



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7505P)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

93930-52

Date of Issuance:

3/30/22

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Avalaire R-Moc II

Name and Address of Registrant (include ZIP Code):

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

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
2. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. You have 18 months from the date of registration to provide these data.

*Continues page 2*

Signature of Approving Official:

Mindy Ondish, Product Manager 23  
Herbicide Branch, Registration Division (7505P)

Date:

3/30/22

3. Submit one copy of the revised final printed label for the record before you release the product for shipment.

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

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

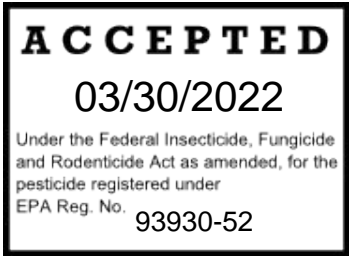
Please note that the alternate brand name, "**Andover II**" has been added to the product record.

Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 02/22/2021
- Alternate CSF 1 dated 02/22/2021
- Alternate CSF 2 dated 02/22/2021

If you have any questions, please contact Jamie Harrington at (202) 566-2726 or by email at [harrington.jamie@epa.gov](mailto:harrington.jamie@epa.gov).

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}

METOLACHLOR	GROUP <b>15</b>	HERBICIDE
-------------	-----------------	-----------

# Avalaire R-Moc II<sup>TM</sup>

[Alternate Brand Name: Andover II]

[For weed control in [Corn (field, pop, sweet, grown for seed)], [Cotton,] [Peanuts,] [Crop Group 6 Legume Vegetables (succulent and dried)] [Potatoes,] [Safflowers,] [Sorghum,] [Soybeans,] and [Tomato]]

<b>ACTIVE INGREDIENT:</b>	<b>(% by weight)</b>
Metolachlor: 2-chloro- N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) acetamide.....	84.1%
<b>OTHER INGREDIENTS:</b> .....	<u>15.9%</u>
<b>TOTAL</b> .....	100.0%
Contains 7.8 lbs. of metolachlor active ingredient per gallon.	
Contains a safener	

## KEEP OUT OF REACH OF CHILDREN CAUTION

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

See [below] [inside label booklet] for [additional] [First Aid,] [and] [Precautionary Statements] [and] [Directions for Use].

<b>FIRST AID</b>	
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have affected person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<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 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>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>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center at 1-800-222-1222 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)**

**EPA Reg. No.: 93930-52**

**EPA Est. No.:**

**Net Contents:**

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

## {LANGUAGE INSIDE BOOKLET}

### **PRECAUTIONARY STATEMENTS**

#### **Hazards to Humans and Domestic Animals**

**CAUTION:** Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing.

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

#### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that may have been drenched or heavily contaminated with this product.

#### **ENGINEERING CONTROLS**

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

#### **USER SAFETY RECOMMENDATIONS**

**Users should:**

- Wash hands 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.

#### **ENVIRONMENTAL HAZARDS**

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

#### **GROUND WATER ADVISORY**

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

#### **SURFACE WATER ADVISORY**

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several weeks or months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of metolachlor 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.

**Ecological Incidents Reporting:**

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

**PHYSICAL AND CHEMICAL HAZARDS**

Do not mix or allow coming in contact with oxidizing agents. Hazardous chemical reaction may occur.

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

**DIRECTIONS FOR USE**

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

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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

**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](mailto:ESPP@epa.gov). You must use the Bulletin valid for the month in which you will apply the product.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.**

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls over short-sleeved shirt and short pants
- Shoes plus socks

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

**[Do not apply this product by air in New York State.] Not for sale, use, or distribution in Nassau County or Suffolk County, New York.**

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop injury may result.

#### PRODUCT INFORMATION

**Avalaire R-Moc II** is a selective herbicide registered for use as a preplant surface-applied, preplant incorporated, or preemergence treatment in water or fluid fertilizer for control of most annual grasses and certain broadleaf weeds in corn (field, pop, sweet, grown for seed), cotton, peanuts, crop group 6 legume vegetables (succulent and dried), potatoes, safflowers, sorghum, soybeans, and tomatoes. **Avalaire R-Moc II** is also registered as a postemergent treatment on corn, cotton, potato, soybean, and tomato.

#### USE RESTRICTIONS:

- DO NOT use in nurseries, turf, or landscape plantings.
- DO NOT apply to frozen ground.
- DO NOT apply under conditions which favor runoff or wind erosion of soil containing this product to nontarget areas. To prevent off-site movement due to runoff or wind erosion:
  - 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 nontarget crops, unless at least 1/2 inch of rainfall has occurred between application and the first irrigation.

Where directions on this label specify a **Avalaire R-Moc II** tank mixture with atrazine, follow the rates, restrictions, and use precautions on the labeling of the atrazine product used. Certain states may have established rate limitations for atrazine within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

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

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

#### **USE PRECAUTIONS**

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

#### **WEED RESISTANCE MANAGEMENT**

For resistance management, metolachlor is a Group 15 herbicide. Any weed population may contain or develop plants naturally resistant to metolachlor and other Group 15 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

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

- Rotate the use of this product or other Group 15 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed 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.

#### **INTEGRATED WEED PEST MANAGEMENT**

Integrate this product into an overall weed pest management strategy whenever the use of an herbicide is required. Practices known to reduce weed development (tillage, crop competition) and herbicide use (weed scouting, proper application timing, banding) should be followed wherever possible. Consult local agricultural and weed authorities for additional IPM strategies established for your area.



## SOIL TEXTURES AND HERBICIDE RATES

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

Coarse	Medium	Fine	
Sand	Loam	Sandy clay loam	Sandy clay
Loamy sand	Silt loam	Silty clay loam	Silty clay
Sandy loam	Silt	Clay loam	Clay

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

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

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

### MIXING INSTRUCTIONS

**Avalaire R-Moc II Alone:** Mix **Avalaire R-Moc II** with water or fluid fertilizer (as specified in the individual crop sections) and apply as a spray. Fill the spray tank 1/2 - 3/4 full with water or fluid fertilizer, add the proper amount of this product, then add the rest of the water or fluid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

**Tank Mixtures:** Fill the spray tank one-quarter full with water, and start agitation; add tank mix partners (with the exception of paraquat or glyphosate), allow it to become dispersed; then add **Avalaire R-Moc II II**; then add paraquat, glyphosate/2,4-D, or glyphosate if these products are being used; and finally the rest of the water.

In some tank mixtures with atrazine, dicamba, linuron, simazine, pendimethalin, simazine; fluid fertilizers may replace all or part of the water as carrier, except in the atrazine postemergence and the dicamba post-emergence tank mixes. For tank mixtures with atrazine, see additional mixing instructions on the atrazine label. For each tank mixture, check compatibility with fluid fertilizer before mixing in spray tank. For all tank mixtures, conduct a compatibility test as described in the Compatibility Test Section of this label. For all tank mixtures, agitate during mixing and application to maintain a uniform suspension.

\*See **Mixing Instructions** for tank mixtures with flumeturon, atrazine, or simazine+pendimethalin under the appropriate tank mixture section.

## APPLICATION PROCEDURES

### Application Timing

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

- a) **Preplant Surface-Applied:** For minimum-tillage or no-tillage systems only, **Avalaire R-Moc II** alone and some **Avalaire R-Moc II** tank mixtures may be applied up to 45 days before planting. Use only split applications for treatments made 30-45 days before planting, with 2/3 the specified broadcast rate for the crop and soil texture applied initially and the remaining 1/3 at planting. Treatments less than 30 days before planting may be made either as a split or a single application. Refer to individual crop sections to determine if early preplant surface application is allowed. If weeds are present at the time of treatment, apply in a tank mixture combination with a contact herbicide (for example, paraquat or glyphosate). Observe

directions for use, precautions, and restrictions on the label of the contact herbicide. To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

- b) **Preplant Incorporated:** Apply **Avalaire R-Moc II** to the soil and incorporate into the top 2 inches of soil within 14 days before planting, using a finishing disk, harrow, rolling cultivator, or similar implement capable of providing uniform 2-inch incorporation. Use a preplant incorporated application if furrow irrigation is used or when a period of dry weather after application is expected. If the crop will be planted on beds, apply and incorporate this product after bed formation, unless specified otherwise.
- c) **Preemergence:** Apply this product during planting (behind the planter) or after planting, but before weeds or crops emerge.
- d) **Postemergence (cotton and soybean use only):** For pre-emergence or partial control of the weeds listed in the **WEEDS CONTROLLED – AVALAIRE R-MOC II APPLIED ALONE** and in the **WEEDS PARTIALLY CONTROLLED** sections of this label, use one application of this product at the rate specified in the cotton or soybean sections of this label. This product alone will not control emerged weeds, so it must be applied to a weed-free surface or in a tank mixture with products that provide postemergence weed control. If weeds are present at the time of application, tank mix with a labeled postemergence herbicide and observe all directions for use, precautions, limitations, and restrictions on the label of the tank mix partner. For additional postemergence information, follow the crop specific label requirements identified on this label.

#### SPECIAL APPLICATION PROCEDURES

1. **CA Only (Corn, Safflowers, Crop Group 6 Legume Vegetables (succulent and dried)):**  
**Preplant Incorporated:** Broadcast this product alone or with tank mix partners listed on this label to the soil and thoroughly incorporate with a disk or similar implement set to till 4-6 inches deep. For more thorough incorporation, till the soil in 2 different directions (cross-till). Crops may be planted on flat surface or on beds. Caution should be used when forming the beds that only soil from the **Avalaire R-Moc II** treated zone is used (i.e., untreated soil should not be brought to soil surface). If the application is made to pre-formed beds, incorporate this product with a tillage implement set to till 2-4 inches deep. Care should be taken during tilling to keep the tilled (**Avalaire R-Moc II** treated) soil on the beds.
2. **Preemergence:** Apply this product after planting. Water with sprinkler or flood irrigation within 7-10 days.
3. **Fall Application (Only in IA, MN, ND, SD, WI, and North of Route 20 in the state of NE, and North of Route 136 in the state of IL – See specific instructions in the individual crop sections of this label for timing of application and other information):** Use on medium and fine soils with greater than 2.5% organic matter that will be planted to corn or soybeans the next spring. Ground may be tilled before or after application.

#### RESTRICTIONS – Fall applications

- DO NOT apply to frozen ground.
  - DO NOT exceed a 2 to 3-inch incorporation depth if tilled after treatment.
  - If a spring application is made, the total rate of the fall plus spring applications MUST NOT exceed the maximum total rate for the specific crop, or illegal residues may result.
1. **Ground Application:** Apply this product alone or in tank mixtures by ground equipment in a minimum of 10 gals. of spray mixture per acre, unless otherwise specified. Use sprayers that provide accurate and uniform application. For tank mixtures of this product with wettable powder or dry flowable formulations, screens and strainers should be no finer than 50-mesh. Rinse sprayer thoroughly with clean water immediately after use.

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

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

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

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

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

**WEEDS CONTROLLED – AVALAIRE R-MOC II APPLIED ALONE**

Barnyardgrass (watergrass)	Florida pusley foxtail millet	white) signalgrass ( <i>Brachiaria</i> )
bristly foxtail	galinsoga	Southwestern cupgrass
carpetweed	giant foxtail	tall waterhemp
common waterhemp	goosegrass	wild proso millet*
crabgrass	green foxtail	witchgrass
crowfootgrass	pigweed	woolly cupgrass*
Eastern black nightshade	prairie cupgrass	yellow foxtail
fall panicum	red rice	yellow nutsedge
	robust foxtails (purple,	

\*For control of these weeds in corn only, refer to the **Corn – Woolly Cupgrass and Wild Proso Millet Control Program** section of this label.

**Weeds Partially Controlled\*:**

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

\*\* For partial control of this weed, use a minimum of 2.0 pts./A and apply preemergence.

\*\*\* For partial control of this weed, use a minimum of 2.0 pts./A and apply through a center pivot irrigation system.

Where reference is made to weeds partially controlled, partial control can either mean erratic control from good to poor, or consistent control at a level below that generally considered acceptable for commercial weed control. Control of these weeds can be erratic, due partially to variable weather conditions. Control may be improved by following these suggested procedures:

1. **Thoroughly till moist soil** to destroy germinating and emerged weeds. If this product is to be applied preplant incorporated, this tillage may be used to incorporate this product if uniform 2- inch incorporation is achieved as recommended under **Application Procedures**.
2. Plant crop into moist soil **immediately after tillage**. If this product is to be used preemergence, apply at planting or immediately after planting.
3. If available, **sprinkler irrigate** within 2 days after application. Apply one-half to 1 inch of water. Use lower water volume (one-half inch) on *coarse-textured* soils and higher volume (1 inch) on *fine-textured soils*. Also, refer to the section on **Center Pivot Irrigation Application** for this method of applying **Avalaire R-Moc II**.
4. If irrigation is not possible and rain does not occur within 2 days after planting and application, weed control may be decreased. Under these conditions, a uniform, shallow cultivation is recommended as soon as weeds emerge.

## ROTATIONAL CROPS

### AVALAIRE R-MOC II ALONE

#### Replanting if a crop is lost

If a crop treated with this product alone is lost, any crop on this label may be replanted immediately if the rate from the previous crop does not exceed the rate for the crop to be planted. Do not make a second broadcast application of this product.

#### Rotational Crop Directions

- Barley, oats, rye, or wheat may be planted 4.5 months following treatment.
- Alfalfa may be planted 4 months following application. Clover may be seeded 9 months following application.

**RESTRICTIONS:** To avoid injury to rotational alfalfa or clover:

- DO NOT apply more than 3.0 lbs. a.i. of metolachlor per acre (3.0 pts. of **Avalaire R-Moc II**) preemergence (including preplant surface, preplant incorporated, postplant incorporated, etc.)
- DO NOT make lay-by or other postemergent applications of **Avalaire R-Moc II**.
- DO NOT graze or feed forage or fodder from cotton to livestock.
- Any crop on this label, in addition to root crops, tobacco, barley, buckwheat, milo, oats, rice, rye, wheat, cabbage, or peppers may be planted in the next spring following treatment.
- Following a lay-by treatment or multiple treatments applied the previous season, any crop on this label, in addition to tobacco, cabbage, or peppers, may be planted in the spring.
- Do not graze or feed forage or fodder from cotton to livestock.

### Avalaire R-Moc II Tank Mixtures

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

## SPRAY EQUIPMENT LOW CARRIER APPLICATION

### For Broadcast Ground Application Only

Use sprayers that provide accurate and uniform application. **Only water may be used as a carrier.** Screens in suction and in-line strainers should be 50-mesh. Manufacturers may require that tip screens as fine as 100-mesh be used with some nozzles. Use a pump with capacity to: (1) maintain up to 35-40 psi at the nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension. Use a minimum of 5.0 gals. of spray mixture per acre. Maximum recommended sprayer speed is 15 mph. Rinse sprayer thoroughly with clean water immediately after each use.

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

### AERIAL APPLICATION

Apply **Avalaire R-Moc II** in water alone or in tank mixtures with atrazine, or linuron, metribuzin in a minimum total volume of 2.0 gals./A by aircraft. This product may also be applied by air in combination with pendimethalin, or trifluralin. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. In order to assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft., using low-drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply **Avalaire R-Moc II** alone or **Avalaire R-Moc II** + atrazine

by aircraft at a minimum upwind distance of 400 ft. from sensitive plants, or apply **Avalaire R-Moc II** + linuron, or metribuzin at a minimum upwind distance of 300 ft. from sensitive plants.

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

### **Aerial Drift Management**

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

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

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

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

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

#### **MANDATORY SPRAY DRIFT MANAGEMENT**

##### **Aerial Applications:**

- **DO NOT** release spray at a height greater than 10 ft above the ground or vegetative canopy unless a greater application height is necessary for pilot safety.
- Applicators are required to select the nozzle and pressure that deliver medium or coarser droplets (ASABE S641).
- If the wind speed is 10 miles per hour or less, applicators must use 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) for all applications.
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

## **SPRAY DRIFT ADVISORIES**

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

### **IMPORTANCE OF DROPLET SIZE**

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

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

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

#### **Controlling Droplet Size – Aircraft**

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

#### **BOOM HEIGHT – Ground Boom**

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

#### **RELEASE HEIGHT - Aircraft**

Higher release heights increase the potential for spray drift.

#### **SHIELDED SPRAYERS**

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

#### **TEMPERATURE AND HUMIDITY**

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

#### **TEMPERATURE INVERSIONS**

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

#### **WIND**

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

#### **Boomless Ground Applications:**

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

#### **Handheld Technology Applications:**

Take precautions to minimize spray drift.

#### **Sensitive Areas**

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

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

#### **CENTER PIVOT IRRIGATION APPLICATION**

**Avalaire R-Moc II** alone or in tank mixture with other herbicides on this label, which are registered for center pivot application, may be applied in irrigation water preemergence (after planting, but before weeds or crop emerge) at rates specified on this label. This product also may be applied postemergence to the crop and preemergence to weeds in crops where postemergence applications are allowed on this label. Follow all restrictions (height, timing, rate, etc.) to avoid illegal residues. **Apply this product only through a center pivot irrigation system. Do not apply this product through any other type of irrigation system.** Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water. If you have questions about calibration, you should contact State Extension specialists, equipment manufacturers, or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### **Operating Instructions**

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

#### **PRECAUTIONS FOR CENTER PIVOT APPLICATIONS**

1. Where sprinkler distribution patterns do not overlap sufficiently, unacceptable weed control may result.
2. Where sprinkler distribution patterns overlap excessively, crop injury may result.

**DRY BULK GRANULAR FERTILIZERS**

Many dry bulk granular fertilizers may be impregnated or coated with this product alone or selected **Avalaire R-Moc II** tank mixtures which are registered for preplant incorporated or preplant surface applications which are used to control weeds on labeled crops on the **Avalaire R-Moc II** label and are not prohibited from use on dry bulk granular fertilizers.

When applying **Avalaire R-Moc II** or **Avalaire R-Moc II** mixtures with dry bulk granular fertilizers, follow all directions for use and precautions on the respective product labels, regarding target crops, corn, rates per acre, soil texture, application methods (including timing of application), and rotational crops.

All individual state regulations relating to dry bulk granular fertilizer blending, registration, labeling, and application are the responsibility of the individual and/or company selling the herbicide/fertilizer mixture.

Prepare the herbicide/fertilizer mixtures by using any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Nozzles used to spray **Avalaire R-Moc II** and **Avalaire R-Moc II** mixtures onto the fertilizer must be placed to provide uniform spray coverage. Care should be taken to aim the spray directly onto the fertilizer only and to avoid spraying the walls of the blender.

If the herbicide/fertilizer mixture is too wet, add a highly absorptive material, such as Agsorb® or Celatom MP-79®, or similar granular clay or diatomaceous earth materials, to obtain a dry, freeflowing mixture. Absorptive materials should be added only after the herbicide has been thoroughly blended into the fertilizer mixture. Best application results will be obtained by using a granule of 6/30 particle size or of a size similar to that of the fertilizer material being used. Generally, less than 2% by weight of absorptive material will be needed. Avoid using more than 5% absorptive material by weight.

Calculate amounts of **Avalaire R-Moc II**, atrazine, atrazine plus simazine, metribuzin, isoxaflutole or ethafluralin by the following formula:

$$\frac{2,000}{\text{lbs. of fertilizer per acre}} \times \begin{matrix} \text{pts./A of liquid or} \\ \text{flowable product} \end{matrix} = \begin{matrix} \text{pts. of liquid or flowable} \\ \text{product per ton of fertilizer} \end{matrix}$$

$$\frac{2,000}{\text{lbs. of fertilizer per acre}} \times \begin{matrix} \text{lbs./A of} \\ \text{dry product} \end{matrix} = \begin{matrix} \text{lbs. of dry product} \\ \text{per ton of fertilizer} \end{matrix}$$

**Pneumatic (Compressed Air) Application (Avalaire R-Moc II Alone):** High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer may cause fertilizer mixture to build up or plug the distributor head, air tubes, or nozzle deflector plates. To minimize buildup, premix **Avalaire R-Moc II** with Exxon Aromatic 200 at a rate of 1.0 to 4.0 pts./gal. of **Avalaire R-Moc II**. Aromatic 200 is a noncombustible / nonflammable petroleum product. Aromatic 200 may be used in either a fertilizer blender or through direct injection systems. Drying agents should not be used when using Aromatic 200.

**PRECAUTIONS**

1. Mixtures of **Avalaire R-Moc II** 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 R-Moc II** in a blender before application, a drier mixture can be attained by substituting a drying agent for Aromatic 200. The use of Agsorb FG or drying agents of 6/30 particle size are recommended.
3. Drying agents are not recommended for use with On-The-Go impregnation equipment.



## RESTRICTIONS

To avoid potential for explosion,

1. Do not impregnate **Avalaire R-Moc II** or **Avalaire R-Moc II** mixtures on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers.
2. Do not use **Avalaire R-Moc II** or **Avalaire R-Moc II** mixtures on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

## Application

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

## USE PRECAUTION:

To avoid crop injury, do not use the herbicide/fertilizer mixture on crops where bedding occurs.

## COMPATIBILITY TEST

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

1. Add 1.0 pt. of fertilizer to each of 2 one-qt. jars with tight lids.
2. To **one** of the jars, add 1 /4 tsp. or 1.2 milliliters of a compatibility agent approved for this use (1 /4 tsp. is equivalent to 2.0 pts./100 gals. spray). Shake or stir gently to mix. When an adjuvant is to be used with this product, recommended adjuvants include Compex®, Unite® or a Chemical Producers and Distributors Association (CPDA) certified adjuvant.
3. To **both** jars, add the appropriate amount of herbicide(s). If more than one herbicide is used, add them separately with dry herbicides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix. The appropriate amount of herbicides for his test follows:  
**Dry herbicides:** For each pound to be applied per acre, add 1.5 level teaspoons to each jar.  
**Liquid herbicides:** For each pint to be applied per acre, add 0.5 teaspoon or 2.5 milliliters to each jar.
4. After adding all ingredients, put lids on and tighten, and invert each jar 10 times to mix. Let the mixtures stand 15 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the 2 jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (A) slurry the dry herbicide(s) in water before addition, or (B) add 1/2 of the compatibility agent to the fertilizer and the other 1 /2 to the emulsifiable concentrate or flowable herbicide before addition to the mixture. If incompatibility is still observed, do not use the mixture.

## CROPS

## CORN (FIELD, POP, SWEET, GROWN FOR SEED) – AVALAIRE R-MOC II ALONE

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

### 1. PREPLANT SURFACE-APPLIED

Refer to instructions for use of **Avalaire R-Moc II** alone under **Application Procedures**.

#### a) Fall Application

- Apply after September 30 in MN, ND, SD, WI, and north of Route 30 in IA;
- Apply after October 15 north of Route 91 in NE and south of Route 30 in IA;
- Apply after October 31 north of Route 136 in IL

In all locations, apply to crop stubble after harvest when the sustained soil temperature at a 4-inch depth is less than 55°F and falling. In minimum-till or no-tillage systems on soils having greater than 2.5% organic matter, use 1.67-2.0 pts./A on *medium-textured* and 2.0 pts./A on *fine-textured soils*. A tillage operation may precede the application. Minimize furrow and ridge formation in the tillage operations.

#### RESTRICTIONS:

- 1) If a spring application is made, the total rate of the fall plus spring applications must not exceed the maximum total rate for corn, or illegal residues may result.
  - 2) DO NOT apply to frozen ground.
  - 3) A fall and/or a spring tillage may follow application, but do not exceed an incorporation depth greater than 2-3 inches.
- b) Use on *medium-* and *fine-textured soils* with minimum-tillage or no-tillage systems in CO, IA, IL, IN, KS, KY, MN, MO, MT, ND, NE, SD, TN, WI, and WY. Apply 2/3 the specified rate of **Avalaire R-Moc II** (1.67 pts./A on *medium soils* and 2.0 pts./A on *fine soils*) as a split treatment 30-45 days before planting and the remainder at planting. Applications made less than 30 days prior to planting may be as either a split or single treatment. Apply 1.33 pts./A on *coarse soils* not more than 2 weeks prior to planting.  
**RESTRICTION:** If a spring application is made, the total rate of the fall plus spring applications must not exceed the maximum total rate for corn, or illegal residues may result.
- c) On *medium-* and *fine-textured soils* with minimum- or no-tillage systems in CT, DE, MA, MD, ME, MI, NH, NY, OH, PA, RI, VA, VT, and WV, preplant surface applications may be applied following the directions for use above. If the amount of rainfall results in unsatisfactory length of weed control following the earlier treatment, a post-emergence application of an appropriately labeled broadleaf and/or grass weed herbicide may be used, i.e., metolachlor, primisulfuron-methyl, prosulfuron, nicosulfuron, dicamba, bromoxynil, or 2,4-D. If the postemergence treatment includes the herbicide used preplant surface-applied, do not exceed the total labeled rate for corn on a given soil texture.

Observe all directions for use, precautions, and restrictions on the label of the postemergent herbicide.

### 2. PREPLANT INCORPORATED OR PREEMERGENCE

Follow instructions for use of **Avalaire R-Moc II** alone under **Application Procedures**.

On *coarse soils*, apply 1.0-1.33 pts./A of **Avalaire R-Moc II** if organic matter content is less than 3%, or 1.33 pts./A if organic matter content is 3% or greater. On *medium soils*, apply 1.33-1.67 pts./A of **Avalaire R-Moc II**. On *fine soils*, apply 1.33-1.67 pts./A of **Avalaire R-Moc II** if organic matter content is less than 3%, or 1.67-2.0 pts./A if organic matter content is 3% or greater.

#### CALIFORNIA ONLY

Preplant Incorporated: See the **SPECIAL APPLICATION PROCEDURES** Section of this label.

3. **LAY-BY OR POSTEMERGENCE:** To extend the duration of weed control in corn, a maximum rate of 2.0 pts./A of **Avalaire R-Moc II** may be applied after crop emergence until the corn plants reach 40 inches in height, following any preplant surface-applied, preplant incorporated, or preemergence herbicide application, including **Avalaire R-Moc II**. For best results, applications should be made to soil free of emerged weeds and directed towards the base of the corn plants in excess of 5 inches tall. The total **Avalaire R-Moc II** rate applied on corn during any one crop year must not exceed 4.0 pts./A, depending on soil texture.

**Shattercane, Wild Proso Millet, Woolly Cupgrass, and Eclipta – Partial Control:** For more consistent partial control of shattercane, wild proso millet, woolly cupgrass, or eclipta, apply 2.0-2.55 pts./A as a single application; or apply 1.0-1.33 pts./A of **Avalaire R-Moc II** preplant incorporated followed by 1.0-1.33 pts./A of **Avalaire R-Moc II** preemergence; however, do not apply more than a total of 2.55 pts./A. Make the preemergence application during or after planting, but before weeds and corn plants emerge. Apply the 1.33 pts./A rate of **Avalaire R-Moc II** when a heavy infestation of shattercane, wild proso millet, woolly cupgrass, or eclipta is expected. A shallow cultivation may be needed to control any late emerging weeds.

**Woolly Cupgrass and Wild Proso Millet Control Program:** For control of these species, use the following 3-step program:

- 1) Apply **Avalaire R-Moc II** early preplant, preplant incorporated, or preemergence at 1.67 pts./A on *medium soils* and 2.0 pts./A on *fine-textured soils*, up to the maximum label rate. Lightly incorporate with a rotary hoe if rainfall does not occur within 5-7 days;
- 2) Apply a postemergence tank mix of primisulfuron-methyl at labeled rates or Exceed primisulfuron-methyl and prosulfuron at labeled rates plus nicosulfuron at labeled rates plus 1.0 qt. of crop oil concentrate plus 1.0 gal./A of 28% nitrogen, or the equivalent amount of ammonium sulfate, when grasses are 2-3 inches tall and the corn plant is at least 4 inches tall;  
And
- 3) Cultivate 14-21 days after the postemergence application.

**RESTRICTIONS (for all application methods):**

- **MAXIMUM SINGLE APPLICATION RATE:** 2.75 pts. product/A (2.68 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 4.0 pts. product/A (3.9 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 2
- **RETREATMENT INTERVAL:** 14 days
- **PRE-HARVEST INTERVAL:** 30 days
- To avoid possible illegal residues, DO NOT graze or feed forage from treated areas for 30 days following application.
- DO NOT apply more than the labeled application rate for a given soil texture per year, either as a single or split treatment, or illegal residues may result.
- In corn, **Avalaire R-Moc II** may be used up to 2.75 pts./A as either a preplant surface, preplant incorporated, or preemergence treatment on soils having an organic matter content between 6% and 20% or up to 2.0 pts./A on any soil for extended residual control and where severe stands of problem weeds are expected.
- In the event of escape of annual weeds following a preplant surface, preplant incorporated, or pre-emergence treatment of **Avalaire R-Moc II**, follow with a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide, i.e., atrazine, primisulfuron methyl, metolachlor, primisulfuron-methyl, prosulfuron, nicosulfuron, dicamba, bromoxynil, or 2,4-D. If the postemergence treatment includes the herbicide used in the earlier treatment, i.e., atrazine, do not exceed the total labeled rate for corn on a given soil texture.

- Bromoxynil may be applied postemergence alone or in tank mix combination with atrazine. DO NOT exceed 1.2 lbs. a.i./A of atrazine in tank mix combination with bromoxynil postemergence. Refer to the atrazine, bromoxynil labels for specific rates and precautions.
- Do not use **Avalaire R-Moc II** on peat or muck soils.
- Do not apply to frozen ground.

**CORN (FIELD, POP, SWEET, GROWN FOR SEED)  
AVALAIRE R-MOC II COMBINATIONS**

**Avalaire R-Moc II** in any tank mixture for corn (except **Avalaire R-Moc II** + atrazine postemergence and **Avalaire R-Moc II** + dicamba postemergence) may be applied in water or fluid fertilizer. Use only water in the **Avalaire R-Moc II** + atrazine or the **Avalaire R-Moc II** + dicamba postemergence tank mixes.

**IMPORTANT: FOR ALL TANK MIXTURES** – If applying **Avalaire R-Moc II** in tank mixtures, all the restrictions and rate limitations on the mix partner label(s) must be followed if more restrictive than those on this label.

**Avalaire R-Moc II Tank Mixtures for Corn – Additional Weeds Controlled and Special Instructions**

	<b>Avalaire R-Moc II + Atrazine and/or Simazine (1)</b>	<b>Avalaire R-Moc II + Atrazine</b>	<b>Avalaire R-Moc II + Dicamba (Field Corn)</b>	<b>Avalaire R-Moc II + Atrazine + Linuron</b>	<b>Avalaire R-Moc II + Atrazine or Simazine + Pendimethalin</b>	<b>Avalaire R-Moc II + Atrazine / dicamba</b>
<b>Comments</b>	2,3,4,6,7	2,3,4		2,3,4,5	1, 2,3,4	6
Browntop panicum	a			a	a	
Cocklebur	a	b	b	a	a	a
Common purslane	a			a	a	a
Hairy nightshade	a			a	a	a
Jimsonweed		a	b			a
Kochia		a				a
Lambsquarters	a	a	a	a	a	a
Morningglory	a	b	b	a	a	a
Mustard		a				a
Pigweed				a	a	a
Prickly sida		a				a
Ragweed	a	a	a	a	a	a
Smartweed	a	a	a	a	a	a
Velvetleaf	a	a	b	a	a	a

a = control; b = partial control.

(1) Preplant Surface, PPI, PRE

**INSTRUCTIONS**

- **Special Mixing Instructions for Avalaire R-Moc II + atrazine or simazine and pendimethalin**
  - Fill the spray tank 1/4 full with water or fluid fertilizer and start agitation.
  - To aid compatibility, add a compatibility agent, such as Unite® or X-77®, at 4.0 pts./100 gals. of spray mixture.
  - Then add the atrazine or simazine and allow it to become dispersed.
  - Then add **Avalaire R-Moc II** and pendimethalin.
  - Add the rest of the water.

- Follow the directions for use, rates, and restrictions on the tank mix partner label(s).
- In Minimum-Tillage and No-Tillage systems, mix with paraquat for control of most emerged annual weeds and suppression of perennial weeds; or with glyphosate/2, 4-D for suppression of emerged field bindweed and control or suppression of annual weeds; or with glyphosate for control of most emerged annual and perennial weeds.
- Refer to **TANK MIXTURE WITH ATRAZINE; OR ATRAZINE + 2,4-D; OR ATRAZINE + 2,4-D + DICAMBA FOR MINIMUM-TILLAGE OR NO-TILLAGE SYSTEMS** in the corn section of this label for specific directions for 2,4-D or dicamba burndown combinations in Minimum-Tillage and No-Tillage systems.
- **Avalaire R-Moc II** in any tank mixture for corn may be applied in water or fluid fertilizer, except as noted.
- Refer to **Corn (Field, Pop, Sweet, Grown for Seed) – Avalaire R-Moc II Alone**, for sequential postemergence treatments if escape weeds develop.

#### RESTRICTIONS FOR ALL TANK MIXES USED ON CORN

- **MAXIMUM SINGLE APPLICATION RATE:** 2.75 pts. product/A (2.68 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 4.0 pts. product/A (3.9 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 2
- **RETREATMENT INTERVAL:** 14 days
- **PRE-HARVEST INTERVAL:** 30 days
- For all applications to corn, do not graze or feed forage from treated areas for 30 days following application, or possible illegal residues may result.
- When applying **Avalaire R-Moc II** in tank mixture with atrazine, do not exceed the specified amount of atrazine per acre per year. Certain states may have established rate limitations for atrazine within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.
- In corn, **Avalaire R-Moc II** may be used up to 2.0 pts./A in combinations on any soil for extended residual control and where severe stands of problem weeds are expected.
- Do not apply more than the labeled rate for a given soil texture per year, either as a split or single treatment, or illegal residues may result.

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

In addition to the weeds controlled by **Avalaire R-Moc II** alone, **Avalaire R-Moc II** + atrazine or simazine, or **Avalaire R-Moc II**+ atrazine + simazine, applied preplant surface, preplant incorporated, or preemergence, also controls the following weeds: browntop panicum, cocklebur, common purslane, hairy nightshade, lambsquarters, morningglory, ragweed, smartweed, and velvetleaf.

Apply **Avalaire R-Moc II** + atrazine or simazine, or **Avalaire R-Moc II** + atrazine + simazine either preplant surface, preplant incorporated, or preemergence.

**Preplant Surface-Applied:** Follow instructions for use of **Avalaire R-Moc II** alone under **Application Procedures** and under application instructions for **Avalaire R-Moc II** alone on corn. Apply **Avalaire R-Moc II** + atrazine or simazine, or **Avalaire R-Moc II** + atrazine + simazine on *medium soils* (1.67 pts./A of **Avalaire R-Moc II** + the labeled rate of atrazine or simazine, or atrazine+ simazine combined) and on *fine soils* (1.67-2.0 pts./A of **Avalaire R-Moc II** + the labeled rate of atrazine or simazine, or atrazine+simazine combined) in minimum-tillage and no-tillage systems in CO, IA, IL, IN, KS, KY, MN, MO, MT, ND, NE, SD, TN, WI, and WY. Apply the tank mixtures as a split or single treatment

in those states and as indicated in the **Avalaire R-Moc II Alone – Preplant Surface-Applied** section of the label. On *coarse soils*, apply 1.33 pts./A of **Avalaire R-Moc II** and the labeled rate of atrazine or simazine, or atrazine + simazine combined.

**Preplant Incorporated or Preemergence:** Follow instructions for use of **Avalaire R-Moc II** alone under **Application Procedures**. Apply **Avalaire R-Moc II** + atrazine or simazine, or **Avalaire R-Moc II** + atrazine + simazine, using the appropriate rates from Table 1.

**CALIFORNIA ONLY**

Preplant Incorporated: See the **SPECIAL APPLICATION PROCEDURES** Section of this label.

**Shattercane, Wild Proso Millet, Woolly Cupgrass, and Eclipta – Partial Control**

For more consistent partial control of shattercane, wild proso millet, woolly cupgrass, or eclipta, where **Avalaire R-Moc II** is applied in tank mixture or sequentially with other registered corn herbicides, apply 2.0 - 2.33 pts. as a single application, or the following applications may be made:

- Apply 1.0-1.33 pts./A of **Avalaire R-Moc II** + the labeled rate of atrazine or simazine preplant incorporated, followed by 1.0-1.33 pts./A of **Avalaire R-Moc II** preemergence. Make the preemergence application during or after planting, but before weeds and corn plants emerge.
- Apply **Avalaire R-Moc II** at 1.33 pts./A alone or in tank mix combination with up to the labeled rate of atrazine or simazine, preplant incorporated. Do not exceed the total rate of triazine herbicide specified for corn grown on a given soil texture. Follow with a post-directed application of ametryn at the labeled rate. Refer to the ametryn label for specific directions for the post-directed application.
- Apply EPTC or butylate at labeled rates preplant incorporated, followed by a preemergence application of **Avalaire R-Moc II** at 1.0-1.33 pts./A. Do not use EPTC or butylate on soils where rapid degradation has been shown to occur. Make the preemergence application during or after planting, but before weeds and corn plants emerge.

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

**Table 1: Avalaire R-Moc II + atrazine or simazine, or Avalaire R-Moc II + atrazine + simazine, Preplant Incorporated, or Preemergence – Corn (Field, Pop, Sweet, Grown for Seed)**

Soil Texture	Broadcast Rates of Avalaire R-Moc II Per Acre			
	Less than 3% Organic Matter		3% Organic Matter or Greater	
<b>COARSE</b>	0.85-1.0 pts. + the label rate of either atrazine or simazine	0.85-1.0 pts. + the label rates of atrazine and simazine	1.0 pts. + the label rate of either atrazine or simazine	1.0 pts. + the label rates of atrazine and simazine
<b>MEDIUM</b>	1.0-1.33 pts. + the label rate of either atrazine or simazine	1.0-1.33 pts. + the label rates of atrazine and simazine	1.33 pts. + the label rate of either atrazine or simazine	1.33 pts. + the label rates of atrazine and simazine
<b>FINE</b>	1.33 pts. + the label rate of either atrazine or simazine	1.33 pts. + the label rates of atrazine and simazine	1.33-1.67 pts. + the label rate of either atrazine or simazine	1.33-1.67 pts. + the label rates of atrazine and simazine
<b>DO NOT USE ON MUCK OR PEAT (SOILS WITH MORE THAN 20% ORGANIC MATTER)</b>				

\* Use simazine in preference to atrazine when heavy infestations of crabgrass or fall panicum are expected. On soils having between 6% and 20% organic matter, **Avalaire R-Moc II** may be used up to 2.33 pts./A in tank mix combination with the label rate of atrazine. Refer to the atrazine label for weeds controlled at this rate.

## 2. TANK MIXTURE WITH ATRAZINE– POSTEMERGENCE

Weeds Controlled			
barnyardgrass (watergrass)	giant foxtail green foxtail yellow foxtail	kochia lambsquarters mustard pigweed prickly sida	purslane ragweed smartweed velvetleaf
crabgrass	jimsonweed		
crowfootgrass			
fall panicum			
Weeds Partially Controlled			
cocklebur	morning glory	yellow nutsedge	

Apply 1.0 pt./A of **Avalaire R-Moc II** + the label rate of atrazine on *coarse soils*, 1.33 pts./A of **Avalaire R-Moc II** + the label rate of atrazine on *medium soils*, or 1.33-1.67 pts./A of **Avalaire R-Moc II** + the label rate of atrazine on *fine soils*. Apply this tank mixture before grass and broadleaf weeds pass the 2-leaf stage and before corn exceeds 5 inches in height. Application to weeds larger than the 2-leaf stage will generally result in unsatisfactory control.

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

For better control of cocklebur, morningglory, velvetleaf, and yellow nutsedge on *fine-textured soils* above 3% organic matter, apply the label rate of atrazine with 1.33-1.67 pts./A of **Avalaire R-Moc II**.

Tank mixtures of **Avalaire R-Moc II** + atrazine may be applied following use of any registered preplant surface-applied, preplant incorporated, or preemergence corn herbicide, including **Avalaire R-Moc II** + atrazine.

### RESTRICTIONS

1. The total **Avalaire R-Moc II** rate must not exceed 4.0 pts., and the atrazine rate must not exceed the amount allowed on the label during any one crop year, or illegal residues may result.
2. Refer to the atrazine label for geographic, soil-texture, and rotational restrictions.

### TANK MIXTURE WITH DICAMBA

**Preemergence:** Use this tank mixture only on field corn, which is flat-planted (no furrows) in CO, IA, IL, IN, KS, MN, NE, OH, SD, and WI if the tank mix partner is registered in the state.

In addition to the weeds controlled by **Avalaire R-Moc II** alone, **Avalaire R-Moc II** + dicamba, applied preemergence, also controls lambsquarters, ragweed, smartweed, cocklebur\*, jimsonweed\*, morningglory\*, and velvetleaf\*.

\*Partially controlled.

**Apply Avalaire R-Moc II + dicamba preemergence.** Broadcast the label rate of dicamba with 1.33 pts./A of **Avalaire R-Moc II** on *medium soils*, or with 1.33-1.67 pts./A of **Avalaire R-Moc II** on *fine soils*. Do not apply on *coarse soils* or on soils with less than 2.5% organic matter. Apply this tank mixture to the soil surface at planting or after planting, but before field corn emerges. Plant seed at least 1.5 inches deep and apply behind planting equipment, avoiding incorporation by the planter wheel or other seed-covering device. Do not incorporate before corn plants emergence. If it is necessary to rotary hoe to break the soil crust, do not disturb the soil more than 1/2 inch deep.

**Postemergence for Control of Pigweed (Mid-Atlantic states, including DE, MD, PA, VA, and WV):** Apply 1.0-1.5 pts. of **Avalaire R-Moc II** + the label rate of dicamba by ground equipment when pigweed plants are less than 3 inches tall and before field corn exceeds 5 inches in height in a minimum of 20 gals. of spray per acre. Use the lower specified rate on *coarse-textured* and low organic matter soils. Use the higher specified rate on *fine-textured* and high organic matter soils.

**RESTRICTIONS FOR ALL Avalaire R-Moc II AND DICAMBA TANK MIXES ON CORN**

1. Avoid drift to sensitive nontarget plants, such as soybeans, during application, or injury may occur.
2. Do not apply with aircraft.

**TANK MIXTURE WITH ATRAZINE AND LINURON FOR CONTROL OF LAMBSQUARTERS AND PIGWEED**

For prolonged control of lambsquarters and pigweed in DE, MD, NJ, NY, PA, VA, and WV, **Avalaire R-Moc II** may be applied preemergence in tank mix combination with atrazine + the label rate of linuron. Apply **Avalaire R-Moc II** and atrazine according to the rates in Table 1 and linuron according to the labeled rates.

Observe all directions for use, precautions, and restrictions on the **Avalaire R-Moc II**, atrazine, and linuron labels when applying these products in tank mix combinations.

**TANK MIXTURE WITH ATRAZINE OR SIMAZINE + PENDIMETHALIN FOR PROLONGED CONTROL OF LAMBSQUARTERS AND PIGWEED IN FIELD CORN ONLY (NORTHEAST U.S., INCLUDING MI, IN, KY, AND STATES EAST OF THESE)**

For prolonged control of lambsquarters and pigweed, in addition to a broad spectrum of annual broadleaf and grass weeds, **Avalaire R-Moc II** in tank mix combination with atrazine\* or simazine + pendimethalin may be applied after planting, but before field corn or weeds emerge. Apply by ground equipment in a minimum of 10 gals. of water or 20 gals. of liquid fertilizer. Apply by air in a minimum of 5.0 gals. of water. Refer to Table 1 of this label for rates of **Avalaire R-Moc II** to be applied. Apply pendimethalin, atrazine, or simazine at the label rate.

Some formulations of atrazine and pendimethalin are not compatible. Before using this tank mixture, a compatibility test must be conducted. See the **COMPATIBILITY TEST** section of this label.

**Mixing Instructions:**

1. Fill the spray tank 1/4 full with water or fluid fertilizer and start agitation.
2. To aid compatibility, add a compatibility agent, such as Unite® or X-77®, at 4.0 pts./100 gals. of spray mixture.
3. Then add the atrazine or simazine and allow it to become dispersed.
4. Then add **Avalaire R-Moc II** and pendimethalin.
5. Add the rest of the water.

Observe all directions for use, precautions, and restrictions on the respective product labels when applying these products in tank mix combination. Refer to the pendimethalin label for replanting instructions in the event of crop loss.

**TANK MIXTURE WITH ATRAZINE OR SIMAZINE, OR ATRAZINE + SIMAZINE, WITH PARAQUAT, GLYPHOSATE +2,4-D, OR GLYPHOSATE FOR MINIMUM-TILLAGE OR NOTILLAGE SYSTEMS**

In minimum-tillage or no-tillage systems where corn is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, the contact herbicides paraquat, glyphosate or glyphosate+2,4-D, may be added to a tank mix of **Avalaire R-Moc II** + atrazine and/or simazine, mixed with paraquat for control of most emerged annual weeds and suppression of perennial weeds; or with glyphosate/2, 4-D for suppression of emerged field bindweed and control or suppression of annual weeds; or with glyphosate for control of most emerged annual and perennial weeds. The **Avalaire R-Moc II** + atrazine or simazine, or **Avalaire R-Moc II** + atrazine + simazine portion of the tank



mixture provides preemergence control of the weeds listed on this label in the tank mixture section for **Avalaire R-Moc II + ATRAZINE OR SIMAZINE, OR Avalaire R-Moc II + ATRAZINE + SIMAZINE PREPLANT SURFACE, PREPLANT INCORPORATED, OR PREEMERGENCE.**

**Application:** Apply before, during, or after planting, but before the corn emerges, at the rates specified below. Add paraquat, glyphosate or glyphosate/2, 4-D at the labeled broadcast rate. See the paraquat, glyphosate or glyphosate/2, 4-D labels for weeds controlled, labeled rates for specific weeds, and other use directions.

- Apply surfactant at 1.0 or 2.0 pts./100 gals. of spray mixture with 75% or greater or 50-74% nonionic active ingredient, respectively. This treatment will not control weeds taller than 6 inches.
- Apply in 20-60 gals. of water or fluid fertilizer per acre with ground equipment.
- On *coarse soils*, apply 1.0 pt./A of **Avalaire R-Moc II** with the labeled rate of all tank mix partners,
- On *medium soils*, apply 1.33 pts./A of **Avalaire R-Moc II** with the labeled rate of all tank mix partners.
- On *fine soils*\*\*\*, apply 1.33-1.67 pts./A of **Avalaire R-Moc II** with the labeled rate of all tank mix partners.

\* Use simazine in preference to atrazine when heavy infestations of crabgrass or fall panicum are expected.

\*\* When using the tank mixture of **Avalaire R-Moc II** + atrazine + simazine, use equal rates of atrazine and simazine as shown when heavy broadleaf weed infestations are expected. When heavy infestations of crabgrass or fall panicum are expected, use a 1:2 ratio of atrazine + simazine instead of the 1:1 ratio.

\*\*\* For cocklebur, yellow nutsedge, and velvetleaf control on *fine-textured soils* above 3% organic matter, apply the specified labeled rate of atrazine and/or simazine, with 1.33-1.67 pts./A of **Avalaire R-Moc II**.

**RESTRICTION:** Do not apply combinations containing paraquat in suspension-type liquid fertilizers, as the activity of paraquat will be reduced.

#### **TANK MIXTURE WITH ATRAZINE; OR ATRAZINE + 2,4-D; OR ATRAZINE + 2,4-D + DICAMBA FOR MINIMUM-TILLAGE OR NO-TILLAGE SYSTEMS**

In minimum-tillage or no-tillage systems where corn is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, **Avalaire R-Moc II** applied in combination with atrazine will kill most emerged small annual weeds. Apply **Avalaire R-Moc II** + atrazine before, during, or after planting, but before corn emerges, according to the rates in Table 1.

Where heavy crop debris exists, add the label rate of an appropriately labeled 3.8 lbs. a.i./gal. of 2,4-D amine (such as Weedar® 64 or Formula 40®) to the spray tank last and apply in a minimum of 25 gals. of carrier per acre.

As carriers, nitrogen solutions and complete liquid fertilizers, applied before corn emergence, enhance burndown of existing weeds, and therefore, are recommended instead of water. Add X-77 surfactant at 1.0-2.0 qts./100 gals. of diluted spray, or another appropriate surfactant at its recommended rate, or add crop oil concentrate plus 28% liquid nitrogen (or equivalent). Apply before weeds exceed 3 inches in height. If alfalfa is present, add dicamba to the spray mixture at the labeled rate and apply before alfalfa exceeds 6 inches in height.

For fields with existing sod grasses (e.g., bromegrass, orchardgrass, rye, or timothy), when existing weeds exceed 3 inches in height or when very dry conditions exist, add paraquat at the label rate in place of or in addition to 2,4-D, as indicated above. Do not apply paraquat in suspension-type liquid fertilizer. Observe all directions for use, precautions, and restrictions on the respective product labels when applying these products in tank mix combination.

#### **TANK MIXTURE WITH DICAMBA / ATRAZINE IN CONSERVATION TILLAGE – FIELD CORN**

In conservation tillage systems where field corn is planted directly into a cover crop or previous crop residue, **Avalaire R-Moc II** + dicamba / atrazine will kill most emerged small annual weeds. Apply **Avalaire R-Moc II** + dicamba / atrazine before, during, or after planting, but before field corn emergence on *medium* and *fine soils* with greater than 2.5% organic matter. For fields with existing vegetation exceeding 3 inches in height or when very dry conditions

exist, add paraquat at its labeled rate. **Avalaire R-Moc II** + dicamba / atrazine may be applied postemergence to field corn plants less than 3 inches tall and before weedy grasses exceed the 2-leaf stage. As carriers, nitrogen solutions and complete liquid fertilizers, applied before crop emergence enhance burndown of existing weeds. Do not apply paraquat in suspension type liquid fertilizer or use on emerged crop.

Refer to the dicamba / atrazine label and follow all directions, restrictions, and use precautions regarding application and use in field corn.

#### **TANK MIXTURE WITH ISOXAFLUTOLE - FIELD CORN ONLY[\*]**

##### **[\*Not for Use in California]**

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

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

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

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

**For coarse-textured soils:** Apply labeled rate of isoxaflutole with 1.0 to 1.33 pts./A of this product.

**Restriction:** Do not use isoxaflutole on coarse-textured soils with less than 1.5% organic matter.

**For medium-textured soils:** Where lower labeled rate of isoxaflutole is used, rates as low as 1.33 pts./A of this product may be applied. Where higher labeled rate of Isoxaflutole is used, rates as low as 1.0 pint per acre of this product may be applied. This product can be used in combination with Isoxaflutole at rates up to 1.67 pts./A on medium-textured soils.

**For fine-textured soils:** Where lower labeled rate of Isoxaflutole is used, rates as low as 1.33 pts./A of this product may be applied if the soil organic matter is less than 3%. If the soil organic matter is 3% or greater, 1.67 pts./A of this product should be applied. Where higher labeled rate of Isoxaflutole is used, rates as low as 1.0 pts./A of this product may be applied. This product can be used in combinations with Isoxaflutole at rates up to 2.0 pts./A on fine-textured soils if the organic matter is 3% or greater.

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

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

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

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

**AVALAIRE R-MOC II + GLUFOSINATE: POSTEMERGENCE USE IN LIBERTYLINK® CORN OR CORN WARRANTED AS BEING TOLERANT TO GLUFOSINATE**

These tank mixtures can be applied postemergence to weeds and corn from seed designated as LibertyLink or Corn warranted as being tolerant to glufosinate. Glufosinate provides postemergence control of a broad spectrum of grass and broadleaf weeds and this product provides residual control of grasses and certain broadleaf weeds listed in the section **Avalaire R-Moc II - Alone**. Refer to **Preplant Incorporated or Preemergence** under the section **Corn (Field, Pop, Sweet, Grown for Seed) – Avalaire R-Moc II Alone** and use the minimum rate per soil texture and organic matter classification for season-long residual control from this tank mix combination with glufosinate. Refer to the glufosinate label for the postemergence application rates according to weed species and their maximum height at the time of postemergence application. Where multiple weed species are present, use the highest specified rate to control the species and growth stages present.

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

**AVALAIRE R-MOC II + GLYPHOSATE FOR POSTEMERGENCE APPLICATION TO GLYPHOSATE-TOLERANT CORN**

The tank mixture of this product + glyphosate can be applied postemergence to weeds and to corn designated as glyphosate-tolerant.

Application may be applied postemergence to glyphosate-tolerant corn from emergence until corn reaches 30 inches tall or the V8 stage (8 leaves with collars), whichever comes first. This mixture will provide postemergence control of weed species on the glyphosate label and residual control of weed species on this label. Use the minimum rate of this product postemergence with Glyphosate in glyphosate-tolerant Corn as specified in **Preplant Incorporated or Preemergence** under the section **Corn (Field, Pop, Sweet, Grown for Seed) – Avalaire R-Moc II Alone** according to soil texture and organic matter. Refer to the glyphosate label and follow appropriate use directions, application procedures, precautions and limitations. Refer to the glyphosate label for directions to control problem species. Where difficult species and/or severe weed populations are expected, use the maximum rate where rate ranges are listed.

**AVALAIRE R-MOC II + GLYPHOSATE + ATRAZINE FOR POSTEMERGENCE APPLICATION TO GLYPHOSATE-TOLERANT CORN**

The tank mixture of this product + atrazine + glyphosate can be applied postemergence to weeds and to corn designated as glyphosate-tolerant.

Application may be applied postemergence to glyphosate-tolerant corn from emergence up to 12 inches in height. This mixture will provide postemergence control of weed species on the glyphosate label and residual control of weed species on this label + atrazine label. Use the minimum rate postemergence of this product + atrazine with glyphosate in glyphosate-tolerant Corn as specified in **Preplant Incorporated or Preemergence** under the **Tank Mixture with Atrazine or Simazine, or Atrazine + Simazine** section and Table 1 of this label according to soil texture and organic matter. Follow all applicable use directions, limitations, precautions and information regarding application to Corn on this label, atrazine and glyphosate labels for application to glyphosate-tolerant corn. Where difficult species and/or severe weed populations are expected, use the maximum rate where rate ranges are listed.

## COTTON – AVALAIRE R-MOC II ALONE

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

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

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

\*\* Area 2 = NM, OK, and TX

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

### RESTRICTIONS:

1. For best control of yellow nutsedge and suppression of seedling johnsongrass, apply this product preplant incorporated at the maximum rate for the soil texture, whether applied alone or mixed with prometryn.

**Preemergence:** Apply **Avalaire R-Moc II** to the soil surface at planting or after planting, but before weeds or crop emerge.

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

<b>VA, NC, SC, GA, FL, and AL</b>	Apply <b>Avalaire R-Moc II</b> at 1 to 1.33 pts./A when cotton is 3 to 6 inches tall.
<b>TN, AR, KS, MS, MO, and LA</b>	Apply <b>Avalaire R-Moc II</b> at 0.75 to 1.33 pts./A when cotton is 3 to 12 inches tall.
<b>TX, OK, NM, AZ, CA, and Clay Soils in AR</b>	Apply <b>Avalaire R-Moc II</b> at 1 to 1.33 pts./A when cotton is 3 to 12 inches tall, but before August 1.

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

Apply this product postemergence over a previous preplant or preemergence application of this product as shown in the following table.

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

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

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

**RESTRICTIONS:**

- **MAXIMUM SINGLE APPLICATION RATE:** 1.33 pts. product/A (1.29 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 4.0 pts. product/A (3.9 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 2
- **RETREATMENT INTERVAL:** 14 days
- Do not graze or feed forage or fodder from cotton to livestock, or illegal residues may result.
- To avoid crop injury, do not apply this product on sand or loamy sand soils, or in areas where water is likely to "pond" over the bed;
- To avoid concentration in the seed furrow, do not make broadcast applications of this product to cotton planted in furrows more than 2 inches deep. Band applications may be made to cotton planted in furrows deeper than 2 inches, but band width should not exceed the width of the bottom of the furrow;
- In furrow-planted cotton, to avoid concentration in the furrow and potential injury, do not apply this product postemergence until after first "knifing" or cultivation to level soil surface.
- Do not apply over-the-top in fluid fertilizer or any other adjuvant, surfactant, oil, or other pesticide not specified in the cotton section of this label, or injury may occur;
- Do not apply on Taloka silt loam.
- Do not use in Gaines County, TX.
- Do not apply to frozen ground.

**COTTON – AVALAIRE R-MOC II COMBINATIONS**

**TANK MIXTURE WITH PROMETRYN**

**Avalaire R-Moc II** tank mixed with prometryn may be applied preplant incorporated or preemergence in water or fluid fertilizer. When fluid fertilizer is used as a carrier for this product, either alone or in combination with prometryn, mix only the amount that will be sprayed in one operation. Do not allow these to stand without agitation. Only water may be used as a carrier for postemergence-directed application.

In addition to those weeds controlled by **Avalaire R-Moc II** alone, **Avalaire R-Moc II** + prometryn, applied preplant incorporated or preemergence, also controls the following weeds: junglerice, wild oats, annual morningglory, groundcherry, hairy nightshade, lambsquarters, malva, mustard, prickly sida (teaweed), purslane, ragweed, and shallow-germinating seedlings of cocklebur and coffeeweed. As a postemergence-directed application, prometryn provides postemergence control and residual control of weeds on its label, while this product provides residual control of weed species on its label. This product will not control emerged weeds.

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

**TABLE 2: AVALAIRE R-MOC II + PROMETRYN – COTTON (NM, OK, TX)**

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

**Postemergence-Directed (AR, AZ, CA, LA, MO, MS, NM, OK, TN, and TX):** **Avalaire R-Moc II** may be tank mixed with prometryn in water and applied postemergence directed in cotton for control of emerged weeds listed on the prometryn label and residual preemergence control of weeds controlled by this product and prometryn, or application may be made after cultivation for residual preemergence control. These treatments may be applied over previous application of herbicides, including this product, provided the maximum label rate of any product is not exceeded (do not make tandem applications of metolachlor and s-metolachlor herbicides). Do not apply over-the-top of cotton or injury may occur.

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

**RESTRICTIONS:**

- **MAXIMUM SINGLE APPLICATION RATE:** 1.33 pts. product/A (1.29 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 4.0 pts. product/A (3.9 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 2
- **RETREATMENT INTERVAL:** 14 days
- To avoid concentration in the seed furrow, do not make broadcast applications of this product + prometryn to cotton planted in furrows more than 2 inches deep. Band applications may be made to cotton planted in furrows deeper than 2 inches, but band width should not exceed the width of the bottom of the furrow.
- To avoid crop injury,
  - Do not apply on sand or loamy sand soils, or in areas where water is likely to “pond” over the bed;
  - Do not apply in cut areas of newly leveled fields, or in areas of excess salt;

- Do not apply to glandless cotton varieties; and
- Do not apply on Taloka silt loam.
- Do not use in Gaines County, TX.
- Do not graze or feed forage or fodder from cotton to livestock, or illegal residues may result.
- Refer to the prometryn label for further instructions and restrictions.

**TANK MIXTURE WITH FLUOMETURON**

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

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

**TABLE 3: AVALAIRE R-MOC II + FLUMETURON – COTTON**

Soil Texture	Broadcast Rates Per Acre		
	Avalaire R-Moc II (pts.)		9BFlumeturon
	Area 1*	Area 2**	
Sand, Loamy sand	DO NOT USE		
Sandy loam	0.75-1.0	0.85-1.0	Label rate
Loam, Silt loam, Silt	1.0-1.33	1.0-1.33	Label rate
Fine soil	1.0-1.33	1.33	Label rate

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

\*\* Area 2 = Eastern OK, Gulf Coast, Rio Grande Valley, and Eastern TX

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

**RESTRICTIONS**

1. To avoid possible illegal residues, DO NOT feed treated forage or gin trash to livestock, or graze treated areas.
2. DO NOT apply **Avalaire R-Moc II** + fluometuron on sand or loamy sand soils, or in areas where water is likely to “pond” over the bed, or crop injury may occur.
3. To avoid concentration in the seed furrow, do not make broadcast applications of this product + fluometuron to cotton planted in furrows more than 2 inches deep. Band applications may be made to

cotton planted in furrows deeper than 2 inches, but band width should not exceed the width of the bottom of the furrow.

4. The use of fluometuron following the use of a systemic insecticide at planting may result in crop injury.
5. DO NOT use on Taloka silt loam, or crop injury may occur.
6. DO NOT use in Gaines County, TX.

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

#### **TANK MIXTURE OF AVALAIRE R-MOC II + FLUOMETURON WITH PARAQUAT OR GLYPHOSATE FOR MINIMUM-TILLAGE OR NO-TILLAGE SYSTEMS**

In minimum-tillage or no-tillage systems where cotton is planted directly into a cover crop, stale seedbed, or previous crop residues, the contact herbicides paraquat or glyphosate may be added to a tank mix of either **Avalaire R-Moc II** or **Avalaire R-Moc II** + fluometuron. When used as directed, the paraquat portion of the tank mixture controls most emerged weeds and suppresses many perennial weeds. Glyphosate combinations will control emerged annual and perennial weeds when applied as directed on the glyphosate label. **Avalaire R-Moc II** and **Avalaire R-Moc II** + fluometuron portion of the tank mixture provides preemergence control of the weeds listed on each label, respectively.

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

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

**Do not apply this product + fluometuron + glyphosate in tank mixture because of compatibility problems.**

Add paraquat or glyphosate at the following broadcast rates:

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

**RESTRICTION:** Do not apply combinations containing paraquat in suspension-type liquid fertilizers, as the activity of paraquat will be reduced.

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

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

#### **RESTRICTIONS:**

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

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

**Avalaire R-Moc II** may be tank mixed with MSMA in water and applied postemergence-directed for control of emerged weeds listed on the MSMA product label and residual preemergence control of weeds controlled by this product. The addition of prometryn or fluometuron will add control of weed species on their respective labels.

**Postemergence-Directed (AR, AZ, CA, LA, MS, NM, OK, TN, TX, and Bootheel of MO):** Apply **Avalaire R-Moc II** + MSMA postemergence-directed to 3 to 12-inch cotton according to the directions, restrictions, and use precautions



on the MSMA product label, as well as the directions, restrictions, and use precautions for use of this product in the section for **Cotton — Avalaire R-Moc II Alone – Postemergence**. Do not apply after first cotton bloom. These treatments may be applied over previous registered treatments, including this product, provided the maximum label rate of any product is not exceeded. Flumeturon or prometryn may be added to this product + MSMA tank mixture according to the respective label directions for application to 3- to 12-inch cotton. When these mixtures are used, follow the mixing instructions for **Avalaire R-Moc II + prometryn or flumeturon** and then add the MSMA product.

Do not use this product in tank mix with premixes of MSMA plus herbicides other than those registered for use in tank mixture with this product on cotton.

#### **TANK MIXTURE OF AVALAIRE R-MOC II WITH GLYPHOSATE FOR USE ON ROUNDUP READY® COTTON AND ROUNDUP READY FLEX COTTON ONLY**

**Avalaire R-Moc II** may be tank mixed with glyphosate in water and applied postemergence over-the-top or postemergence-directed spray only to RoundUp Ready or RoundUp Ready Flex cotton or other cotton varieties or cultivars warranted as tolerant to glyphosate. This tank mixture will control emerged weeds listed on the glyphosate label and residual preemergence control of weeds listed on this label. See the **Cotton — Avalaire R-Moc II Alone – Postemergence** section for proper rates and timing of **Avalaire R-Moc II**. Also follow the glyphosate label for appropriate use rate, method of application, and restrictions of application timing. For postemergence over-the-top application, do not add any adjuvants, surfactants, fertilizers, or other pesticides to this tank mixture as unacceptable injury may occur.

#### **RESTRICTIONS:**

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

#### **TANK MIXTURE OF AVALAIRE R-MOC II WITH GLUFOSINATE TOLERANT COTTON**

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

#### **RESTRICTIONS:**

1. Do not apply this tank mixture postemergence to any cotton variety unless it is designated glufosinate tolerant, and unless the glufosinate formulation being used is registered for postemergence use in glufosinate tolerant cotton.
2. Postemergence over-the-top applications of this tank mixture may cause temporary injury in the form of necrotic spotting to exposed cotton leaves, which will not affect normal plant development.
3. Do not apply glufosinate postemergence to cotton beyond early bloom stage.
4. Do not use on sand or loamy sand soils in Gaines County, TX.

## PEANUTS – AVALAIRE R-MOC II ALONE

Apply **Avalaire R-Moc II**, either preplant incorporated, postplant incorporated, preemergence, or lay-by, using the appropriate rate specified below. **Preplant Incorporated or Preemergence:** Follow instructions for use of this product alone under **Application Procedures**.

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

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

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

### RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 2.0 pts. product/A (1.95 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 2.0 pts. product/A (1.95 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1
- **PRE-HARVEST INTERVAL:** 90 days
- Do not apply within 90 days of harvest, or illegal residues may result.
- Do not graze or feed peanut forage or fodder to livestock for 30 days following application.
- **Avalaire R-Moc II** alone may be applied as directed after any of the following preplant incorporated herbicides when used according to their label: trifluralin, ethafluralin, imazethapyr, or pendimethalin.

## PEANUTS – AVALAIRE R-MOC II COMBINATIONS

### TANK MIXTURE WITH BENFLURALIN

This product + benfluralin tank mixture applied preplant incorporated controls those weeds listed under the section “THIS PRODUCT APPLIED ALONE” and those weeds as listed on the benfluralin label. Apply 1 to 1.33 pts./A of this product + labeled rate of benfluralin in a minimum of 10 gallons of spray volume per acre for ground application or in a minimum of 5 gallons of spray volume per acre for aerial application. Follow the procedures for benfluralin on the benfluralin label for soil preparation and incorporation of this tank mix. Apply and incorporate this product + benfluralin up to 14 days prior to planting.

Follow all restrictions and use precautions on the benfluralin label.

### Multiple Applications

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

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

**1st Application:** Apply this product preplant incorporated as directed under **Peanuts – Avalaire R-Moc II Alone** or apply this product + benfluralin preplant incorporated as directed previously in this section. Refer to the respective section for weeds controlled.

**2nd Application:** Apply this product any time from preemergence up to “ground cracking” at 1 to 2 pts./A for extended control of weeds not yet emerged. Refer to the **Avalaire R-Moc II Applied Alone** section for a list of weeds controlled.

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

**Restrictions:** (1) Do not apply more than the equivalent of 2.66 pints of this product per acre during any one year or illegal residues may result. (2) Do not graze or feed peanut forage or fodder to livestock for 30 days following application. (3) Do not apply within 90 days of harvest or illegal residues may result

**2. Southwest Only (NM, OK, TX)**

**1st Application:** Apply this product preplant incorporated or preemergence or at-cracking as directed previously in this section. Refer to the respective section for weeds controlled.

**2nd Application:** Apply this product at lay-by as directed under the section **Peanuts – Avalaire R-Moc II Alone**. Use only when late germinating weeds are expected to be a problem. Refer to the **Avalaire R-Moc II Applied Alone** section for a list of weeds controlled.

**Restrictions:** (1) Do not apply more than the equivalent of 2.66 pints of this product per acre during any one year or illegal residues may result. (2) Do not graze or feed peanut forage or fodder to livestock for 30 days following application. (3) Do not apply within 90 days of harvest or illegal residues may result.

**TANK MIXTURE OR SEQUENTIALLY WITH IMAZETHAPYR**

The tank mixture or sequential treatment of **Avalaire R-Moc II** and imazethapyr controls both all weeds controlled by this product alone and all weeds controlled by imazethapyr alone. Refer to the **Avalaire R-Moc II Applied Alone** section for weeds controlled by this product and to the imazethapyr label for weeds controlled by imazethapyr.

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

**TANK MIXTURE WITH ETHAFLURALIN**

The tank mixture controls all weeds controlled by **Avalaire R-Moc II** alone and by ethafluralin alone. Refer to the **Avalaire R-Moc II Applied Alone** section for weeds controlled by this product and to the ethafluralin label for weeds controlled by ethafluralin.

Apply **Avalaire R-Moc II** + ethafluralin preplant incorporated, using the appropriate rate from the table below. Follow label recommended soil preparation and soil-incorporation procedures for ethafluralin.

**Table 4: Avalaire R-Moc II + Ethafluralin – Peanuts**

Soil Texture	Broadcast Rates Per Acre (pts.)			
	Southeast		NM, OK, TX	
	Avalaire R-Moc II	Ethafluralin	Avalaire R-Moc II	Ethafluralin
<b>COARSE</b>	1.0-1.33	Label rate	0.85-1.33	Label rate
<b>MEDIUM</b>	1.0-1.33	Label rate	0.85-1.33	Label rate
<b>FINE</b>	1.0-1.33	Label rate	0.85-1.33	Label rate

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

**TANK MIXTURE WITH PENDIMETHALIN**

**Avalaire R-Moc II** + pendimethalin applied preplant incorporated controls all weeds controlled by this product alone plus Texas panicum, field sandbur, johnsongrass from seed, lambsquarters, kochia, annual spurge, and other species on the pendimethalin label. Apply **Avalaire R-Moc II** + pendimethalin by ground or by aerial equipment within 14 days before planting. Incorporate into the top 1 to 2 inches of soil before planting and within 7 days of application, using a finishing disk or similar implement capable of providing uniform incorporation. If peanuts will be planted on beds, apply and incorporate after bed formation. Refer to the **Incorporation** instructions of the respective labels for additional directions.

Apply **Avalaire R-Moc II** + pendimethalin preplant incorporated, using the appropriate rates from the table below.

**Table 5: Avalaire R-Moc II + pendimethalin – Peanuts**

Soil Texture	Broadcast Rates of Avalaire R-Moc II (pints per acre)			
	NM, OK, TX		Other Peanut Growing States	
	Avalaire R-Moc II	Pendimethalin	Avalaire R-Moc II	Pendimethalin
<b>Sand, Loamy sand</b>	0.85	Label rate	1.0-1.33	Label rate
<b>Sandy loam</b>	0.85-1.0	Label rate	1.0-1.33	Label rate
<b>Fine soil</b>	1.33	Label rate	1.33	Label rate

Follow all use directions, restrictions, and use precautions regarding application to peanuts on **Avalaire R-Moc II** and pendimethalin labels.

**TANK MIXTURE OR SEQUENTIALLY WITH PARAQUAT**

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

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

The addition of bentazon to this product + paraquat mixture will result in improved control of such problem broadleaf weeds as bristly starbur, cocklebur, prickly sida and smartweed. This product + paraquat + Bentazon applied at ground cracking or sequentially will control or suppress small (1 to 6 inch) emerged annual grass and broadleaf weeds and provide residual control of weed species listed in the **Avalaire R-Moc II Applied Alone** section of this label. Apply labeled rates of bentazon + paraquat with the appropriate rate of this product from the **Peanuts – Avalaire R-Moc II Alone** section in a minimum spray volume of 20 gallons per acre with ground equipment. A second application of this product + paraquat + bentazon may be made 28 days after ground cracking. (Refer to **Multiple Applications** under the **Peanuts – Avalaire R-Moc II Combinations** section of this label for geographical areas where multiple applications are directed.) A second paraquat + bentazon application may be made in all peanut-growing areas, if needed. Refer to the respective labels and follow all directions, limitations and restrictions for each product.

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

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

**TANK MIXTURE OR SEQUENTIALLY WITH BENTAZON**

This product + bentazon applied at ground cracking or sequentially will control weed species on the bentazon label and provide residual control of weed species listed in the **Avalaire R-Moc II Applied Alone** section of this label. Apply

labeled rate of bentazon in 20 gallons per acre depending on weed species and stage of growth as specified on the bentazon label with the appropriate rate of this product from **Peanuts – Avalaire R-Moc II Alone** section. A second application of the combination may be made before peanut pegging. (Refer to **Multiple Applications** under the **Peanuts – Avalaire R-Moc II Combinations** section of this label for geographical areas where multiple applications are directed.) A second bentazon application may be made in all peanut-growing areas, if needed. Refer to the respective labels and follow all directions, limitations and restrictions for each product.

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

This product + bentazon + 2,4-DB applied at ground cracking or sequentially will control weed species on the bentazon and 2,4-DB labels, especially morningglories.

Apply labeled rates of bentazon + 2,4-DB in 20 gallons per acre depending on weed species and stage of growth as specified on the bentazon label with the appropriate rate of this product from the **Peanuts – Avalaire R-Moc II Alone** section. A second application of the combination may be made before Peanut pegging. (Refer to “Multiple Applications” under the **Peanuts – Avalaire R-Moc II Combinations** section of this label for geographical areas where multiple applications are directed.) A second bentazon + 2,4-DB application may be made in all Peanut growing areas, if needed. Refer to the respective labels and follow all directions, limitations and restrictions for each product.

#### **TANK MIXTURE OR SEQUENTIALLY WITH BENTAZON/ACIFLUFEN**

**Avalaire R-Moc II** + bentazon/aciflufen applied at ground cracking through 2 expanded tetrafoliate leaves or **Avalaire R-Moc II** applied according to the directions for **Avalaire R-Moc II Alone** and followed with an at-cracking through postemergence treatment of bentazon/aciflufen as specified on its label will control species on the bentazon/aciflufen label and provide residual control of species listed in the **Avalaire R-Moc II Applied Alone** section of this label. This product will not control emerged weeds. Refer to the **Peanuts – Avalaire R-Moc II Alone** section and to the bentazon/aciflufen label and follow all directions, use precautions, and restrictions for each product.

#### **CROP GROUP 6 LEGUME VEGETABLES (succulent and dried) – AVALAIRE R-MOC II ALONE**

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

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

**Spring Application:** Apply **Avalaire R-Moc II** either preplant incorporated or preemergence, using the appropriate rate specified below.

**Preplant Incorporated or Preemergence:** Follow instructions for use of this product alone under **Application Procedures**. On *coarse soils* with less than 3% organic matter, apply 1 to 1.33 pts./A of **Avalaire R-Moc II** or 1.33 pts./A if organic matter is 3% or greater. On *medium soils*, apply 1.33 to 1.67 pts./A of this product. On *fine soils*, apply 1.33 to 1.67 pts./A of this product if organic matter content is less than 3%, or 1.67 to 2 pts./A if organic matter content is 3% or greater.

#### **RESTRICTIONS:**

- **MAXIMUM SINGLE APPLICATION RATE:** 2.0 pts. product/A (1.95 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 3.0 pts. product/A (2.93 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 2
- **RETREATMENT INTERVAL:** 10-14 days

- **PRE-HARVEST INTERVAL:** 120 days (hay) and 60 days (forage)
- Do not cut for hay within 120 days following application of this product.
- Do not use for forage within 60 days following application of this product.
- Do not apply more than 3 pts. (2.93 lb ai)/A of this product during any one crop year.

## **CROP GROUP 6 LEGUME VEGETABLES (succulent and dried) – AVALAIRE R-MOC II COMBINATIONS**

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

This mixture controls all weeds controlled by **Avalaire R-Moc II** alone and by EPTC alone. Refer to the **Avalaire R-Moc II Applied Alone** section of this label for weeds controlled by this product alone and to the EPTC label for weeds controlled by EPTC.

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

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

#### **CALIFORNIA ONLY**

Preplant Incorporated: See the **SPECIAL APPLICATION PROCEDURES** Section of this label.

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

Apply the labeled rate of EPTC\* with **Avalaire R-Moc II** as specified. On *coarse soils*, apply 0.85 pts./A of this product if organic matter content is less than 3%, or 1 pt./A if organic matter content is 3% or greater.

On *medium soils*, apply 1 pt./A of **Avalaire R-Moc II** if organic matter content is less than 3%, or 1.33 pts./A if organic matter content is 3% or greater. On *fine soils*, apply 1.33 pts./A of **Avalaire R-Moc II** if organic matter is less than 3%, or 1.33 to 1.67 pts./A if organic matter is 3% or greater.

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

#### **RESTRICTIONS:**

- **MAXIMUM SINGLE APPLICATION RATE:** 2.0 pts. product/A (1.95 lbs.Ai/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 3.0 pts. product/A (2.93 lbs.Ai/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 2
- **RETREATMENT INTERVAL:** 10-14 days
- **PRE-HARVEST INTERVAL:** 120 days (hay) and 60 days (forage)
- DO NOT exceed the label rate of EPTC on small white beans or green beans grown on coarse-textured soils.
- DO NOT cut for hay within 120 days following application, or illegal residues may result.

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

**Avalaire R-Moc II** + trifluralin tank mix applied preplant incorporated controls those weeds listed under **Avalaire R-Moc II Applied Alone** and those weeds listed for trifluralin alone on the trifluralin label. **Avalaire R-Moc II** + trifluralin may be applied by ground or by aerial equipment and incorporated up to 14 days prior to planting. Follow the procedures on this label and on the respective trifluralin label, using equipment that provides uniform 2-inch incorporation.

Apply **Avalaire R-Moc II** + trifluralin tank mix, using the appropriate label rate of this product, and the trifluralin specified label rate. Choose the product rate for the specific soil texture/organic matter classification and weed species expected.

Follow all restrictions and use precautions on the respective trifluralin label and in the Crop Group 6 Legume Vegetables (succulent and dried) – **Avalaire R-Moc II Alone** section of this label.

### POTATOES – AVALAIRE R-MOC II ALONE

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

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

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

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

#### RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 2.75 pts. product/A (2.68 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 3.70 pts. product/A (3.61 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 2
- **RETREATMENT INTERVAL:** 14 days
- **PRE-HARVEST INTERVAL:** 60 days (at planting incorporated), 40 days (lay-by)
- Potatoes treated with this product must not be harvested within 60 days after the at-planting to drag-off application, or within 40 days after a lay-by application, or illegal residues may result.
- Do not use on muck or peat soils. If cool, wet soil conditions occur after application, this product may delay maturity and/or reduce yield of Superior and other early maturing potato varieties.
- To avoid crop injury,
  - Do not use on sweet potatoes or yams;
  - Do not apply both as a preemergence and an incorporated treatment;
- Do not use in Kern County, CA.

### POTATOES – AVALAIRE R-MOC II COMBINATIONS

#### TANK MIXTURE WITH METRIBUZIN

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

\*Partially controlled.

**Avalaire R-Moc II** at 1 to 2 pts./A plus metribuzin at the labeled use rate may be used preemergence through after last hilling. Apply 1 to 1.33 pts./A of **Avalaire R-Moc II** on *coarse soils* and 1.33 to 2 pts./A on other soil textures. Within this rate range, use the lower rate on soils relatively coarse-textured or low in organic matter; use the higher

rate on soils relatively fine-textured or high in organic matter. Effectiveness will be reduced if later cultural practices expose untreated soil. This product will not control emerged weeds.

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

**RESTRICTIONS:**

- **MAXIMUM SINGLE APPLICATION RATE:** 2.75 pts. product/A (2.68 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 3.70 pts. product/A (3.61 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 2
- **RETREATMENT INTERVAL:** 14 days
- **PRE-HARVEST INTERVAL:** 60 days (at planting incorporated), 40 days (lay-by)
- DO NOT apply to sweet potatoes or yams.
- DO NOT use this tank mixture on muck or peat soils.
- DO NOT use this product + metribuzin on potatoes in Kern County, CA
- Postemergence applications to potatoes should be made only as a directed or semi-directed spray to avoid chlorosis, minor necrosis, or leaf distortion.

**AVALAIRE R-MOC II + LINURON TANK MIXTURE (EAST OF ROCKY MOUNTAINS)**

**Avalaire R-Moc II** may be applied in a tank-mix combination with any of the registered linuron formulations as a preemergence broadcast application to potatoes. Apply to the soil surface after planting and before emergence of the crop or after final drag-off, according to the rates specified in the table below.

**TABLE 6: AVALAIRE R-MOC II + LINURON – POTATOES (EAST OF ROCKY MOUNTAINS)**

Soil Texture	Broadcast Rates Per Acre			
	1% to Less Than 3% Organic Matter		3-5% Organic Matter	
	Avalaire R-Moc II	Linuron	Avalaire R-Moc II	Linuron
<b>COARSE</b> Sandy loam	1 pt.	Label rate	1.33 pts.	Label rate
<b>MEDIUM</b> Loam, Silt loam, Silt	1.33 pts.	Label rate	1.67-2 pts.	Label rate

**RESTRICTIONS:**

To avoid crop injury,

- Do not use on sands or loamy sands, and
- Do not incorporate or spray over the top of emerged potatoes.

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

**TANK MIXTURE WITH PENDIMETHALIN**

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



**TABLE 7: Avalaire R-Moc II + PENDIMETHALIN – POTATOES**

Soil Texture	12B Broadcast Rates Per Acre (pts.)	
	Less Than 3% Organic Matter	More Than 3% Organic Matter
	Avalaire R-Moc II + pendimethalin	Avalaire R-Moc II + pendimethalin
COARSE	1.0-1.33 + label rate	1.0-1.33 + label rate
MEDIUM	1.33 + label rate	1.33-1.67 + label rate
FINE	1.33-1.67 + label rate	1.67 + label rate

Refer to **Avalaire R-Moc II** and pendimethalin labels and observe all directions, timings, use precautions, and restrictions concerning the use of these products on potatoes and follow the most restrictive.

#### TANK MIXTURE WITH PENDIMETHALIN + EPTC

In addition to the weeds controlled by **Avalaire R-Moc II** alone, this tank mixture will control those species on the pendimethalin and EPTC labels. Refer to the **Avalaire R-Moc II**, pendimethalin and EPTC labels for rates of those products (depending on geographical area); and observe all directions, use precautions, and restrictions concerning the use of these products on potatoes and follow the most restrictive.

#### SAFFLOWERS – AVALAIRE R-MOC II ALONE

**Preplant Incorporated or Preemergence:** Follow instructions for use of **Avalaire R-Moc II** alone under **Application Procedures**.

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

#### CALIFORNIA ONLY

Preplant Incorporated: See the **SPECIAL APPLICATION PROCEDURES** Section of this label.

#### RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 2.0 pts. product/A (1.95 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 2.0 pts. product/A (1.95 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1

#### SORGHUM – AVALAIRE R-MOC II ALONE

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

Apply **Avalaire R-Moc II**, either preplant surface, preplant incorporated, or preemergence, using the appropriate rate specified below. Apply this product alone only when the sorghum seed has been properly treated by the seed company with Concep or Screen.

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

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

**RESTRICTIONS:**

- **MAXIMUM SINGLE APPLICATION RATE:** 1.67 pts. product/A (1.63 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 1.67 pts. product/A (1.63 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1
- If sorghum seed is not properly treated with Concep or Screen seed treatment, this product will severely injure the crop.
- Under high soil moisture conditions prior to sorghum emergence, injury may occur following the use of this product. The crop will normally outgrow this effect.
- DO NOT use this product on sorghum grown under dry mulch tillage, or injury may occur.
- Except for the split preplant surface treatment, DO NOT make more than one application per year, or illegal residues may result.

**SORGHUM – AVALAIRE R-MOC II COMBINATIONS****USE ONLY ON SORGHUM (GRAIN OR FORAGE) SEED TREATED WITH CONCEP® OR SCREEN®**

**Avalaire R-Moc II** tank mixtures with atrazine may be applied in water or fluid fertilizer. Apply this product in tank mixtures only when the sorghum seed has been properly treated by the seed company with Concep or Screen.

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

**RESTRICTIONS:**

- **MAXIMUM SINGLE APPLICATION RATE:** 1.67 pts. product/A (1.63 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 1.67 pts. product/A (1.63 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1
- If sorghum seed is not properly treated with Concep or Screen seed treatment, this product + atrazine may severely injure the crop.
- Applications of this product + atrazine on highly alkaline soils or on eroded areas where calcareous subsoils are exposed may cause sorghum injury.
- Under high soil moisture conditions prior to sorghum emergence, injury may occur following the use of this product + atrazine. The crop will normally outgrow this effect.
- DO NOT use this product + atrazine on sorghum grown under dry mulch tillage, or injury may occur.
- Except for the split preplant surface treatment, DO NOT make more than one application per year, or illegal residues may result.

**TANK MIXTURE WITH ATRAZINE**

In addition to the weeds controlled by **Avalaire R-Moc II** alone, **Avalaire R-Moc II** + atrazine also controls the following broadleaf weeds when applied either preplant surface, preplant incorporated, or preemergence: cocklebur, common purslane, hairy nightshade, lambsquarters, morningglory, ragweed, smartweed, and velvetleaf. **Preplant Surface-Applied:** Refer to instructions for use of **Avalaire R-Moc II** under **Application Procedures**. For minimum-tillage or no-tillage systems only, **Avalaire R-Moc II** + atrazine may be applied up to 45 days prior to planting in IA, IL, Eastern KS, MO, NE, and SD. Use only split applications for treatments made 30 to 45 days prior to planting, with two-thirds of the broadcast rate applied initially and the remaining one-third at planting. Apply 1.5 pts./A of **Avalaire R-Moc II** + the label rate of atrazine on *medium soils* with 1.5% organic matter or greater. Apply 1.5 pts./A of **Avalaire R-Moc II** + the label rate of atrazine on *fine soils* with less than 1.5% organic matter, or apply 1.67 pts./A of **Avalaire R-Moc II** + the label rate of atrazine on *fine soils* with 1.5% organic matter or greater.

Treatments less than 30 days prior to planting may be made either as a split or single application. Under dry conditions, irrigation after application is recommended to move **Avalaire R-Moc II** + atrazine into the soil.

**RESTRICTIONS:**

To avoid crop injury,

- Do not use on coarse soils,
- Do not use on medium soils with less than 1.5% organic matter.

**Preplant Incorporated or Preemergence:** Refer to instructions for use of **Avalaire R-Moc II** under **Application Procedures**. On *medium* soils with 1.5% organic matter or greater, apply 1 pt./A of **Avalaire R-Moc II** + the label rate of atrazine. On *fine* soils with less than 1.5% organic matter, apply 1 pt./A of **Avalaire R-Moc II** + the label rate of atrazine. On *fine* soils with 1.5% organic matter or greater, apply 1.2- 1.33 pts./A of **Avalaire R-Moc II** + the label rate of atrazine.

**RESTRICTIONS:**

To avoid crop injury,

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

**MINIMUM-TILLAGE OR NO-TILLAGE SYSTEMS**

**TANK MIXTURE OF AVALAIRE R-MOC II OR AVALAIRE R-MOC II + ATRAZINE WITH PARAQUAT, GLYPHOSATE/2, 4-D OR GLYPHOSATE**

In minimum-tillage or no-tillage systems where sorghum (seed treated with Concep or Screen) is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, the contact herbicides paraquat, glyphosate/2, 4-D or glyphosate may be tank mixed with **Avalaire R-Moc II** or **Avalaire R-Moc II** + atrazine. Mix with paraquat for control of most emerged annual weeds and suppression of perennial weeds; or with glyphosate/2, 4-D for suppression of emerged field bindweed and control or suppression of annual weeds; or with glyphosate for control of most emerged annual and perennial weeds. **Avalaire R-Moc II** or **Avalaire R-Moc II** plus atrazine portion of the tank mixture provides preemergence control of the weeds listed on this label under the respective sections.

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

**Application:** Apply before, during, or after planting, but before sorghum emerges, at the appropriate rates listed under **Sorghum (Grain or Forage) – Avalaire R-Moc II Alone** or – **Avalaire R-Moc II in Combinations – Tank Mixture with atrazine**, respectively. Add paraquat, glyphosate/2, 4-D, or glyphosate at the following broadcast rates:

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

**Glyphosate/2, 4-D:** Use the labeled rate depending on weed species and size. See the glyphosate/2, 4-D label for weeds controlled, rates for specific weeds, and other information concerning use.

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

Apply in a minimum of 20 gals. of water per acre with conventional spray equipment.

**SOYBEANS – AVALAIRE R-MOC II ALONE**

Apply **Avalaire R-Moc II**, either preplant surface-applied, preplant incorporated, preemergence, or post emergence using the appropriate rate specified below.

**Preplant Surface-Applied, Preplant Incorporated, Preemergence, or Postemergence:** Follow instructions for use of this product alone under **Application Procedures**.

### **Preplant Surface-Applied**

#### **Fall Application**

- **Apply after September 30 in MN, ND, SD, WI, and North of Route 30 in IA**
- **Apply after October 15 North of Route 91 in NE and South of Route 30 in IA**
- **Apply after October 31 North of Route 136 in IL**

In all locations, apply **Avalaire R-Moc II** to crop stubble after harvest when the sustained soil temperature at a 4-inch depth is less than 55°F and falling. In minimum-till or no-tillage systems on soils having greater than 2.5% organic matter, use 1.67 to 2 pts./A on *medium-textured* and 2 pts./A on *fine-textured soils*. Do not apply to frozen ground. A tillage operation may precede the application. A fall and/or a spring tillage may follow application, but do not exceed an incorporation depth greater than 2 to 3 inches. Minimize furrow and ridge formation in the tillage operations.

#### **Preplant Surface – Spring Application**

Use on *medium* and *fine* soils with minimum-tillage or no-tillage systems in CO, CT, DE, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, MO, MT, ND, NE, NH, NY, OH, PA, RI, SD, TN, VA, VT, WI, WV, and WY. Apply two-thirds of the specified rate of **Avalaire R-Moc II** (1.67 pts./A on *medium soils* and 2 pts./A on *fine soils*) as a split treatment 30 to 45 days prior to planting and the remainder at planting. Applications made less than 30 days before planting may be as either a split or single treatment. Apply 1.33 pts./A on *coarse soils* not more than 2 weeks before planting.

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

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

#### **RESTRICTIONS: (Preplant surface applied, preplant incorporated, preemergence):**

- **MAXIMUM SINGLE APPLICATION RATE:** 2.75 pts. product/A (2.68 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1
- **RETREATMENT INTERVAL:** 14 days
- **PRE-HARVEST INTERVAL:** 90 days
- On soybeans, use up to 2.5 pints / acre of **Avalaire R-Moc II** preplant incorporated or preemergence treatment on soils having an organic matter content between 6% and 20%.
- The total **Avalaire R-Moc II** rate applied to must not exceed 2.75 pints / acre per year.
- If a pre-plant surface, pre-plant incorporated or pre-emergence application of metolachlor products has already been applied, a postemergence application of this product cannot be used.
- DO NOT graze or feed treated soybean forage, hay, or straw to livestock 30 days following treatment, or illegal residues may result.
- If a spring application is made, the total rate of the fall plus spring applications must not exceed the maximum total rate on soybeans, or illegal residues may result.
- DO NOT apply to frozen ground.

#### **POSTEMERGENCE APPLICATIONS –**

**Postemergence (From emergence up through the 5th trifoliate leaf stage)**

For postemergence treatments, apply 1.0 to 1.33 pints per acre to soybeans from emergence through the 5th trifoliolate leaf stage. This product will not control emerged weeds, it must be applied to a weed free surface or in tank mixture with products that provide postemergence control of weeds present at the time of application.

#### **RESTRICTIONS (Postemergence)**

- DO NOT apply more than 1.33 pints (1.2 lb ai) per acre postemergence.
- DO NOT graze or feed treated soybean forage or soybean hay to livestock following a postemergence application of this product;
- DO NOT apply a postemergence application of this product if a pre-plant surface, pre-plant incorporated or pre-emergence application of metolachlor products has already been applied.
- **NOT FOR USE IN CALIFORNIA**
- Make postemergence application at least 90 before harvest.

### **SOYBEANS – AVALAIRE R-MOC II COMBINATIONS**

#### **Preplant Incorporated or Pre-emergence**

Water or fluid fertilizer may be used as carrier for **Avalaire R-Moc II** in combination with metribuzin, linuron, metribuzin / chlorimuron-ethyl, imazethapyr, imazaquin, ethafluralin, or clomazone.

#### **RESTRICTIONS:**

- **MAXIMUM SINGLE APPLICATION RATE:** 2.75 pts. product/A (2.68 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 2.75 pts. product/A (2.68 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1
- **RETREATMENT INTERVAL:** 14 days
- **PRE-HARVEST INTERVAL:** 90 days
- For all of the following combinations, this product may be used up to 2.5 pts./A on soils having an organic matter content between 6% and 20%.
- The total rate of this product applied to soybeans during any one crop year must not exceed 2.75 pts./A.
- DO NOT apply to frozen ground.

#### **TANK MIXTURE WITH METRIBUZIN**

In addition to those weeds controlled by **Avalaire R-Moc II** alone, **Avalaire R-Moc II** + metribuzin, when applied as directed, also controls the following broadleaf weeds: cocklebur\*, hairy nightshade, hemp sesbania, jimsonweed\*, lambsquarters, prickly sida, ragweed, smartweed, velvetleaf, Venice mallow, and wild mustard.

\*Partially controlled.

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

**Sequential:** Apply **Avalaire R-Moc II** alone **Preplant Incorporated**, as specified in the table below. Follow with a preemergence application of metribuzin during planting (behind the planter) or after planting, but before weeds or soybeans emerge.

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

**TABLE 8: AVALAIRE R-MOC II + METRIBUZIN – SOYBEANS**

Soil Texture*	Broadcast Rates Per Acre			
	0.5 to Less Than 3% Organic Matter		3% Organic Matter or Greater	
	Avalaire R-Moc II	Metribuzin	Avalaire R-Moc II	Metribuzin
<b>COARSE</b>	0.85-1.0 pt.	Label rate	1.0 pt.	Label rate
<b>MEDIUM</b>	1.0-1.33 pts.	Label rate	1.33 pts.	Label rate
<b>FINE</b>	1.33 pts.	Label rate	1.33-1.67 pts.	Label rate
<b>Mississippi Delta only</b> Silty clay, Clay	1.33 pts.	Label rate	1.33-1.67 pts.	Label rate
<b>DO NOT USE ON MUCK OR PEAT (SOILS WITH MORE THAN 20% ORGANIC MATTER)</b>				

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

**RESTRICTION:**

- Do not use the tank mix or sequential application on soil with less than 0.5% organic matter or on alkaline soil with a pH over 7.4, or crop injury may occur.

**PRECAUTION:**

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

**TANK MIXTURE WITH LINURON**

In addition to those weeds controlled by **Avalaire R-Moc II** alone, **Avalaire R-Moc II** + linuron, applied preemergence, also controls the following broadleaf weeds: cocklebur\*, jimsonweed\*, lambsquarters, morningglory\*, prickly sida, ragweed, smartweed, velvetleaf\*, Venice mallow, and wild mustard.

\*Partially controlled.

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

**RESTRICTIONS:**

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

**TABLE 9: AVALAIRE R-MOC II + LINURON – SOYBEANS**

Soil Texture*	Broadcast Rates Per Acre			
	0.5 to Less Than 3% Organic Matter		3% Organic Matter or Greater	
	Avalaire R-Moc II	Linuron	Avalaire R-Moc II	Linuron
<b>COARSE**</b>	0.85 pt.	Label rate	1.0 pt.	Label rate
<b>MEDIUM</b>	1.0 pt.	Label rate	1.33 pts.	Label rate
<b>FINE</b>	1.33 pts.	Label rate	1.33-1.67 pts.	Label rate
<b>DO NOT USE ON MUCK OR PEAT (SOILS WITH MORE THAN 20% ORGANIC MATTER)</b>				

\*Do not use on sand, gravelly soils, or exposed subsoils.

\*\*Do not use on loamy sand, except in the Northeastern U.S. on loamy sand with over 1% organic matter.

**TANK MIXTURE WITH TRIFLURALIN**

**Avalaire R-Moc II** + trifluralin tank mix applied preplant incorporated controls those weeds listed under the **Avalaire R-Moc II Applied Alone** section and those weeds listed for trifluralin alone on the respective trifluralin label. **Avalaire R-Moc II** + trifluralin may be applied by ground or by aerial equipment and incorporated up to 14 days before planting. Follow the procedures on the trifluralin and **Avalaire R-Moc II** labels, using equipment that provides uniform 2-inch incorporation.

Apply **Avalaire R-Moc II** + trifluralin tank mix, using the appropriate rate from the **Soybeans – Avalaire R-Moc II Alone** section of this label and the appropriate section of the trifluralin label for the specific soil texture/organic matter classification and weed species expected.

To control DNA-resistant goosegrass\* and other species on the respective labels where the soil organic matter is 3% or less, apply the rate in the table below.

**TABLE 10: AVALAIRE R-MOC II + TRIFLURALIN – SOYBEANS (Organic Matter Content Less Than 3%)**

Soil Texture	Broadcast Rates Per Acre (pts.)		
	Avalaire R-Moc II	Trifluralin	
	Organic Matter Less Than 3%	Organic Matter	
		Less Than 2%	2-3%
<b>COARSE*</b>	0.85-1.0	Lower label rate	Higher label rate
<b>MEDIUM</b>	1.0	Lower label rate	Higher label rate
<b>FINE</b>	1.33	Lower label rate	Higher label rate

\*Where a range of rates is given for this product use the minimum rate where DNA-resistant goosegrass is the predominant species.

Follow all restrictions and use precautions on the respective trifluralin label and in the **Soybeans – Avalaire R-Moc II Alone** section of this label.

**TANK MIXTURE WITH IMAZAQUIN**

This tank mixture controls all weeds controlled by **Avalaire R-Moc II** alone and by imazaquin alone. Refer to the **Avalaire R-Moc II Applied Alone** section for weeds controlled by this product and to the imazaquin label for weeds controlled by imazaquin. Refer to the imazaquin label for geographical locations where this tank mixture may be applied.

Apply **Avalaire R-Moc II** + imazaquin preplant incorporated or preemergence, using rates in the table below. Follow use directions under **Application Instructions** on the imazaquin label. For preplant incorporated applications, apply and incorporate within 30 days before planting. Observe all other use precautions and restrictions on the imazaquin labels.

**TABLE 11: AVALAIRE R-MOC II + IMAZAQUIN – SOYBEANS**

Soil Texture	Broadcast Rates Per Acre (pts.)			
	Less Than 3% Organic Matter		3% or More Organic Matter	
	Avalaire R-Moc II	Imazaquin	Avalaire R-Moc II	Imazaquin
<b>COARSE</b>	0.85	Label rate	1.0	Label rate
<b>MEDIUM</b>	1.0	Label rate	1.33	Label rate
<b>FINE</b>	1.33	Label rate	1.33-1.67*	Label rate
<b>DO NOT USE ON MUCK OR PEAT (SOILS WITH MORE THAN 20% ORGANIC MATTER)</b>				

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

**RESTRICTIONS:**

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

**TANK MIXTURE WITH PRODIAMINE + ISOXABEN**

This tank mixture controls all weeds controlled by this product alone and by prodiamine + isoxaben alone. Refer to the **Avalaire R-Moc II Applied Alone** section for weeds controlled by this product and the prodiamine + isoxaben label for weeds controlled by prodiamine + isoxaben. Apply this product + prodiamine + isoxaben preemergence after planting, but before Soybeans emerge using rates in Table 12.

Follow all use directions, limitations, use precautions and information regarding application to soybeans, and rotational restrictions on this product and prodiamine + isoxaben labels.

**Table 12: Avalaire R-Moc II + Prodiamine + Isoxaben — Soybeans**

Soil Texture	Broadcast Rates Per Acre	
	0.5 to 3% Organic Matter	
	This Product	Prodiame + Isoxaben
Coarse: Sandy loam only	0.85 pt.	See prodiame + isoxaben label of product being used for application rates
Medium	1.0 pt.	
Fine	1.33 pts.	

**Restriction:** Do not apply to sand or loamy sand or to any soil with less than 0.5% organic matter or to any soil with pH greater than 7 except as noted on the prodiamine + isoxaben label.

**TANK MIXTURE WITH LINURON/CHLORIMURON-ETHYL**

This tank mixture controls all weeds controlled by **Avalaire R-Moc II** alone and by linuron / chlorimuron-ethyl alone. Refer to the **Avalaire R-Moc II Applied Alone** section for weeds controlled by **Avalaire R-Moc II** and to the linuron / chlorimuron-ethyl label for weeds controlled.

Apply **Avalaire R-Moc II** + linuron / chlorimuron-ethyl preemergence after planting, but before soybeans emerge, using rates in the table below

Follow all use directions, restrictions, and use precautions regarding application to soybeans, and rotational restrictions on **Avalaire R-Moc II** and linuron / chlorimuron-ethyl labels.

**TABLE 13: AVALAIRE R-MOC II + LINURON / CHLORIMURON-ETHYL — SOYBEANS**

Soil Texture	Broadcast Rates Per Acre	
	0.5 to 3% Organic Matter	
	Avalaire R-Moc II	Linuron / Chlorimuron-ethyl
COARSE	0.85 pt.	Label rate
MEDIUM	1.0 pt.	Label rate
FINE	1.33 pts.	Label rate

**RESTRICTION:**

- Do not apply to sand, or to any soil with less than 0.5% organic matter, or to any soil with Ph greater than 6.8.



**TANK MIXTURE WITH METRIBUZIN / CHLORIMURON-ETHYL**

This tank mixture controls all weeds controlled by **Avalaire R-Moc II** alone and by metribuzin / chlorimuronethyl alone. Refer to the **Avalaire R-Moc II Applied Alone** section for weeds controlled by this product and to the metribuzin / chlorimuron-ethyl label for weeds controlled by metribuzin / chlorimuron-ethyl.

Apply preplant incorporated or preemergence, using the appropriate rates from the table below.

**Preplant Incorporated:** Apply within 2 weeks of planting. Uniformly incorporate into the top 1 to 2 inches of soil before planting soybeans.

**Preemergence:** Apply after planting, but before soybeans emerge.

Follow all use directions, restrictions, and use precautions regarding application to soybeans, and rotational restrictions on **Avalaire R-Moc II** and metribuzin / chlorimuron-ethyl labels.

**TABLE 14: AVALAIRE R-MOC II + METRIBUZIN / CHLORIMURON-ETHYL – SOYBEANS**

Soil Texture	Broadcast Rates Per Acre (pts.)			
	Less Than 3% Organic Matter		3% or More Organic Matter	
	Avalaire R-Moc II	Metribuzin / Chlorimuron-ethyl	Avalaire R-Moc II	Metribuzin / Chlorimuron-ethyl
<b>COARSE</b>	0.85 pt.	Label rate	1.0 pt.	Label rate
<b>MEDIUM*</b>	1.0 pt.	Label rate	1.33 pts.	Label rate
<b>FINE*</b>	1.33 pts.	Label rate	1.33-1.67 pts.	Label rate

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

**RESTRICTION:**

- Do not apply to sand, or to any soil with less than 0.5% organic matter, or to any soil with pH greater than 7, except as noted on the metribuzin / chlorimuron-ethyl label.

**TANK MIXTURE WITH CLOMAZONE**

This tank mixture controls all weeds controlled by **Avalaire R-Moc II** alone and by clomazone alone. Refer to the **Avalaire R-Moc II Applied Alone** section for weeds controlled by **Avalaire R-Moc II** and to the clomazone label for weeds controlled by clomazone.

Apply **Avalaire R-Moc II** + clomazone preplant incorporated, using rates in the table below. Follow all clomazone application instructions as to incorporation interval, geographical location, equipment operation, soil moisture conditions, etc.

Before making applications, read and strictly follow all use directions, restrictions, and use precautions regarding application to soybeans, and rotational restrictions on **Avalaire R-Moc II** and clomazone labels.

**TABLE 15: AVALAIRE R-MOC II + CLOMAZONE – SOYBEANS**

Soil Texture	Broadcast Rates Per Acre (pts.)			
	Less Than 3% Organic Matter		3% or More Organic Matter	
	Avalaire R-Moc II	Clomazone	Avalaire R-Moc II	Clomazone
<b>COARSE</b>	0.85 pt.	Label rate	1.0 pt.	Label rate
<b>MEDIUM*</b>	1.0 pt.	Label rate	1.33 pts.	Label rate
<b>FINE*</b>	1.33 pts.	Label rate	1.33-1.67 pts.	Label rate

**TANK MIXTURE WITH ETHAFLURALIN**

This tank mixture controls all weeds controlled by **Avalaire R-Moc II** alone and by ethafluralin alone. Refer to the **Avalaire R-Moc II Applied Alone** section for weeds controlled by **Avalaire R-Moc II** and to the ethafluralin label for weeds controlled by ethafluralin.

Apply **Avalaire R-Moc II** and ethafluralin preplant incorporated, using the appropriate rates from the table below.

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

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

**TABLE 16: AVALAIRE R-MOC II + ETHAFLURALIN – SOYBEANS**

Soil Texture	Broadcast Rates Per Acre (pts.)			
	Less Than 3% Organic Matter		3% or More Organic Matter	
	Avalaire R-Moc II	Ethafluralin	Avalaire R-Moc II	Ethafluralin
COARSE	1.0-1.33	Label rate	1.33	Label rate
MEDIUM*	1.33-1.67	Label rate	1.33-1.67	Label rate
FINE*	1.33-1.67	Label rate	1.67-2.0	Label rate
<b>DO NOT USE ON MUCK OR PEAT (SOILS WITH MORE THAN 20% ORGANIC MATTER)</b>				

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

Follow all use directions, restrictions, and use precautions regarding application to soybeans on the **Avalaire R-Moc II** and ethafluralin labels.

**TANK MIXTURE WITH IMAZETHAPYR**

This tank mixture controls all weeds controlled by **Avalaire R-Moc II** alone and by imazethapyr alone. Refer to the **Avalaire R-Moc II Applied Alone** section for weeds controlled by **Avalaire R-Moc II** and to the imazethapyr label for weeds controlled by imazethapyr. Refer to the imazethapyr label for geographical locations where this tank mixture may be applied.

Apply **Avalaire R-Moc II** + imazethapyr early preplant, preplant incorporated, or preemergence after planting, using rates in the table below. Application can be made in water or liquid fertilizer. For early preplant and preplant incorporated applications, apply within 30 days before planting.

Follow all use directions, restrictions, and, use precautions regarding application to soybeans, and rotational restrictions on the **Avalaire R-Moc II** and imazethapyr labels.

**TABLE 17: AVALAIRE R-MOC II + IMAZETHAPYR – SOYBEANS**

Soil Texture	Broadcast Rates Per Acre (pts.)			
	Less Than 3% Organic Matter		3% or More Organic Matter	
	Avalaire R-Moc II	Imazethapyr	Avalaire R-Moc II	Imazethapyr
COARSE	0.85	Label rate	1.0	Label rate
MEDIUM	1.0	Label rate	1.33	Label rate

FINE	1.33	Label rate	1.33-1.67	Label rate
------	------	------------	-----------	------------

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

#### MINIMUM-TILLAGE OR NO-TILLAGE SYSTEMS

##### TANK MIXTURES WITH METRIBUZIN, IMAZAQUIN, LINURON, LINURON / CHLORIMURONETHYL, PRODIAMINE / ISOXABEN, METRIBUZIN / CHLORIMURON-ETHYL, OR IMAZETHAPYR, PLUS PARAQUAT OR GLYPHOSATE

In minimum-tillage or no-tillage systems where soybeans are planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, the contact herbicides paraquat or glyphosate may be added to a tank mix of either **Avalaire R-Moc II** + metribuzin, **Avalaire R-Moc II** + imazaquin, **Avalaire R-Moc II** + linuron, **Avalaire R-Moc II** + linuron / chlorimuron-ethyl, **Avalaire R-Moc II** + prodiamine / isoxaben, **Avalaire R-Moc II** + metribuzin / chlorimuron-ethyl, or **Avalaire R-Moc II** + imazethapyr.

When used as directed, the paraquat portion of the tank mixture controls most emerged weeds and suppresses many perennial weeds.

Glyphosate combinations will control emerged annual and perennial weeds when applied as directed on the glyphosate label.

**Avalaire R-Moc II** + metribuzin, imazaquin, linuron, linuron / chlorimuron-ethyl, prodiamine / isoxaben, metribuzin / chlorimuron-ethyl, or imazethapyr portion of the tank mixture provides preemergence control of the weeds listed on this label in the tank mixture section for **Avalaire R-Moc II** + metribuzin, **Avalaire R-Moc II** + imazaquin, **Avalaire R-Moc II** + linuron, **Avalaire R-Moc II** + linuron / chlorimuron-ethyl, **Avalaire R-Moc II** + prodiamine / isoxaben, **Avalaire R-Moc II** + metribuzin / chlorimuron-ethyl, and **Avalaire R-Moc II** + imazethapyr, respectively.

**Application:** Apply before, during, or after planting, but before the soybeans emerge, at the rates specified in the chart below.

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

**For all tank mix partners** - Refer to the label of each product used in combination and observe the planting details, soybean variety restrictions, information regarding application to soybeans, geographical restrictions, soil and organic matter classification, pH limitations and all other use precautions and restrictions.

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

**RESTRICTION:** Do not apply combinations containing paraquat in suspension-type liquid fertilizers, as the activity of paraquat will be reduced.

Tank Mix Partners	Avalaire R-Moc II Rates Per Acre (pts.)			Tank Mix Partner	RESTRICTIONS
	Coarse Soil	Medium Soil	Fine Soil	Pints Per Acre	
Metribuzin + Paraquat Or Glyphosate	1.0	1.33	1.33 - 1.67	Labeled Rate	To avoid crop injury, Do not use this tank mixture on soil with less than 0.5% organic matter, on alkaline soil with a pH over 7.4, or on all sand and on loamy sand with less than 2% organic matter. If heavy rain occurs soon after application, crop injury may result, especially in poorly drained areas where water stands for several days, or where the seeding slit has not been properly closed.
Imazaquin + Paraquat Or Glyphosate	1.0	1.33	1.67	Labeled Rate	Do not apply within 90 days of harvest, Do not graze or feed treated soybean forage, hay, or straw to livestock, or illegal residues may result.
Linuron + Paraquat Or Glyphosate	1.0	1.33	1.33 - 1.67	Labeled Rate	Do not use on loamy sand, except in the Northeastern U.S. on loamy sand with over 1% organic matter, or injury may occur. Do not use on sand, gravelly soils, or exposed subsoils, or injury may occur. Do not use on soil with less than 0.5% organic matter, or crop injury may occur.
Linuron / Chlorimuron-Ethyl + Paraquat Or Glyphosate	1.0	1.33	1.33 - 1.67	Labeled Rate	Use only where soils have 0.5 to 3% organic matter. Do not apply to sand or to any soil with pH greater than 6.8
Metribuzin / Chlorimuron-Ethyl + Paraquat Or Glyphosate	1.0 Do not use on sand.	1.33	1.33 - 1.67	Labeled Rate	Use only where soils have 0.5 to 5% organic matter. DO NOT apply to sand, or to any soil with less than 0.5% organic matter, or to any soil with pH greater than 6.8, except as noted on the metribuzin / chlorimuron-ethyl label.
Imazethapyr + Paraquat Or Glyphosate	1.0	1.33	1.67		None
Prodiamine + Isoxaben + Paraquat or Glyphosate	1.0 (sandy loam only)	1.33	1.33 – 1.67	Labeled Rate	Use only where soils have 0.5 to 3% organic matter. Do not apply to sand or loamy sand or to any soil with less than 0.5% organic matter or to any soil with pH greater than 7 except as noted on the prodiamine + isoxaben label.

## SOYBEANS – AVALAIRE R-MOC II COMBINATIONS POSTEMERGENCE

### TANK MIXTURE OF AVALAIRE R-MOC II WITH GLYPHOSATE FOR USE ON GLYPHOSATE TOLERANT SOYBEANS

**Avalaire R-Moc II** may be tank mixed with glyphosate in water and applied postemergence over-the top or postemergence-directed spray only up through the 5th trifoliate leaf stage of soybean varieties or cultivars warranted as tolerant to glyphosate. This tank mixture will control emerged weeds listed on the glyphosate label and residual preemergence control of weeds listed on this label.

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

#### RESTRICTIONS:

- **MAXIMUM SINGLE APPLICATION RATE:** 2.75 pts. product/A (2.68 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 2.75 pts. product/A (2.68 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1
- **RETREATMENT INTERVAL:** 14 days
- **PRE-HARVEST INTERVAL:** 90 days
- DO NOT apply this tank mixture postemergence to any soybean variety unless it is designated glyphosate tolerant and unless the glyphosate formulation being used is registered for postemergence use in Roundup Ready Soybeans or glyphosate tolerant soybeans.
- DO NOT apply more than 1.33 pints per acre postemergence.
- Do not apply a postemergence application of this product if a preplant surface, preplant incorporated, or preemergence application of metolachlor products has already been applied
- Following a postemergence application of this product, DO NOT graze or feed treated soybean forage or soybean hay to livestock.
- Postemergence applications must be made at least 90 days before harvest.
- **NOT FOR USE IN CALIFORNIA**

### TANK MIXTURE OF AVALAIRE R-MOC II WITH GLUFOSINATE FOR USE ON GLUFOSINATE TOLERANT SOYBEANS

**Avalaire R-Moc II** may be tank mixed with glufosinate in water and applied postemergence over the top or postemergence-directed spray only up through the 5th trifoliate leaf stage of soybean varieties or cultivars warranted as tolerant to glufosinate. This tank mixture will control emerged weeds listed on the glufosinate label and provide residual preemergence control of weeds listed on this label.

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

#### RESTRICTIONS:

- DO NOT apply this tank mixture postemergence to any soybean variety unless it is designated glufosinate tolerant and unless the glufosinate formulation being used is registered for postemergence use in Liberty Link Soybeans or glufosinate tolerant soybeans.
- DO NOT apply more than 1.33 pints per acre postemergence.
- Following a postemergence application of this product, DO NOT graze or feed treated soybean forage or soybean hay to livestock.
- Postemergence applications must be made at least 90 days before harvest.

## TOMATOES – AVALAIRE R-MOC II ALONE

### TRANSPLANTED TOMATOES

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

### SEEDED TOMATOES

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

### TOMATO USE RATES

Soil Texture	Broadcast Rates Per Acre (pts.)	
	Less Than 3% Organic Matter	3% or More Organic Matter
	Avalaire R-Moc II	Avalaire R-Moc II
COARSE	1.0 – 1.33 pints/acre	1.33 pints/acre
MEDIUM	1.33 pints/acre	1.33 pints/acre
FINE	1.33 – 1.67 pints/acre	1.67 – 2.0 pints/acre

### RESTRICTIONS

- **MAXIMUM SINGLE APPLICATION RATE:** 2.0 pts. product/A (1.95 lbs.AI/A)
- **MAXIMUM ANNUAL APPLICATION RATE PER YEAR:** 2.0 pts. product/A (1.95 lbs.AI/A)
- **MAXIMUM NUMBER OF APPLICATIONS:** 1
- **PRE-HARVEST INTERVAL:** 90 days
- DO NOT exceed the maximum label rate for the soil texture per year.
- Apply only by ground application.
- Do not apply more than 1 postemergence application per year.

### PRECAUTIONS

- DO NOT apply to varieties or cultivars with unknown tolerance to **Avalaire R-Moc II**.
- This product may damage transplants that have been weakened by any cause. To prevent damage, plant only healthy transplants. Do not plant when wet, cool, or unfavorable growing conditions exist.
- In transplanted tomatoes, if this product is applied preplant incorporated, incorporate to a depth less than the depth of transplanting, and use the lower end of the rate range for the given soil type, or damage may occur.
- For row middle applications where tomatoes are grown on sandy soils and where high soil moisture conditions can exist (i.e. low binding and high evaporation conditions), as may be found in the States of Florida, Georgia, Maryland, and Virginia, there is potential for crop injury in the form of leaf epinasty. The risk of this type of injury can be reduced by:
  - incorporating this product immediately following application,
  - applying this product seven or more days before transplanting (but only after the beds have been formed),
  - minimizing the application of this product onto the plastic of the bed, or
  - any combination of the above.

## STORAGE AND DISPOSAL

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

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

**PESTICIDE DISPOSAL:** Pesticide spray mixture or rinsate that cannot be used should 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 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 other procedures allowed by state and local authorities.]

**[For containers > 5 gallons: Nonrefillable container.** Do not reuse or refill this container. Triple rinse container or pressure rinse promptly after emptying. Triple rinse as follow: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed 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 R-Moc II] is a trademark of Avalaire, LLC

LibertyLink® is a trademark of Bayer CropScience

Celatom MP-79 is a trademark of EP Minerals.

Unite is a registered trademark of HACO, Inc.

Compex is a registered trademark of KALO Agricultural Chemicals, Inc.  
RoundupReady is a trademark of Monsanto Company  
Formula 40 and Weedar are registered trademarks of Nufarm, Inc.  
Agsorb is a registered trademark of Oil-Dri Corporation  
X-77 is a registered trademark of Loveland Industries, Inc.



**{LANGUAGE ON LABEL AFFIXED TO CONTAINER}**

METOLACHLOR	GROUP 15	HERBICIDE
-------------	----------	-----------

**Avalaire R-Moc II<sup>TM</sup>**

[Alternate Brand Name: Andover II]

[For weed control in [Corn (field, pop, sweet, grown for seed)], [Cotton,] [Peanuts,] [Crop Group 6 Legume Vegetables (succulent and dried)] [Potatoes,] [Safflowers,] [Sorghum,] [Soybeans,] and [Tomato]]

**ACTIVE INGREDIENT:** ( % by weight)  
 Metolachlor: 2-chloro- N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) acetamide.....84.1%  
**OTHER INGREDIENTS:**.....15.9%  
**TOTAL** ..... 100.0%  
 Contains 7.8 lbs. of metolachlor active ingredient per gallon.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

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

FIRST AID	
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have affected person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
<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 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>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>
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 1-844-685-9173 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**

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

**ENVIRONMENTAL HAZARDS:** Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean highwater mark. Do not contaminate water when disposing of equipment wash waters or rinsate.

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

**SURFACE WATER ADVISORY:** This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several weeks or months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of metolachlor 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.

**PHYSICAL AND CHEMICAL HAZARDS:** Do not mix or allow coming in contact with oxidizing agents. Hazardous chemical reaction may occur.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.  
**PESTICIDE STORAGE:** This product may be stored at temperatures down to -30°F. For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.  
**PESTICIDE DISPOSAL:** Pesticide spray mixture or rinsate that cannot be used should 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 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 other procedures allowed by state and local authorities.]  
**[For containers > 5 gallons: Nonrefillable container.** Do not reuse or refill this container. Triple rinse container or pressure rinse promptly after emptying. Triple rinse as follow: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.  
 Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

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

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

**EPA Reg. No.:** 93930-XX  
**EPA Est. No.:** \_\_\_\_\_  
**NET CONTENTS:** \_\_\_\_\_