



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

January 20, 2023

Alison Suffill  
Label Facilitator  
Avalaire, LLC  
1204 Village Market Place, #173  
Morrisville, NC 27560

Subject: Registration Review Label Amendments Incorporating Mitigation Measures from the Interim Decision for S-Metolachlor and the National Marine Fisheries Services' (NMFS) Biological Opinion on the Effects of S-Metolachlor on Pacific Salmonids  
*Product Name: Avalaire S-Moc + MTZ*  
*EPA Registration Number: 93930-47*  
*Application Date: 4/15/2021 and 8/6/2021*  
*Decision Number: 589308 and 589309*

Dear Alison Suffill:

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

This letter also addresses the label mitigation resulting from the NMFS' Biological Opinion on the effects of S-Metolachlor 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 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 Ben Tweed at [tweed.benjamin@epa.gov](mailto:tweed.benjamin@epa.gov).

Sincerely,



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

Enclosure

[Note to reviewer: [Text] in brackets denotes optional or explanatory language  
 [Note to reviewer: {Text} in braces denotes where in the final label text will appear  
**{BOOKLET FRONT PANEL LANGUAGE}**

S-METOLACHLOR	GROUP 15	HERBICIDE
METRIBUZIN	GROUP 5	HERBICIDE

Sale, use and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited.

# AVALAIRE S-MOC + MTZ [™]

[Alternate Brand Name: OdexiS MTZ]

[For control of certain grasses and broadleaf weeds in potatoes and soybeans]

ACTIVE INGREDIENTS:	(% by weight)
S- metolachlor* .....	58.2%
Metribuzin** .....	13.8%
<b>OTHER INGREDIENTS***:</b> .....	<u>28.0%</u>
<b>TOTAL</b> .....	100.0%

AVALAIRE S-MOC + MTZ is formulated as an emulsifiable concentrate (EC) containing 5.25 lb of S-metolachlor and 1.25 lb of metribuzin per gallon.

\*CAS No. 87392-12-9

\*\*CAS No. 21087-64-9

\*\*\*Contains petroleum distillates.

## KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

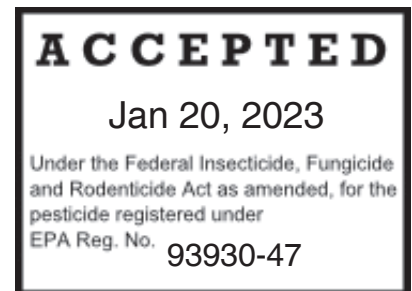
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See inside label booklet for First Aid, Precautionary Statements and Directions for Use.

EPA Reg. No.: 93930-47

EPA Est. No.:  
 Net Contents:  
 20201021a

Manufactured for:  
**Avalaire, LLC**  
 1204 Village Market Place, #173  
 Morrisville, NC 27560



## {LANGUAGE INSIDE BOOKLET}

<b>FIRST AID</b>	
<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"><li>• Immediately call a poison control center or doctor.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give <b>any</b> liquid to the person.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>Note to Physician:</b> Contains petroleum distillates. Vomiting may cause aspiration pneumonia.	
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at <b>1-844-685-9173</b> for emergency medical treatment information.	

**For Chemical Emergency:  
Spill, Leak, Fire, Exposure, or Accident,  
Call CHEMTREC Day or Night  
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)**

## **PRECAUTIONARY STATEMENTS** **Hazards to Humans and Domestic Animals** **WARNING/AVISO**

Causes substantial, but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

This product may cause skin sensitization reactions in some people.

### **Personal Protective Equipment (PPE)**

**Applicators and other handlers must wear:**

- Protective eyewear
- Coveralls over a short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, or Viton

- $\geq 14$  mils
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when mixing/loading and cleaning equipment.

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

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607(d-e)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### **USER SAFETY RECOMMENDATIONS**

#### **Users should:**

- Wash thoroughly with soap and water 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.

### **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsate.

#### **Ground Water Advisory**

S-metolachlor is known to leach through soil into ground water under certain conditions as a result of label use. This chemical may leach into ground water 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 contaminate ground water which may be used as drinking water. Metribuzin has been found in ground water as a result of agricultural use. Users are advised not to apply metribuzin where the water table (ground water) is close to the surface and where the soils are very permeable, i.e., well-drained soils such as loamy sands. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

#### **Surface Water Advisory**

S-metolachlor 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 S-metolachlor from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

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

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

**Reporting Ecological Incidents:**

To report ecological incidents, including mortality, injury, or harm to plants and animals, call 984-465-4800.

**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 ft. of perennial or intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be mixed/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 wash water, and rain water that may fall on the pad. Surface water must 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 must 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.

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, wear:

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

Sale, use and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited.

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

### **PRODUCT INFORMATION**

Observe all precautions and limitations on the labels of each product used in tank mixtures. Tank mixture partners must be registered in states where they are used. Refer to and follow the label for each tank mix product used.

#### **Restriction:**

- 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:

- 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.
- Do not apply to impervious substrates, such as paved or highly compacted surfaces.
- Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops, unless at least ½ inch of rainfall has occurred between application and the first irrigation.

### **WEED RESISTANCE MANAGEMENT**

For resistance management, please note that **AVALAIRE S-MOC + MTZ** 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 **AVALAIRE S-MOC + MTZ** 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.
- 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 an influx of weeds into the field by managing field borders.

Report any incidence of non-performance of this product against a particular weed species to your Avalaire, LLC retailer, representative or call 984-465-4754.

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 ingredient in this product.

#### **Mixing Instructions**

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean the spray equipment before using **AVALAIRE S-MOC + MTZ**. Vigorous agitation is necessary to maintain uniformity of the spray mixture. Maintain maximum agitation throughout the spraying operation. Do not allow spray mixture to stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

#### **Application in Water or Fluid Fertilizers**

**AVALAIRE S-MOC + MTZ Alone:** Add ½ of the required amount of water or fluid fertilizer to the spray or mixing tank. With the agitator running, add **AVALAIRE S-MOC + MTZ** into the spray tank. Continue agitation while adding the



remainder of the water or fluid fertilizer. Begin application of the spray solution after the **AVALAIRE S-MOC + MTZ** has completely dispersed in the water or fluid fertilizer. Maintain agitation until all of the mixture has been applied. **AVALAIRE S-MOC + MTZ + Tank Mixtures:** Add ½ of the required amount of water or fluid fertilizer to the mix tank. Start the agitator running before adding any tank mix partners. In general, tank mix partners should be added in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables), liquid flowables, liquids such as **AVALAIRE S-MOC + MTZ**, and emulsifiable concentrates. Always allow each tank mix partner to become fully dispersed before adding the next product.

Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all of the mixture has been applied.

(1) When using **AVALAIRE S-MOC + MTZ** in tank mixtures, add all products in water-soluble packaging to the tank and mix with plain water before any other tank mix partner, including **AVALAIRE S-MOC + MTZ**. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank. (2) Water-soluble packets will not properly dissolve in most spray solutions that contain fluid fertilizers.

It is the pesticide user's responsibility to ensure that all products in the listed mixtures 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 exceed any label dosage rate. The most restrictive label precautions and limitations must be followed.

**AVALAIRE S-MOC + MTZ** is compatible with most common tank mix partners. However, the physical compatibility of **AVALAIRE S-MOC + MTZ** with tank mix partners should be tested before use. To determine the physical compatibility of **AVALAIRE S-MOC + MTZ** with other products, use a jar test, as described below.

#### **Compatibility Test**

A jar test is recommended before tank mixing to ensure compatibility of **AVALAIRE S-MOC + MTZ** with other pesticides. The following test assumes a spray volume of 25 gal./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. Because liquid fertilizers vary, even within the same analysis, **always check compatibility with pesticide(s) before use.** Incompatibility of tank mixtures is more common with suspensions of fertilizer and pesticides.

#### **Test 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 ¼ tsp. or 1.2 milliliters of a compatibility agent approved for this use (tsp. is equivalent to 2.0 pt./100 gal. spray). Shake or stir gently to mix.
3. To both jars, add the appropriate amount of pesticide(s) in their relative proportions based on listed label rates. If more than one pesticide is used, add them separately with dry pesticides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix.
4. After adding all ingredients, put lids on and tighten, and invert each jar ten 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 two 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 half the compatibility agent to the fertilizer or water and the other half 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.

**Ground Application:** Apply **AVALAIRE S-MOC + MTZ** alone or in tank mixtures by ground equipment in a minimum of 10 gallons of spray mixture per acre, unless otherwise specified.

[Optional] [For certain ground application equipment approved by Avalaire, LLC, apply in a minimum of 2 gallons of spray mixture per acre. Contact your local Avalaire representative for a list of approved equipment].

Use sprayers that provide accurate and uniform application. Calibrate the sprayer before use at the beginning of the season. For **AVALAIRE S-MOC + MTZ** tank mixtures with wettable powder or dry flowable formulations, screens and strainers should be no finer than 50-mesh.

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

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

#### **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, 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**

- 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.
- 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 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.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 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.
- Do not apply when wind speed favors drift beyond the area intended for treatment.
- Prepare a mixture with a minimum of 1 part 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.
- Meter into irrigation water during entire period of water application.
- Apply in ½-1 inch of water. Use the lower water volume (½ 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.

Precaution 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.

**Aerial Application:** Apply **AVALAIRE S-MOC + MTZ** in water using a minimum spray volume of 2 gal./A. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. Make applications at a maximum height of 10 ft. above the crop with low-drift nozzles at a maximum pressure of 40 psi.

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.

## 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.

**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.

**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.

**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.

**Sensitive Areas**

Only apply **AVALAIRE S-MOC + MTZ** 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 areas).

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.

**Cleaning Equipment After Application**

Because some non-labeled crops are sensitive to low rates of **AVALAIRE S-MOC + MTZ**, special attention must be given to cleaning equipment before spraying a crop other than those registered for use and on this label. Mix only as much spray solution as needed.

Immediately after spraying, clean equipment thoroughly using the following procedure:

1. Flush tank, hoses, boom, and nozzles with clean water.
2. Prepare a cleaning solution of one gal. of household ammonia per 50 gal. of water. Many commercial spray tank cleaners may be used as well. Consult your Avalaire representative for a partial listing of approved tank cleaners and more information about proper tank cleaning procedures. Do not use chlorine-based cleaners such as Clorox®.
3. When available, use a pressure washer to clean the inside of the spray tank with this solution. Take care to wash all parts of the tank, including the inside top surface. Completely fill the sprayer with the cleaning

solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly re-circulate the cleaning solution for **at least 15 minutes**. All visible deposits must be removed from the spraying system.

4. Flush hoses, spray lines, and nozzles for at least one minute with the cleaning solution.
5. Dispose of rinsate from steps 1-3 as described under the **Storage and Disposal** section.
6. Repeat steps 2-5.
7. Remove nozzles, screens, and strainers and clean separately in the ammonia cleaning solution after completing the above procedures.
8. Rinse the complete spraying system with clean water.

#### **Impregnation Onto Dry Bulk Granular Fertilizers**

Many dry bulk granular fertilizers may be impregnated or coated with **AVALAIRE S-MOC + MTZ** and used to control weeds. When applying **AVALAIRE S-MOC + MTZ** with dry bulk fertilizers, follow all directions for use and precautions on the **AVALAIRE S-MOC + MTZ** label regarding target crops, rates per acre, soil texture, application methods, and rotational crops.

Complying with all individual state regulations relating to dry bulk granular fertilizer blending, registration, labeling, and application is 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 **AVALAIRE S-MOC + MTZ** onto the fertilizer must be spaced to provide uniform spray coverage. Take care to aim the spray onto the fertilizer only, avoiding the walls of the blender.

If the herbicide/fertilizer mixture is too wet, add a highly absorptive material, such as Agsorb® FG or Celatom MP-79®, or similar granular clay or diatomaceous earth materials, to obtain a dry, free-flowing mixture. Add absorptive materials 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 materials 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 **AVALAIRE S-MOC + MTZ** to be used by the following formula:

$$\frac{2,000}{\text{Lbs. of fertilizer per acre}} \times \text{pt. of AVALAIRE S-MOC + MTZ per acre} = \text{pt. of AVALAIRE S-MOC + MTZ per ton of fertilizer}$$

#### **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 **AVALAIRE S-MOC + MTZ** with Exxon Aromatic 200 at a rate of 2.0-2.5 pt./gal. of **AVALAIRE S-MOC + MTZ**. Aromatic 200 is a noncombustible/nonflammable petroleum product. Aromatic 200 may be used in either a fertilizer blender or through direct injection systems. Drying agents should not be used when using Aromatic 200.

**Restrictions:** (1) Mixtures of **AVALAIRE S-MOC + MTZ** 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 **AVALAIRE S-MOC + MTZ** in a blender before application, a drier mixture can be obtained by substituting a drying agent for Aromatic 200. The use of Agsorb FG or another drying agent 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 **AVALAIRE S-MOC + MTZ** on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers. (2) Do not combine **AVALAIRE S-MOC + MTZ** with a single superphosphate (1-20-0) or treble superphosphate (0-46-0). (3) Do not use **AVALAIRE S-MOC + MTZ** on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

**Application of Impregnated Dry Bulk Granular Fertilizer**

Apply 200-700 lb. 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 to subsequent rotational crops. 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 is recommended 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: To help avoid rotational crop injury, make applications as early as possible, since **AVALAIRE S-MOC + MTZ** impregnated onto dry bulk fertilizers can be expected to last longer in the soil than **AVALAIRE S-MOC + MTZ** applied as a spray in water or fluid fertilizer.

**Table 1: Crop Rotation Intervals** <sup>1,3</sup>

Rotational Interval After Application of <b>AVALAIRE S-MOC + MTZ</b> <sup>2</sup>				
4 months	4.5 months	8 months	12 months	18 months
Corn	Winter Barley Winter Wheat Alfalfa	Peas Rice Spring Barley Spring Wheat	Asparagus Cotton Forage Grasses Lentils Sainfoin Sugarcane Tomatoes Other Crops not listed (except root crops)	Onions Sugar Beets and Other Root Crops

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

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

<sup>3</sup> Refer to the specific crop use sections for additional crop rotation precautions.

**Replanting**

If replanting is necessary in fields previously treated with **AVALAIRE S-MOC + MTZ**, the field may be replanted to soybeans or potatoes. Before replanting, refer to the specific crop use sections for precautions and restrictions.

**Activation**

A small amount of rainfall or irrigation is required to activate **AVALAIRE S-MOC + MTZ** following application. In areas of low rainfall, follow a preemergence application with light irrigation of ¼ to ½ 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[\*]

[\*][NOT FOR USE IN CALIFORNIA]

**AVALAIRE S-MOC + MTZ** may be used for preemergence weed control prior to or after potato emergence. **AVALAIRE S-MOC + MTZ** has some postemergence activity on weeds, but the consistency and spectrum of weed control is much better preemergence to weeds.

Preplant incorporated applications are not recommended 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 postemergence 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 AVALAIRE S-MOC + MTZ**

Annual Broadleaves*		
Anoda, spurred	Lambsquarters, common	Redweed
Beggarweed, Florida	Lettuce, prickly	<i>Sesbania</i> spp.
Carpetweed	Mallow, Venice	Shepherd’s-purse
Chickweed, common	Mustard spp.	Sicklepod
Copperleaf, hophornbeam	Nightshade, black	Sida, prickly/teaweed
<i>Galinsoga</i> spp.	Pennycress, field	Smartweed, Pennsylvania
Henbit	Pepperweed, Virginia	Spurge, spotted
Jimsonweed	Pigweed spp.	Starbur, bristly
Knotweed spp.	Purslane, common	Thistle, Russian
Ladysthumb	Pusley, Florida	Waterhemp spp.
Annual Grasses		
Barnyardgrass	Goosegrass	
Bluegrass, annual	Junglerice	
Crabgrass spp.	Panicum, fall	
Crowfootgrass	Rice, red	
Cupgrass, prairie	Signalgrass, broadleaf	
Cupgrass, southwestern	Witchgrass	
Foxtail spp.		
Segdes		
Yellow nutsedge		

**AVALAIRE S-MOC + MTZ** will provide suppression\*\* of the following broadleaf weeds (except triazine-resistant broadleaf biotypes): cocklebur, common ragweed, kochia, velvetleaf, hairy nightshade and common sunflower and grasses such as seedling johnsongrass, Texas panicum, sandbur spp., shattercane, and the volunteer crops: barley, sorghum, and wheat.

\*Except triazine-resistant biotypes other than *Galinsoga* spp., black nightshade, pigweed spp. and waterhemp spp.

\*\*Suppression means significant activity, but not always at a level considered acceptable for commercial weed



control.

### Application Rates

The application rates for **AVALAIRE S-MOC + MTZ** 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: AVALAIRE S-MOC + MTZ Preemergence Use Rates in Potatoes**

Soil Texture	0.5 to 3% Organic Matter Pt./A	Over 3% Organic Matter Pt./A
COARSE <sup>1</sup> (Sand, loamy sand, sandy loam)	1.5-2.0 (0.98-1.31 lb S-metolachlor, 0.23-0.31 lb metribuzin)	2.0-2.4 (1.31-1.58 lb S-metolachlor, 0.31-0.38 lb metribuzin)
MEDIUM or FINE (Loam, silt loam, silt, sandy clay, sandy clay loam, silty clay, silty clay loam, clay, clay loam)	2.4-2.75 (1.58-1.80 lb S-metolachlor, 0.38-0.43 lb metribuzin)	2.75-2.9 (1.80-1.90 lb S-metolachlor, 0.43-0.45 lb metribuzin)

<sup>1</sup> On soils that classify as a “sand” texture do not use more than 1.5 pt./A of **AVALAIRE S-MOC + MTZ**, or more than 0.5 lb. a.i./A of metribuzin in total, or crop injury may occur.

**Table 4: AVALAIRE S-MOC + MTZ Postemergence Use Rates in Potatoes (for application in center pivot irrigation water only)**

Soil Texture	0.5% Organic Matter and Above Pt./A
COARSE <sup>1</sup> (Sand, loamy sand, sandy loam)	1.5 (0.98 lb S-metolachlor, 0.23 lb metribuzin)
MEDIUM or FINE (Loam, silt loam, silt, sandy clay, sandy clay loam, silty clay, silty clay loam, clay, clay loam)	1.5-2.2 (0.98-1.44 lb S-metolachlor, 0.23-0.34 lb metribuzin)

<sup>1</sup> Crop injury may occur on soils that classify as a “sand” texture and have less than 0.5% organic matter.

### Restrictions:

- 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. S-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. S-metolachlor) per acre/year. Do not apply more than 1.0 lb. a.i. of metribuzin per acre/year. **AVALAIRE S-MOC + MTZ** is not recommended for application to muck or peat soils.
- Do not apply **AVALAIRE S-MOC + MTZ** postemergence if the weather in the next 3 days is predicted to be cool, wet or cloudy, as crop injury may occur.
- Do not harvest within 60 days of the last **AVALAIRE S-MOC + MTZ** application.
- 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.
- Do not apply **AVALAIRE S-MOC + MTZ** to sweet potatoes or yams.

### Precautions:

- To avoid crop injury, make postemergence applications only on russeted 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 **AVALAIRE S-MOC + MTZ** for the first time on a particular variety, always determine crop tolerance before using on a field-scale.
3. The planting of sensitive crops such as lettuce, cole crops and cucurbits during the next growing season following application of **AVALAIRE S-MOC + MTZ** may result in injury to that crop.
4. Certain cereal varieties are sensitive to metribuzin 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.
5. Do not apply **AVALAIRE S-MOC + MTZ** as a preplant incorporated application in potatoes, or crop injury may occur.

#### **Tank Mixtures With Other Products Registered for Use in Potatoes**

For preemergence applications in potatoes, **AVALAIRE S-MOC + MTZ** 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 postemergence 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 **AVALAIRE S-MOC + MTZ** only with pesticide products which allow tank mixing and postemergence 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.

#### **SOYBEANS [\*]**

**[\*][NOT FOR USE IN CALIFORNIA]**

**AVALAIRE S-MOC + MTZ** 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**

##### **Restriction:**

Treated soybean plants may be grazed or fed to livestock 40 days after the last application of **AVALAIRE S-MOC + MTZ**.

##### **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 **AVALAIRE S-MOC + MTZ**, the field may be replanted to soybeans. A minimum of tillage is recommended. Do not apply a second treatment as injury to soybeans may occur.

**Precautions (Soybeans)**

Injury to soybeans or reduced weed control may occur when **AVALAIRE S-MOC + MTZ** 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, **AVALAIRE S-MOC + MTZ** 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 **AVALAIRE S-MOC + MTZ**) before using **AVALAIRE S-MOC + MTZ**.
- When applied in conjunction with soil-applied organic phosphate pesticides.
- Uneven application or improper incorporation of **AVALAIRE S-MOC + MTZ** 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 1-½” deep, particularly when **AVALAIRE S-MOC + MTZ** is applied preemergence.
- Where high soil levels of atrazine are present.
- When using poor quality soybean seed.

**AVALAIRE S-MOC + MTZ**, when applied as directed, will control the following weeds.

**Table 5: Weeds Controlled by AVALAIRE S-MOC + MTZ**

<b>Annual Broadleaves*</b>		
Anoda, spurred	Lambsquarters, common	Redweed
Beggarweed, Florida	Lettuce, prickly	<i>Sesbania</i> spp.
Carpetweed	Mallow, Venice	Shepherd’s-purse
Chickweed, common	Mustard spp.	Sicklepod
Copperleaf, hophornbeam	Nightshade, black	Sida, prickly/teaweed
<i>Galinsoga</i> spp.	Pennycress, field	Smartweed, Pennsylvania
Henbit	Pepperweed, Virginia	Spurge, spotted
Jimsonweed	Pigweed spp.	Starbur, bristly
Knotweed spp.	Purslane, common	Thistle, Russian
Kochia	Pusley, Florida	Waterhemp spp.
Ladysthumb		

Annual Grasses		
Barnyardgrass	Goosegrass	
Bluegrass, annual	Junglerice	
Crabgrass spp.	Panicum, fall	
Crowfootgrass	Rice, red	
Cupgrass, prairie	Signalgrass, broadleaf	
Cupgrass, southwestern	Witchgrass	
Foxtail spp.		

**AVALAIRE S-MOC + MTZ** will provide suppression\*\* of cocklebur, common ragweed, seedling johnsongrass, velvetleaf, hairy nightshade, yellow nutsedge, Texas panicum, sandbur spp., shattercane, common sunflower, and the volunteer crops barley, sorghum, and wheat.

\*Except triazine-resistant biotypes other than *Galinsoga* spp., black nightshade, pigweed spp. and waterhemp spp.

\*\*Suppression means significant activity, but not always at a level considered acceptable for commercial weed control.

#### **AVALAIRE S-MOC + MTZ Foundation Program for Planned 2-Pass Weed Control Systems**

**AVALAIRE S-MOC + MTZ** may be applied preplant incorporated or preemergence at 1.5-1.8 pt./A (0.98-1.18 lb S-metolachlor/A, 0.23-0.28 lb metribuzin/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. Permitted postemergence treatments include any product or combination of products labeled to control the specific weeds remaining in the field including Roundup® (glyphosate) or Touchdown® (glyphosate) brands (for use only on Roundup Ready® or glyphosate resistant soybean varieties). Follow all application directions for **AVALAIRE S-MOC + MTZ** 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.

**Restriction:** On soils with pH above 7.0, use the 1.5 pt./A (0.98 lb S-metolachlor/A, 0.23 lb metribuzin/A) rate only.

#### **AVALAIRE S-MOC + MTZ in Conventional Tillage Systems Preplant Incorporated Application**

Incorporate **AVALAIRE S-MOC + MTZ** uniformly into the top 2 inches of soil within 14 days before planting using a disk, field cultivator, rolling cultivator, or similar implement. Apply **AVALAIRE S-MOC + MTZ** 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**

Dry weather following preemergence application of **AVALAIRE S-MOC + MTZ** 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.

**Table 6: AVALAIRE S-MOC + MTZ Use Rates - Conventional Tillage Systems (Broadcast Rate)**

Soil Texture	0.5 to 3% Organic Matter Pt./A	Over 3% Organic Matter <sup>2</sup> Pt./A
COARSE <sup>1</sup> (Sand, loamy sand, sandy loam)	1.2-1.5 <sup>3</sup> (0.79-0.98 lb S-metolachlor, 0.19-0.23 lb metribuzin)	1.5-1.8 (0.98-1.18 lb S-metolachlor, 0.23-0.28 lb metribuzin)
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.8-2.1 (1.18-1.38 lb S-metolachlor, 0.28-0.33 lb metribuzin)	2.1-2.4 (1.38-1.58 lb S-metolachlor, 0.33-0.38 lb metribuzin)

FINE (silty clay, silty clay loam <sup>4</sup> , clay, clay loam)	2.4-2.7 (1.58-1.77 lb S-metolachlor, 0.38-0.42 lb metribuzin)	2.4-3.0 (1.58-1.97 lb S-metolachlor, 0.38-0.47 lb metribuzin)
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<sup>1</sup> Do not use on sand soils. On coarse-textured soils, do not use on loamy sand soils with less than 2% organic matter.

<sup>2</sup> For preplant incorporated application, use the lower rate.

<sup>3</sup> For Southern and Southeastern states, see section below **In Coarse (Light) Soils**

<sup>4</sup> Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **AVALAIRE S-MOC + MTZ**, treat this soil as “fine- textured.”

**Restrictions:** On soils with pH above 7.0, soybean injury caused by the metribuzin in **AVALAIRE S-MOC + MTZ** may occur at rates higher than 1.5 pt./A (0.98 lb S-metolachlor/A, 0.23 lb metribuzin/A). To avoid injury, do not use **AVALAIRE S-MOC + MTZ** at rates greater than 1.5 pt./A (0.98 lb S-metolachlor/A, 0.23 lb metribuzin/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)

**AVALAIRE S-MOC + MTZ** may be applied 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, precautions, and restrictions.

**Weeds Controlled:** Refer to Table 5.

**Table 7: AVALAIRE S-MOC + MTZ Preemergence Application (Broadcast Rates)**

Soil Texture	Organic Matter	AVALAIRE S-MOC + MTZ (Pt./A)
COARSE (Sand <sup>1</sup> , loamy sand, sandy loam)	0.5% or above	1.2-2.1 (0.79-1.38 lb S-metolachlor, 0.19-0.33 lb metribuzin)

<sup>1</sup> Do not use on sand with less than 1% organic matter.

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.

**Restrictions:** On soils with pH above 7.0, soybean injury caused by the metribuzin in **AVALAIRE S-MOC + MTZ** may occur at rates higher than 1.5 pt./A (0.98 lb S-metolachlor/A, 0.23 lb metribuzin/A). To avoid injury, do not use **AVALAIRE S-MOC + MTZ** at rates greater than 1.5 pt./A (0.98 lb S-metolachlor/A, 0.23 lb metribuzin/A) on soils above pH 7.0.

#### **AVALAIRE S-MOC + MTZ Plus JaRaka™ WDG (flumetsulam, EPA Reg. No. 91234-116) or Python® 80 WDG (flumetsulam, EPA Reg. No. 62719-277) Tank Mix Application**

**AVALAIRE S-MOC + MTZ** may be applied with JaRaka WDG (flumetsulam) or Python 80 WDG (flumetsulam) preplant surface, preplant incorporated, or preemergence for the control of certain broadleaf weeds and grasses in soybeans. Consult the JaRaka (flumetsulam) or Python (flumetsulam) label for specific directions on use, precautions, and restrictions not specified on this label. It is the pesticide user’s responsibility to ensure that all products in the mixture are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

**Weeds Controlled:** In addition to weeds controlled by **AVALAIRE S-MOC + MTZ** alone, **AVALAIRE S-MOC + MTZ** plus JaRaka (flumetsulam) or Python (flumetsulam) will improve control of Palmer amaranth, velvetleaf, common ragweed, wild sunflower, waterhemp spp., kochia, and triazine-resistant common lambsquarters. (**Note:** JaRaka WDG (flumetsulam) will not improve control of ALS-resistant weeds.)

**Table 8: AVALAIRE S-MOC + MTZ Plus JaRaka™ WDG (flumetsulam, EPA Reg. No. 91234-116) or Python® 80 WDG (flumetsulam, , EPA Reg. No. 62719-277) Application (Broadcast Rates)**

Soil Texture	AVALAIRE S-MOC + MTZ <sup>1</sup> (Pt./A)	JaRaka WDG <sup>1</sup> (flumetsulam) or Python® 80 WDG <sup>1</sup> (flumetsulam) (Oz./A)
COARSE (loamy sand or sandy loam)	1.2-1.5 (0.79-0.98 lb S-metolachlor, 0.19-0.23 lb metribuzin)	Refer to tank mix product label
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.5-2.1 (0.98-1.38 lb S-metolachlor, 0.23-0.33 lb metribuzin)	Refer to tank mix product label
FINE (silty clay, silty clay loam <sup>3</sup> , clay loam)	2.1-2.7 (1.38-1.77 lb S-metolachlor, 0.33-0.42 lb metribuzin)	Refer to tank mix product label

<sup>1</sup> Use the higher rate on soils with more than 3% organic matter.

<sup>2</sup> For Southern and Southeastern states in coarse soils, see In Coarse (Light) Soils section of this label for rates of **AVALAIRE S-MOC + MTZ**.

<sup>3</sup> Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **AVALAIRE S-MOC + MTZ**, treat this soil as "fine- textured."

**Restrictions:** On soils with pH above 7.0, soybean injury caused by the metribuzin in **AVALAIRE S-MOC + MTZ** occasionally occurs at rates higher than 1.5 pt./A (0.98 lb S-metolachlor/A, 0.23 lb metribuzin/A). To avoid injury, do not use **AVALAIRE S-MOC + MTZ** at rates greater than 1.5 pt./A (0.98 lb S-metolachlor/A, 0.23 lb metribuzin/A) on soils above pH 7.0.

**AVALAIRE S-MOC + MTZ Plus Scepter® 70 DG (imazaquin, EPA Reg. No. 5481-610) Tank Mix Application**

**AVALAIRE S-MOC + MTZ** may be applied with Scepter (imazaquin) herbicide preplant surface, preplant incorporated, or preemergence for the control of certain broadleaf weeds and grasses in soybeans. Consult the Scepter (imazaquin) label for specific directions on use, precautions, restrictions, and any additional weeds not specified on this label. It is the pesticide user's responsibility to ensure that all products in the mixture are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

**Weeds Controlled:** In addition to weeds controlled by **AVALAIRE S-MOC + MTZ** alone, **AVALAIRE S-MOC + MTZ** plus Scepter (imazaquin) improves control of the following annual broadleaf weeds:

- Buffalobur
- Cocklebur
- Morningglory, pitted
- Morningglory, smallflower
- Ragweed, common
- Sicklepod
- Sunflower

**AVALAIRE S-MOC + MTZ** plus Scepter (imazaquin) will provide suppression (reduce the competition) of ivyleaf and tall morningglory, and giant ragweed.

**Table 9: AVALAIRE S-MOC + MTZ Plus Scepter (imazaquin, EPA Reg. No. 5481-610) Application (Broadcast Rates)**

Soil Texture	AVALAIRE S-MOC + MTZ <sup>1</sup> (Pt./A)	Scepter 70 DG <sup>2</sup> (imazaquin) (Oz./A)
COARSE (loamy sand or sandy loam)	1.2-1.5 <sup>3</sup> (0.79-0.98 lb S-metolachlor, 0.19-0.23 lb metribuzin)	Refer to tank mix product label
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.5-2.1 (0.98-1.38 lb S-metolachlor, 0.23-0.33 lb metribuzin)	Refer to tank mix product label
FINE (silty clay, silty clay loam <sup>4</sup> , clay, clay loam)	2.1-2.7 (1.38-1.77 lb S-metolachlor, 0.33-0.42 lb metribuzin)	Refer to tank mix product label

<sup>1</sup> Use higher listed rate on soils with more than 3% organic matter.

<sup>2</sup> For preemergence application, use the higher rate. For maximum control of moderate to heavy infestations of cocklebur, giant ragweed, and sicklepod, use the higher rate and a preplant incorporated application.

<sup>3</sup> For Southern and Southeastern states in coarse soils, see the In Coarse (Light) Soils section of this label for **AVALAIRE S-MOC + MTZ** rates.

<sup>4</sup> Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **AVALAIRE S-MOC + MTZ**, treat this soil as "fine-textured."

**Restrictions:** On soils with pH above 7.0, soybean injury caused by the metribuzin in **AVALAIRE S-MOC + MTZ** may occur at rates higher than 1.5 pt./A (0.98 lb S-metolachlor/A, 0.23 lb metribuzin/A). To avoid injury, do not use **AVALAIRE S-MOC + MTZ** at rates greater than 1.5 pt./A (0.98 lb S-metolachlor/A, 0.23 lb metribuzin/A) on soils above pH 7.0.

**AVALAIRE S-MOC + MTZ Plus Canopy<sup>®</sup> 75 DG (metribuzin plus chlorimuron-ethyl, EPA Reg. No. 352-444) Tank Mix Application**

**AVALAIRE S-MOC + MTZ** may be applied with Canopy (metribuzin plus chlorimuron-ethyl) herbicide as a preplant surface, preplant incorporated, or preemergence application for the control of certain broadleaf weeds and grasses in soybeans. Consult the Canopy (metribuzin plus chlorimuron-ethyl) herbicide label for specific directions on use, precautions, and restrictions not specified on this label. It is the pesticide user's responsibility to ensure that all products in the mixture are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

**Weeds Controlled:** In addition to weeds controlled by **AVALAIRE S-MOC + MTZ** alone, **AVALAIRE S-MOC + MTZ** plus Canopy (metribuzin plus chlorimuron-ethyl) will improve control of cocklebur and velvetleaf and provide additional suppression (reduce competition) of giant ragweed, common ragweed, and morningglory spp.

**Table 10: AVALAIRE S-MOC + MTZ Plus Canopy 75 DG (metribuzin plus chlorimuron-ethyl, EPA Reg. No. 352-444) Application (Broadcast Rates)**

Soil Texture <sup>1</sup>	AVALAIRE S-MOC + MTZ (Pt./A) <sup>2</sup>	Canopy <sup>5</sup> 75 DG (metribuzin plus chlorimuron-ethyl) (Oz./A)
COARSE (loamy sand or sandy loam)	1.2-1.5 <sup>3</sup> (0.79-0.98 lb S-metolachlor, 0.19-0.23 lb metribuzin)	Refer to tank mix product label
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.5-2.1 (0.98-1.38 lb S-metolachlor, 0.23-0.33 lb metribuzin)	Refer to tank mix product label
FINE (silty clay, silty clay loam <sup>4</sup> , clay, clay loam)	2.1-2.7 (1.38-1.77 lb S-metolachlor, 0.33-0.42 lb metribuzin)	Refer to tank mix product label

<sup>1</sup> Do not use on soils with pH greater than 7.0.

<sup>2</sup> Use higher rate on soils with more than 3% organic matter.

<sup>3</sup> For Southern and Southeastern states in coarse soils, see **In Coarse (Light) Soils** section of this label for rates of **AVALAIRE S-MOC + MTZ**.

<sup>4</sup> Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **AVALAIRE S-MOC + MTZ**, treat this soil as "fine- textured."

<sup>5</sup> Do not use Canopy 75 DG (metribuzin plus chlorimuron-ethyl) as a mix partner on soils with pH above 6.8.

**Restrictions:** On soils with pH above 7.0, soybean injury caused by the metribuzin in **AVALAIRE S-MOC + MTZ** occasionally occurs at rates higher than 1.5 pt./A (0.98 lb S-metolachlor/A, 0.23 lb metribuzin/A). To avoid injury, do not use **AVALAIRE S-MOC + MTZ** at rates greater than 1.5 pt./A (0.98 lb S-metolachlor/A, 0.23 lb metribuzin/A) on soils above pH 7.0.

**AVALAIRE S-MOC + MTZ Plus FrontRunner™ (cloransulam-methyl, EPA Reg. No. 91234-84) or FirstRate® (cloransulam-methyl, EPA Reg. No. 62719-275) Tank Mix Application**

**AVALAIRE S-MOC + MTZ** may be applied with FrontRunner (cloransulam-methyl) or FirstRate (cloransulam-methyl) herbicide as a preplant, preplant incorporated, or preemergence application for the control of certain broadleaf weeds and grasses in soybeans. Consult the FrontRunner (cloransulam-methyl) or FirstRate (cloransulam-methyl) label for specific directions on use, precautions, and restrictions not specified on this label. It is the pesticide user's responsibility to ensure that all products in the mixture are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

**Weeds Controlled:** In addition to weeds controlled by **AVALAIRE S-MOC + MTZ** alone, **AVALAIRE S-MOC + MTZ** plus FrontRunner (cloransulam-methyl) or FirstRate (cloransulam-methyl) will improve control of cocklebur, giant ragweed, common ragweed, common sunflower, and velvetleaf and provide additional suppression (reduce competition) of morningglory species.

**Table 11: AVALAIRE S-MOC + MTZ Plus FrontRunner™ (cloransulam-methyl, EPA Reg. No. 91234-84) or FirstRate® (cloransulam-methyl, EPA Reg. No. 62719-275) Application (Broadcast Rates)**

Soil Texture	AVALAIRE S-MOC + MTZ (Pt./A)	FrontRunner™ <sup>1</sup> (cloransulam-methyl) or FirstRate® <sup>1</sup> (cloransulam-methyl) (Oz./A)
COARSE (loamy sand or sandy loam)	1.2-1.5 <sup>2</sup> (0.79-0.98 lb S-metolachlor, 0.19-0.23 lb metribuzin)	Refer to tank mix product label
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.5-2.1 (0.98-1.38 lb S-metolachlor, 0.23-0.33 lb metribuzin)	Refer to tank mix product label
FINE (silty clay, silty clay loam <sup>3</sup> , clay, clay loam)	2.1-2.7 (1.38-1.77 lb S-metolachlor, 0.33-0.42 lb metribuzin)	Refer to tank mix product label

<sup>1</sup> Use higher rate on soils with more than 3% organic matter.



<sup>2</sup> For Southern and Southeastern states in coarse soils, see **In Coarse (Light) Soils** section of this label for rates of **AVALAIRE S-MOC + MTZ**.

<sup>3</sup> Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **AVALAIRE S-MOC + MTZ**, treat this soil as “fine- textured.”

**Restrictions:** On soils with pH above 7.0, soybean injury caused by the metribuzin in **AVALAIRE S-MOC + MTZ** occasionally occurs at rates higher than 1.5 pt./A. To avoid injury, do not use **AVALAIRE S-MOC + MTZ** at rates greater than 1.5 pt./A on soils above pH 7.0.

**AVALAIRE S-MOC + MTZ Plus Command® 3ME (clomazone, EPA Reg. No. 279-3158) Tank Mix Application**

**AVALAIRE S-MOC + MTZ** may be applied with Command (clomazone) as a preplant or shallow incorporated broadcast application for the control of certain broadleaf weeds and grasses in soybeans. Command may also be applied preemergent. Consult the Command (clomazone) label for specific directions for use, precautions, and restrictions not specified on this label. It is the pesticide user’s responsibility to ensure that all products in the mixture are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

**Weeds Controlled:** In addition to weeds controlled by **AVALAIRE S-MOC + MTZ** alone, **AVALAIRE S-MOC + MTZ** plus Command (clomazone) will provide improved control of heavy infestations of velvetleaf, jimsonweed, and common ragweed.

**Table 12: AVALAIRE S-MOC + MTZ Plus Command (clomazone, EPA Reg. No. 279-3158) Application (Broadcast Rates)**

Soil Texture	AVALAIRE S-MOC + MTZ (Pt./A) <sup>1</sup>	Command 3ME (clomazone) (Oz./A)
COARSE (loamy sand or sandy loam)	1.2-1.5 <sup>2</sup> (0.79-0.98 lb S-metolachlor, 0.19-0.23 lb metribuzin)	Refer to tank mix product label
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.5-2.1 (0.98-1.38 lb S-metolachlor, 0.23-0.33 lb metribuzin)	Refer to tank mix product label
FINE (silty clay, silty clay loam <sup>3</sup> , clay, clay loam)	2.1-2.7 (1.38-1.77 lb S-metolachlor, 0.33-0.42 lb metribuzin)	Refer to tank mix product label

<sup>1</sup> Use higher listed rate on soils with organic matter greater than 3%.

<sup>2</sup> For Southern and Southeastern states in coarse soils, see the **In Coarse (Light) Soils** section of this label for **AVALAIRE S-MOC + MTZ** rates.

<sup>3</sup> Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **AVALAIRE S-MOC + MTZ**, treat this soil as “fine- textured.”

**Restrictions:** On soils with pH above 7.0, soybean injury caused by the metribuzin in **AVALAIRE S-MOC + MTZ** occasionally occurs at rates higher than 1.5 pt./A (0.98 lb S-metolachlor/A, 0.23 lb metribuzin/A). To avoid injury, do not use **AVALAIRE S-MOC + MTZ** at rates greater than 1.5 pt./A (0.98 lb S-metolachlor/A, 0.23 lb metribuzin/A) on soils above pH 7.0.

Precautions: (1) Do not plant wheat, oats, barley, rye, or alfalfa in the fall or following spring after application as crop injury may occur. (2) Do not apply where weather conditions favor drift.

**AVALAIRE S-MOC + MTZ Plus Prowl® 3.3 EC (pendimethalin, EPA Reg. No. 241-337) Tank Mix Application**

**AVALAIRE S-MOC + MTZ** may be applied with Prowl (pendimethalin) as a preplant surface, preplant incorporated, or preemergence broadcast application for the control of certain broadleaf weeds and grasses in soybeans. Consult the Prowl (pendimethalin) label for specific directions for use, precautions, and restrictions not specified on this label. It is the pesticide user's responsibility to ensure that all products in the mixture are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

**Weeds Controlled:** In addition to weeds controlled by **AVALAIRE S-MOC + MTZ** alone, **AVALAIRE S-MOC + MTZ** plus Prowl (pendimethalin) will provide improved control for triazine-resistant weeds such as common lambsquarters, pigweed spp., etc.

**Table 13: AVALAIRE S-MOC + MTZ Plus Prowl (pendimethalin, EPA Reg. No. 241-337) Application (Broadcast Rates)**

Soil Texture	AVALAIRE S-MOC + MTZ (Pt./A) <sup>1</sup>	Prowl 3.3 EC (pendimethalin) (Pt./A)
COARSE (loamy sand or sandy loam)	1.5-1.8 <sup>2</sup> (0.98-1.18 lb S-metolachlor, 0.23-0.28 lb metribuzin)	Refer to tank mix product label
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1.8-2.1 (1.18-1.38 lb S-metolachlor, 0.28-0.33 lb metribuzin)	Refer to tank mix product label
FINE (silty clay, silty clay loam <sup>3</sup> , clay, clay loam)	2.1-2.7 (1.38-1.77 lb S-metolachlor, 0.33-0.42 lb metribuzin)	Refer to tank mix product label

<sup>1</sup> Use higher listed rate is recommended on soils with organic matter greater than 3%.

<sup>2</sup> For Southern and Southeastern states in coarse soils, see the **In Coarse (Light) Soils** section of this label for **AVALAIRE S-MOC + MTZ** rates.

<sup>3</sup> Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **AVALAIRE S-MOC + MTZ**, treat this soil as "fine-textured."

**Restrictions:** On soils with pH above 7.0, soybean injury caused by the metribuzin in **AVALAIRE S-MOC + MTZ** occasionally occurs at rates higher than 1.5 pt./A (0.98 lb S-metolachlor/A, 0.23 lb metribuzin/A). To avoid injury, do not use **AVALAIRE S-MOC + MTZ** at rates greater than 1.5 pt./A (0.98 lb S-metolachlor/A, 0.23 lb metribuzin/A) on soils above pH 7.0.

**Herbicides That May Be Applied Postemergence Following AVALAIRE S-MOC + MTZ**

If required, application of **AVALAIRE S-MOC + MTZ** 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:

Aim® (carfentrazone-ethyl, EPA Reg. No. 279-3241)

Arrow™ (clethodim, EPA Reg. No. 66222-60)

Assure® II (quizalofop-p-ethyl, EPA Reg. No. 5481-646)

Basagran® or Biscayne™ (sodium salt of bentazon, EPA Reg. No. 66330-413, 91234-102)

Classic® (chlorimuron, EPA Reg. No. 352-436)

Cobra® or Mamba™ (lactofen, EPA Reg. No. 74530-92, 91234-169)

Extreme<sup>1</sup> (imazethapyr plus glyphosate, EPA Reg. No. 241-405)

FirstRate® or FrontRunner™ (cloransulam-methyl, EPA Reg. No. 62719-275, 91234-84)

Flexstar® (sodium salt of fomesafen, EPA Reg. No. 100-1101)

Flexstar® GT 3.5<sup>1</sup> (sodium salt of fomesafen plus glyphosate, EPA Reg. No. 100-1385)

Fusilade® DX (fluzifop-p-butyl, EPA Reg. No. 100-1070)

Frontrow® (cloransulam-methyl, EPA Reg. No. 62719-299)

Fusion® (fluzifop-p-butyl plus fenoxaprop-p-ethyl, EPA Reg. No. 100-1059)

Harmony® GT XP (thifensulfuron, EPA Reg. No. 279-9577)  
Liberty®<sup>2</sup> or Inflammé™<sup>2</sup> (glufosinate, EPA Reg. No. 91234-82)  
Poast® (sethoxydim, EPA Reg. No. 7969-58)  
Poast Plus® (sethoxydim, EPA Reg. No. 7969-88)  
Pursuit® or Pemex™ (imazaethapyr, EPA Reg. No. 241-310, 91234-168)  
Raptor® or Octivio™ (imazamox, EPA Reg. No. 241-379, 91234-88)  
Reflex® (sodium salt of fomesafen, EPA Reg. No. 100-993)  
Resource® (flumiclorac, EPA Reg. No. 59539-82)  
Roundup® brands<sup>1</sup> (glyphosate)  
Scepter (imazaquin, EPA Reg. No. 5481-597)  
Select® (clethodim, EPA Reg. No. 59639-78)  
Sequence®<sup>1</sup> (glyphosate plus S-metolachlor, EPA Reg. No. 100-1185)  
Storm® (sodium salt of bentazon plus sodium salt of acifluorfen, EPA Reg. No. 70506-59)  
Synchrony® XP<sup>3</sup> (chlorimuron-ethyl plus thifensulfuron-methyl, EPA Reg. No. 352-648)  
Touchdown® brands<sup>1</sup> (glyphosate)  
Ultra Blazer® or Derecho™ (sodium salt of acifluorfen, EPA Reg. No. 70506-60, 91234-108)

<sup>1</sup> Use on Roundup-Ready or glyphosate resistant soybean varieties only.

<sup>2</sup> Use on LibertyLink® soybean varieties only.

<sup>3</sup> Use on STS™ soybean varieties only.

Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels. It is the pesticide user's responsibility to ensure that all products in the mixture are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

#### **Reduced Rate Scepter 70 DG (imazaquin, EPA Reg. No. 5481-610) Application Following AVALAIRE S-MOC + MTZ**

If required, application of **AVALAIRE S-MOC + MTZ** alone or in tank mixture may be followed by an early postemergence application of a reduced rate of Scepter (imazaquin) herbicide for improved control of cocklebur. Refer to Scepter 70 DG (imazaquin) label for use rates. Use the lower rate of Scepter (imazaquin) if cockleburs are less than 3 inches tall or have fewer than 3 leaves and are actively growing and use the higher rate if cockleburs are 3-6 inches tall and actively growing. Do not use Scepter (imazaquin) when plants have been subjected to stress conditions. Use of nonionic surfactant or crop oil concentrate is recommended for Scepter (imazaquin) applications. Refer to the Scepter 70 DG (imazaquin) label for additional use directions and special precautions/restrictions. It is the pesticide user's responsibility to ensure that all products in the mixture are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

#### **Burndown Weed Control**

**AVALAIRE S-MOC + MTZ** 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. **AVALAIRE S-MOC + MTZ** may be tank mixed with 2,4-D low volatile ester (LVE), Gramoxone® SL 2.0 (paraquat dichloride, EPA Reg 100-1431), Touchdown brands (glyphosate), Roundup brands (glyphosate), Fusion (fluazifop-p-butyl plus fenoxaprop-p-ethyl, EPA Reg. No. 100-1059), Poast Plus (sethoxydim, EPA Reg. No. 7969-88), or Select (clethodim, EPA Reg. No. 59639-78) for control of emerged weeds prior to crop emergence. **AVALAIRE S-MOC + MTZ** burndown tank mixes can be applied before planting or prior to crop emergence.

#### **Application**

**AVALAIRE S-MOC + MTZ** may be applied up to 30 days before planting or preemergence. Apply only by ground equipment when **AVALAIRE S-MOC + MTZ** is used for burndown of existing vegetation in conservation tillage systems. Use the high end of the rate range for **AVALAIRE S-MOC + MTZ** applications made 14-30 days before

planting. Refer to Table 16 for rates of **AVALAIRE S-MOC + MTZ** and to the individual labels for rates of tank mix partners. Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels. It is the pesticide user's responsibility to ensure that all products in the mixture are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

**Table 14: Burndown Rates of Tank Mix Partners**

Product	Rate	Directions and Remarks
2,4-D LVE	Refer to product label for use rates	Apply at least 7 days preplant when using 2,4-D LVE at lower labeled use rates and at least 30 days preplant with higher labeled use rates. Refer to the 2,4-D LVE label for spray adjuvant recommendations and restrictions.
Gramoxone® SL 2.0 (paraquat dichloride, EPA Reg 100-1431)	Refer to product label for use rates	Must be applied prior to crop emergence. Use lower labeled use rates of Gramoxone® SL 2.0 (paraquat dichloride) for weeds less than 4 inches in height and higher labeled use rates when weeds are 4-6 inches in height. Apply in 20-60 gal. of water per acre. Refer to the Gramoxone® SL 2.0 (paraquat dichloride) label for spray adjuvant recommendations and restrictions.
Gramoxone® SL 2.0 (paraquat dichloride, EPA Reg 100-1431) + 2,4-D LVE	Refer to product labels for use rates	Follow the Directions and Remarks section above for 2,4-D LVE and Gramoxone® SL 2.0 (paraquat dichloride) paying special attention to crop planting restrictions with 2,4-D LVE. Include either nonionic surfactant or crop oil concentrate in this tank mix.
Touchdown brands or Roundup brands (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 15. Apply in 10-20 gal. of water per acre. Refer to the Touchdown or Roundup (glyphosate) label for spray adjuvant recommendations and restrictions. Any glyphosate formulation registered and labeled for use in soybeans may be tank mixed with <b>AVALAIRE S-MOC + MTZ</b> .
Touchdown brands or Roundup brands (glyphosate) + 2,4-D LVE	Refer to the Touchdown or Roundup label for use rates + 0.25 lb. a.i./A	Follow the Directions and Remarks section above for 2,4-D LVE and Touchdown/Roundup (glyphosate) paying special attention to planting restrictions with 2,4-D LVE. Refer to the Touchdown or Roundup (glyphosate) label for spray adjuvant recommendations and restrictions. Do not use crop oil concentrate.
Fusion (fluazifop-p-butyl plus fenoxaprop-p-ethyl, EPA Reg. No. 100-1059) + 2,4-D LVE	Refer to product labels for use rates	Follow the planting restrictions under the Directions and Remarks section above for 2,4-D LVE. Refer to Fusion (fluazifop-p-butyl plus fenoxaprop-p-ethyl) label use rates to determine control of certain grasses up to 2, 4, and 6 inches in height. Refer to Fusion (fluazifop-p-butyl plus fenoxaprop-p-ethyl) label for spray adjuvant recommendations and restrictions.
Poast Plus (sethoxydim, EPA Reg. No. 7969-88) + 2,4-D LVE	Refer to product labels for use rates	Follow the planting restrictions under the Directions and Remarks section above for 2,4-D LVE. Refer to Poast Plus (sethoxydim) label uses rates to determined control of certain grasses up to 2 and 3 inches in height. Refer to Poast Plus (sethoxydim) label for spray adjuvant recommendations and restrictions.
Select (clethodim, EPA Reg. No. 59639-78) + 2,4-D LVE	Refer to product labels for use rates	Follow the planting restrictions under the Directions and Remarks section above for 2,4-D LVE. Refer to Select (clethodim) label use rates to determine control of certain grasses up to 3 and 4 inches in height. Refer to Select (clethodim) label for spray adjuvant recommendations and restrictions.

**Restriction:** 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**

- Apply only 2,4-D low volatile ester formulations which are registered for preplant or burndown use.

**Restriction:**

- Do not apply tank mixtures containing 2,4-D LVE 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 **AVALAIRE S-MOC + MTZ** may be grazed or fed to livestock 40 days after application. It is the pesticide user’s responsibility to ensure that all products in the mixture are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

**Weeds Controlled:** **AVALAIRE S-MOC + MTZ** in tank mixtures with the herbicides listed in Table 14 will provide burndown control of the weeds listed below.

**Table 15: Weeds Controlled by Burndown Rates of AVALAIRE S-MOC + MTZ Tank Mixtures**

AVALAIRE S-MOC + MTZ +								
Weeds Controlled	2,4-D LVE	Poast Plus (sethoxydim, EPA Reg. No. 7969-88) + 2,4-D LVE	Select (clethodim, EPA Reg. No. 59639-78)+ 2,4-D LVE	Fusion (fluazifop-p-butyl plus fenoxaprop-p-ethyl, EPA Reg. No. 100-1059) + 2,4-D LVE	Touchdown/ Roundup (glyphosate)	Touchdown/ Roundup (glyphosate) + 2,4-D LVE	Gramoxone SL 2.0 (paraquat dichloride, EPA Reg 100-1431)	Gramoxone SL 2.0 (paraquat dichloride, EPA Reg 100-1431) + 2,4-D LVE
<b>Annual Grasses</b>	<b>Maximum Burndown Height (Inches)</b>							
Barley	Does not control these species	-	-	-	8		4-6	
Barnyardgrass		2-3	3-4	-	6		4-6	
Crabgrass spp.		2-3	-	-	6		4-6	
Foxtail spp.		2-3	3-4	2-6	8		4-6	
Johnsongrass, seedling		2-3	-	-	8		4-6	
Panicum, fall		2-3	3	2-6	6		4-6	
Sandbur, field		-	-	-	8		4-6	
Shattercane		2-3	-	-	8		4-6	
Wheat, Volunteer		-	-	-	6		4-6	
Witchgrass		2-3	-	-	6		4-6	
<b>Broadleaves</b>		<b>Maximum Burndown Height (Inches)</b>						
Buffalobur		-			6	6	4-6	4-6
Chickweed, common		6			6	6	4-6	4-6

AVALAIRE S-MOC + MTZ +								
Weeds Controlled	2,4-D LVE	Poast Plus (sethoxydim, EPA Reg. No. 7969-88) + 2,4-D LVE	Select (clethodim, EPA Reg. No. 59639-78)+ 2,4-D LVE	Fusion (fluazifop-p-butyl plus fenoxaprop-p-ethyl, EPA Reg. No. 100-1059) + 2,4-D LVE	Touchdown/ Roundup (glyphosate)	Touchdown/ Roundup (glyphosate) + 2,4-D LVE	Gramoxone SL 2.0 (paraquat dichloride, EPA Reg 100-1431)	Gramoxone SL 2.0 (paraquat dichloride, EPA Reg 100-1431) + 2,4-D LVE
Cocklebur, common		6			6	8	4-6	4-6
Dandelion, common		6 dia. <sup>1</sup>			2 dia. <sup>2</sup>	6 dia. <sup>1</sup>	4 dia. <sup>3</sup>	6 dia. <sup>1</sup>
Henbit		4			4	4	4-6	4-6
Horseweed/marestail		6 <sup>1</sup>			4 <sup>2</sup>	6	3	6 <sup>1</sup>
Jimsonweed		6			6	6	4-6	4-6
Kochia		4 <sup>1</sup>			4	4	4	4
Ladysthumb		6			6	8	4-6	4-6
Lambsquarter, common		6			6	8	4-6	4-6
Lettuce, prickly		6			4	6	4-6	4-6
Mallow, Venice		6			6	6	4-6	4-6
Morningglory spp.		6			2	4	2	4
Mustard spp.		6			6	8	4-6	4-6
Pennycress, field		6			6	6	4-6	4-6
Pigweed spp. (annual)		6			6	8	4-6	4-6
Ragweed, common		6			6 <sup>2</sup>	8	4-6	4-6
Ragweed, giant		6 <sup>1</sup>			4 <sup>2</sup>	6	4	6
Shepherd's-purse		6			6	6	4-6	4-6
Sida, prickly		6			4	4	4	4
Smartweed, Pennsylvania		6			6	8	4-6	4-6
Sunflower, common		6			6	6	4-6	4-6
Thistle, Russian		4 <sup>1</sup>			2-4 <sup>2</sup>	4	4	4-6
Velvetleaf		6			6	8	4-6	4-6
Waterhemp spp.		6			6	8	4-6	4-6

<sup>1</sup> Refer to 2,4-D LVE label for use rate.

<sup>2</sup> Refer to Touchdown or Roundup (glyphosate) labels for minimum use rate.

<sup>3</sup> Suppression only.

#### AVALAIRE S-MOC + MTZ Use Rates for Reduced and No-Till Systems Preplant Surface Application

AVALAIRE S-MOC + MTZ 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 (metribuzin

plus chlorimuron-ethyl, EPA Reg. No. 352-444), FrontRunner (cloransulam-methyl, EPA Reg. No. 91234-84), Scepter (imazaquin, EPA Reg. No. 5481-610), Command (clomazone, EPA Reg. No. 279-3158), JaRaka WDG (flumetsulam, EPA Reg. No. 91234-116), and Prowl (pendimethalin, EPA Reg. No. 241-418) 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 16: AVALAIRE S-MOC + MTZ use Rates for Reduced-Till and No-Till Systems (Broadcast Rates)**

Soil Texture	AVALAIRE S-MOC + MTZ (Pt./A <sup>1</sup> )
COARSE <sup>2</sup> (loamy sand or sandy loam)	1.2-2.1 (0.79-1.38 lb S-metolachlor, 0.19-0.33 lb metribuzin)
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	2.1-3.0 (1.38-1.97 lb S-metolachlor, 0.33-0.47 lb metribuzin)
FINE (silty clay, silty clay loam <sup>3</sup> , clay, clay loam)	2.7-3.6 (1.77-2.36 lb S-metolachlor, 0.42-0.56 lb metribuzin)

<sup>1</sup> 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.

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

<sup>3</sup> Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **AVALAIRE S-MOC + MTZ**, treat this soil as “fine- textured.”

#### **AVALAIRE S-MOC + MTZ Sequential Application**

An early preplant (surface-applied or shallow incorporated) application of **AVALAIRE S-MOC + MTZ**, followed by a preemergence application of **AVALAIRE S-MOC + MTZ** 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 **AVALAIRE S-MOC + MTZ** 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, use the higher rates (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 Touchdown (glyphosate), Roundup (glyphosate), paraquat, or 2,4-D LVE.

**Weeds Controlled:** In addition to weeds controlled by **AVALAIRE S-MOC + MTZ** alone, the sequential application improves control of the following annual broadleaf weeds: buffalobur, cocklebur, common ragweed, velvetleaf, and sunflower.

**Table 17: Sequential Application (Broadcast Rates)**

Soil Texture <sup>1</sup>	Early Preplant Application AVALAIRE S-MOC + MTZ (Pt./A)	Followed by	Preemergence Overlay Application AVALAIRE S-MOC + MTZ (Pt./A)
COARSE <sup>1</sup> (Sand, loamy sand or sandy loam)	1.2-1.8 (0.79-1.18 lb S-metolachlor, 0.19-0.28 lb metribuzin)	followed by	0.3-0.9 (0.20-0.59 lb S-metolachlor, 0.05-0.14 lb metribuzin)

MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	2.1-3.0 (1.38-1.97 lb S-metolachlor, 0.33-0.47 lb metribuzin)	followed by	0.6-1.2 (0.39-0.79 lb S-metolachlor, 0.09-0.19 lb metribuzin)
FINE (silty clay, silty clay loam <sup>3</sup> , clay, clay loam)	2.7-3.6 (1.77-2.36 lb S-metolachlor, 0.42-0.56 lb metribuzin)	followed by	0.9-1.5 (0.59-0.98 lb S-metolachlor, 0.14-0.23 lb metribuzin)

<sup>1</sup> 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% organic matter, or on loamy sand or sandy loam soils with less than 1% organic matter.

<sup>2</sup> Total not to exceed 3.9 pints of **AVALAIRE S-MOC + MTZ** (2.56 lb S-metolachlor, 0.61 lb metribuzin) per acre per year.

<sup>3</sup> Silty clay loam soils are transitional soils and may be classified as medium-textured soils in some regions of the U.S. When using **AVALAIRE S-MOC + MTZ**, treat this soil as "fine-textured."

### Postemergence Directed Application (AR, LA, MO – Bootheel only, MS, TN)

**AVALAIRE S-MOC + MTZ** can be applied postemergence directed to soybeans to provide residual control of weeds that emerge after crop emergence in the states of Arkansas, Louisiana, Missouri - Bootheel only, Mississippi and Tennessee. A postemergence directed spray of **AVALAIRE S-MOC + MTZ** can be applied to soybeans in addition to a preemergence or preplant application of **AVALAIRE S-MOC + MTZ** according to label directions. The total amount of **AVALAIRE S-MOC + MTZ** applied must not exceed 3.9 pints per acre per season.

See the table below for **AVALAIRE S-MOC + MTZ** postemergence directed rates according to soil type and organic matter level.

**Table 18: AVALAIRE S-MOC + MTZ Rates for Postemergence Directed Application (Broadcast Rates)**

Soil Texture	Broadcast Rate Per Acre	
	0.5% to less than 3% Organic Matter	3% Organic Matter or greater
COARSE (Over 2% organic matter loamy sand, sandy loam)	1.3 pt. (0.85 lb S-metolachlor, 0.20 lb metribuzin)	1.5 pt. (0.98 lb S-metolachlor, 0.23 lb metribuzin)
MEDIUM	1.5-2.0 pt. (0.98-1.31 lb S-metolachlor, 0.23-0.31 lb metribuzin)	2.0 pt. (1.31 lb S-metolachlor, 0.31 lb metribuzin)
FINE	2.0 pt. (1.31 lb S-metolachlor, 0.31 lb metribuzin)	2.0 pt. (1.31 lb S-metolachlor, 0.31 lb metribuzin)
Mississippi Delta Only (Silty clay, clay)	2.0 pt. (1.31 lb S-metolachlor, 0.31 lb metribuzin)	2.0 pt. (1.31 lb S-metolachlor, 0.31 lb metribuzin)

A postemergence directed application of **AVALAIRE S-MOC + MTZ** will provide residual preemergence weed control of the weeds listed in Table 5.

Apply in 10 to 20 gallons of water per acre in a 6 to 8 inch band on each side of the row when soybeans are at least 8 inches tall. Do not allow the directed spray to contact more than the lower ¼ to 1/3 of soybean plants. Soybean leaves contacted by the spray will be killed or severely injured. Do not apply directly to soybeans or serious injury will occur.

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

### Post-Directed Application Tank Mixes - Glyphosate Resistant Soybeans Only



Postemergence directed applications of **AVALAIRE S-MOC + MTZ** can be tank mixed with glyphosate such as Touchdown or Roundup brands in glyphosate-resistant soybeans only. Refer to the tank-mix partner label for use directions, restrictions and limitations. It is the pesticide user's responsibility to ensure that all products in the mixture are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

#### **Postemergence Directed Applications – Restrictions**

- Do not exceed a total of 3.9 pints (2.56 lb S-metolachlor, 0.61 lb metribuzin) per acre per year of **AVALAIRE S-MOC + MTZ**.
- Do not graze or feed treated soybean forage, hay, or straw to livestock.
- Do not apply within 90 days of soybean harvest.
- **AVALAIRE S-MOC + MTZ** cannot be applied to sandy loam or loamy sand soils with less than 2% organic matter.

## **STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

**PESTICIDE DISPOSAL:** Pesticide spray mixture or rinsate that cannot be used must be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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 plastic 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or other procedures approved by state and local authorities.]

**[For plastic 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. Recap 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or other procedures approved by state and local authorities.]

#### **LIMITATION OF WARRANTY AND LIABILITY**

**IMPORTANT: READ BEFORE USE.** Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or

buyer accepts the following Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of AVALAIRE, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, AVALAIRE, LLC makes no other warranties, express or

implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. **LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, neither AVALAIRE, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

[**AVALAIRE S-MOC + MTZ™**] is a trademark of Avalaire, LLC

Biscayne™, Derecho™, FrontRunner™, Inflamm™, JaRaka™, Mamba™, Octivio™, and Pemex™ are trademarks of Avalaire, LLC.

Agsorb® trademark of Oil-Dri Corporation

Aim® and Command® trademarks of FMC Corporation

Arrow™ trademark of Makhteshim Agan of North America, Inc. Assure II® trademark of Nissan Chemical Industries, Ltd.

Canopy®, Classic®, Harmony, Synchrony® STS™, and Viton® trademarks of E. I. du Pont de Nemours and Co.

Basagran®, Extreme Poast®, and Poast Plus® trademarks of BASF Corporation

Celatom® MP-79® trademark of Eagle-Picher Industries, Inc.

Clorox® trademark of The Clorox Company

Cobra®, Resource®, and Select® trademarks of Valent USA Corporation

FirstRate®, Frontrow®, and Python® trademarks of Dow AgroSciences Liberty® and LibertyLink® trademarks of Bayer CropScience

Roundup® and Roundup Ready® trademarks of Monsanto Company

Pursuit®, Prowl®, Pursuit Plus®, Raptor®, and Scepter® trademarks of BASF Ag Products

{LANGUAGE ON LABEL AFFIXED TO CONTAINER}

S-METOLACHLOR	GROUP 15	HERBICIDE
METRIBUZIN	GROUP 5	HERBICIDE

Sale, use and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited.

**AVALAIRE S-MOC + MTZ™**

[Alternate Brand Name: Odexis MTZ]

[For control of certain grasses and broadleaf weeds in potatoes and soybeans]

<b>ACTIVE INGREDIENTS:</b>	<b>(% by weight)</b>
S-Metolachlor*	58.2%
Metribuzin**	13.8%
<b>OTHER INGREDIENTS***:</b>	<b>28.0%</b>
<b>TOTAL</b>	<b>100.0%</b>

AVALAIRE S-MOC + MTZ is formulated as an emulsifiable concentrate (EC) containing 5.25 lb of S-metolachlor and 1.25 lb of metribuzin per gallon.

\*CAS No. 87392-12-9

\*\*CAS No. 21087-64-9

\*\*\*Contains petroleum distillates.

**KEEP OUT OF REACH OF CHILDREN**

**WARNING/AVISO**

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	
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>Immediately call a poison control center or doctor.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give any liquid to the person.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>Note to Physician:</b> Contains petroleum distillates. Vomiting may cause aspiration pneumonia.	
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at <b>1-844-685-9173</b> for emergency medical treatment information.	

**For Chemical Emergency:**

Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night  
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
WARNING/AVISO**

Causes substantial, but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

This product may cause skin sensitization reactions in some people.

**ENVIRONMENTAL HAZARDS:** Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsate. **Ground Water Advisory** S-metolachlor is known to leach through soil into ground water under certain conditions as a result of label use. This chemical may leach into ground water 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 contaminate ground water which may be used as drinking water. Metribuzin has been found in ground water as a result of agricultural use. Users are advised not to apply metribuzin where the water table (ground water) is close to the surface and where the soils are very permeable, i.e., well-drained soils such as loamy sands. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water. **Surface Water Advisory** S-metolachlor has the potential to contaminate surface water through ground spray drift. Under some conditions, S-metolachlor may also have a high potential for runoff into surface water (primarily via dissolution in runoff water) for several months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

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See inside label booklet for additional Precautionary Statements and Directions for Use.

Manufactured for:  
Avalaire, LLC  
1204 Village Market Place, #173  
Morrisville, NC 27560

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EPA Est. No.: \_\_\_\_\_  
NET CONTENTS: \_\_\_\_\_

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