that will not damage soybeans.

For information on applying product in fluid or dry fertilizer, refer to Application in Water or Fluid Fertilizers or Impregnation onto Dry Bulk Granular Fertilizers and Application of Impregnated Dry Bulk Granular Fertilizer on this label.

Soil Texture	0.5 to 3% Organic Matter Pt./A	Over 3% Organic Matter ² Pt./A
COARSE ¹ (Loamy sand, sandy loam)	1.2-1.5 ³	1.5-1.8
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay)	1.8-2.1	2.1-2.4
FINE (Silty clay ⁴ , silty clay loamy, clay, clay loam)	2.4-2.7	2.4-3.0

¹ **DO NOT** use on sand soils. On coarse-textured soils, **DO NOT** use on loamy sand soils with less than 2% organic matter.

² For preplant incorporated application, use the lower rate.

Table 6: METOLACHLOR + METRIBUZIN EC Use Rates - Conventional Tillage Systems				
(Broadcast Rate)				
Soil Texture 0.5 to 3% Organic Matter Pt./A Over 3% Organic Matter ² Pt./A				
³ For Southern and Southeastern states, see section below In Coarse (Light) Soils ⁴ Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions				

Note: On soils with pH above 7.0, soybean injury caused by the metribuzin in METOLACHLOR + METRIBUZIN EC may occur at rates higher than 1.5 pt./A. To avoid injury, **DO NOT** use METOLACHLOR + METRIBUZIN EC at rates greater than 1.5 pt./A on soils above pH 7.0.

In Coarse (Light) Soils (Only in AL, AR, FL, GA, LA, MS, MO, NC, OK, SC, TN, TX, VA)

of the U.S. When using METOLACHLOR + METRIBUZIN EC, treat this soil as "fine-textured."

METOLACHLOR + METRIBUZIN EC may be used as a preplant incorporated or preemergence application in coarse- textured, low organic matter soils in the states listed above. Refer to the appropriate sections of this label for specific directions on use, recommendations, and restrictions. Weeds Controlled: Refer to Table 5.

Table 7: METOLACHLOR + METRIBUZIN EC Preemergence Application (Broadcast Rates)			
Soil Texture	Organic Matter	Pt/A	
COARSE ^{1,2} (Sand, loamy sand, sandy loam)	0.5% or above	1.2-2.12	
¹ Do not use on sand with less than 1% organic mat	ter.		

² Use the higher rate under heavy weed pressures and/or on soils higher in organic matter. For maximum control of sicklepod, use a preemergence application.

Note: On soils with pH above 7.0, soybean injury caused by the metribuzin in METOLACHLOR + METRIBUZIN EC may occur at rates higher than 1.5 pt./A. To avoid injury, **DO NOT** use METOLACHLOR + METRIBUZIN EC at rates greater than 1.5 pt./A on soils above Ph 7.0.

Herbicides That May Be Applied Postemergence Following METOLACHLOR + METRIBUZIN EC

If required, application of METOLACHLOR + METRIBUZIN EC alone or in tank mixture may be followed by an application of a postemergence herbicide to provide additional control of certain weeds. The following postemergence herbicides may be applied:

carfentrazone-ethyl clethodim quizalofop-p-ethyl sodium salt of bentazon chlorimuron lactofen imazethapyr cloransulam-methyl sodium salt of fomesafen fluazifop-p-ethyl fenoxaprop-p-ethyl fluazifop-p-butyl thifensulfuron qlufosinate1 sethoxydim imazamox flumiclorac imazaguin glyphosate² sodium salt of acifluorfen

¹ Use on glufosinate-tolerant soybean varieties only.

² Use on glyphosate-tolerant soybean varieties only.

Refer to the above information and the individual product labels for use directions, use rates, and special precautions/restrictions.

Burndown Weed Control

METOLACHLOR + METRIBUZIN EC can be used as part of a burndown herbicide program for control of existing vegetation prior to soybean emergence in conservation tillage (reduced-tillage/no-till) systems. METOLACHLOR + METRIBUZIN EC may be tank mixed with 2,4-D low volatile ester (LV6), or glyphosate for control of emerged weeds prior to crop emergence. METOLACHLOR + METRIBUZIN EC burndown tank mixes can be applied before planting or prior to crop emergence.

Application

METOLACHLOR + METRIBUZIN EC may be applied up to 30 days before planting or preemergence. Apply only by ground equipment when METOLACHLOR + METRIBUZIN EC is used for burndown of existing vegetation in conservation tillage systems. Use the high end of the rate range for METOLACHLOR + METRIBUZIN EC applications made 14-30 days before planting. Refer to Table 16 for rates of METOLACHLOR + METRIBUZIN EC and to the following table for rates of tank mix partners.

Table 8: Burndown Rates of Tank Mix Partners			
Product	Rate	Directions and Remarks	
2,4-D Low Volatile Ester	0.25-1 lb. a.i./A	Apply at least 7 days preplant when using 2,4-D LV6 at 0.25-0.5 lb. a.i./A and at least 30 days preplant with rates greater than 0.5 lb. a.i./A. Include crop oil concentrate (COC) at the rate of 1 gal./100 gal. of spray solution (1% v/v).	
Glyphosate	Refer to product label for use rates	Must be applied prior to crop emergence. Use the higher rates as weeds approach the maximum weed heights listed in Table 9. Apply in 10-20 gal. of water per acre. Refer to the glyphosate label for spray adjuvant recommendations. Any glyphosate formulation registered and labeled for use in soybeans may be tank mixed with METOLACHLOR + METRIBUZIN EC.	
Glyphosate	Refer to the Glyphosate label for	Follow the Directions and Remarks section above for 2,4-	
+	use rates	D low volatile ester and glyphosate, paying special attention to planting restrictions with 2,4-D low volatile ester. Refer to	
2,4-D Low Volatile Ester	+ 0.25 lb. a.i./A	the glyphosate label for spray adjuvant recommendations. Do no t use crop oil concentrate.	

PRECAUTIONS: DO NOT apply these treatments after crop emergence. Observe all precautions and limitations on the labeling of all products used in tank mixtures. Refer to the Product Information section of this label for additional information, precautions, and limitations.

Soybeans

- 1. Apply only 2,4-D low volatile ester formulations which are registered and labeled for preplant or burndown use.
- 2. **DO NOT** apply tank mixtures containing 2,4-D LV6 if wind is blowing toward desired susceptible plants (i.e., cotton, tobacco, tomato, etc.) or when wind speeds exceed 6 miles per hour. Observe all cautions and limitations of all products used in tank mixtures.

Feeding Restrictions

Soybean plants or hay treated with METOLACHLOR + METRIBUZIN EC may be grazed or fed to livestock 40 days after application. Follow the most restrictive preharvest interval of all products used in a tank mixture.

Weeds Controlled: METOLACHLOR + METRIBUZIN EC in tank mixtures with the herbicides listed in Table 8

Weeds Controlled	2,4-D – low volatile	Glyphosate	Glyphosate + 2,4-D - LV
	ester		
ANNUAL GRASSES	Maxin	num burndown he	-
Barley	_		8
Barnyard grass			6
Crabgrass spp.	-		6
oxtail spp.			8
ohnsongrass, seedling			8
Panicum, fall	Does not control		6
Sandbur, field	these species		8
Shattercane	<u> </u>		8
Wheat, volunteer	-		6
Vitchgrass		 	6
BROADLEAF	Maxin	num burndown he	
Buffalobur	-	6	6
Chickweed, common	6	6	6
Cocklebur, common	6	6	8
Dandelion, common	6 dia. ¹	2 dia. ² 6 dia. ¹	
Henbit	4	4	4
Horseweed/ marestail	6 ¹	4 ²	6
imsonweed	6	6	6
Cochia	41	4	4
adysthumb	6	6	8
ambsquarters, common	6	6	8
ettuce, prickly	6	4	6
Mallow, Venice	6	6	6
forningglory spp.	pp. 6 2		4
Austard spp.	. 6 6		8
Pennycress, field	6	6	6
Pigweed spp. (annual)	6	6	8
Ragweed, common	6	6 ²	8
Ragweed, giant	6 ¹	4 ²	6
Shepherd's-purse	6	6	6
Sida, prickly	6		
Smartweed, Pennsylvania	6	6	8
Sunflower, common	6	6	6
histle, Russian	41	2-4 ²	4
/elvetleaf	6	6	8
Vaterhemp spp.			8

METOLACHLOR + METRIBUZIN EC Use Rates for Reduced and No-Till Systems

Preplant Surface Application

METOLACHLOR + METRIBUZIN EC may be used in reduced-till and no-till systems. Applications may be made up to 30 days before planting or after planting, but before soybean emergence. Residual herbicides such as

Canopy, FirstRate, Scepter, Command, Python, and Prowl may be tank mixed for additional weed control. If weeds are present at time of application, burndown herbicides may be added to the tank mixes (see Burndown Weed Control section). Refer to the tank mix product labels for specific rates and use directions.

Table 10: METOLACHLOR + METRIBUZIN EC Use Rates for Reduced-Till and No-Till Systems (Broadcast Rates)		
Soil Texture	Pt./A 1	
COARSE ^{1,2} (Sand, loamy sand, sandy loam)	1.2-2.1	
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	2.1-3.0	
FINE ³ (silty clay, silty clay loam3, clay, clay loam)	2.7-3.6	

¹ Use low rate range for low residue level or soils with less than 3% organic matter. Use the higher rate range for high residue level or soils with greater than 3% organic matter.

METOLACHLOR + METRIBUZIN EC Sequential Application

An early preplant (surface-applied or shallow incorporated) application of METOLACHLOR + METRIBUZIN EC, followed by a preemergence application of METOLACHLOR + METRIBUZIN EC after planting but before soybean emergence, will provide more consistent control of broadleaf and grass weeds than a single application.

A sequential application will decrease the need for tillage and/or burndown herbicides for the control of existing vegetation before planting, while providing residual control of weeds after planting.

Application

An early preplant application may be made 15-30 days before planting soybeans. Follow this application with a preemergence overlay application of METOLACHLOR + METRIBUZIN EC after planting but before crop emergence. Follow directions on this label for sequential applications from 0-14 days before planting.

Where a rate range is listed, the higher rates should be used (a) in fields with a history of severe weed pressure, (b) when the time between early preplant and preemergence overlay applications approaches the maximum 30 days, (c) when the organic matter content of the soil is over 3%, and/or (d) when heavy crop residues are present on the soil surface.

When weeds exceed 1-1.5 inches in height or diameter at application, use a burndown herbicide, such as glyphosate, paraquat, or 2,4-D low volatile ester.

Weeds Controlled: In addition to weeds controlled by METOLACHLOR + METRIBUZIN EC alone, the sequential application improves control of the following annual broadleaf weeds: buffalobur, cocklebur, common ragweed, velvetleaf, and sunflower.

Table 11: METOLACHLOR + METRIBUZIN EC Sequential Application (Broadcast Rates)			
Soil Texture ¹	Early Preplant Application Pt./A		Preemergence Overlay Application Pt./A
COARSE ¹ (Sand, loamy sand, sandy loam)	1.2-1.8	followed by	0.3-0.9
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.5-2.1	followed by	0.6-1.2
FINE (silty clay, silty clay loam ³ , clay, clay loam)	1.8-2.4	followed by	$0.9 - 1.5^2$

¹ On coarse-textured soils, **do not** use on sand soils with less than 1% organic matter. However, on coarse-textured soils with a calcareous surface area or a pH of 7.5 or higher, **do not** use on sand soils with less than

² **Do not** use on sand soils. On coarse-textured soils, **do not** use on loamy sand soils with less than 2% organic matter.

³ Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using METOLACHLOR + METRIBUZIN EC, treat this soil as "fine-textured."

2% organic matter, or on loamy sand or sandy loam soils with less than 1% organic matter.

² Total not to exceed 3.9 pints of METOLACHLOR + METRIBUZIN EC per acre per use season.

³ Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using METOLACHLOR + METRIBUZIN EC, treat this soil as "fine-textured."

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store product in its original container only and away from pesticides or fertilizer, food or feed. Store in a cool, secure, dry area away from excessive heat.

In Case of Spill - In case of spill avoid contact isolate area and keep out animals and unprotected persons Confine spills. Call CHEMTREC (Transportation and spills) (800) 424 9300.

To Confine Spill - To confine spill If liquid dike surrounding area or absorb with sand cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

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

CONTAINER HANDLING:

[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, or by other procedures allowed by State and local authorities.

[For nonrefillable containers > 5 gallons]: Nonrefillable container. Do not reuse or refill this container. Triple rinse container or pressure rinse promptly after emptying.

Triple rinse as follow: 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 it 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.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ALBAUGH, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold ALBAUGH and Seller harmless for any claims relating to such factors.

ALBAUGH warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or ALBAUGH, and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, ALBAUGH MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall ALBAUGH be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ALBAUGH AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ALBAUGH OR SELLER, THE REPLACEMENT OF THE PRODUCT.

ALBAUGH and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of ALBAUGH.

All product names, logos, brands, trademarks and registered trademarks are the property of their respective owners.

120922

<u>LABEL HISTORY</u> (Not Part of Final printed Label)

File Name	Version Mark	Comment
042750-00GAN.20200414.DRAFT	041420	Revisions Initial Registration per EPA
042750-00360.20200415.MASTER	041520	Section 3 Approval
042750-00360.20200417.ABN	041720	ABN Priority MTZ
042750-00360.20210825.DRAFT	082521	EPA reg review plus NMFS BioP
042750-00360.20221209.DRAFT	120922	EPA reg review