STATE OF HAWAII
Department of Agriculture
ACCEPTED
LICENSE NO. 9226.509

PULL HERE TO OPEN

RESTRICTED USE PESTICIDE

(GROUND AND SURFACE WATER CONCERNS)

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

THIS PRODUCT IS A RESTRICTED-USE HERBICIDE DUE TO GROUND AND SURFACE WATER CONCERNS. USERS MUST READ AND FOLLOW ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUND AND SURFACE WATER.

GROUP 5 15 HERBICIDES

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

Medal® II ATZ

HERBICIDE

For weed control in corn and grain or forage sorghum

Active Ingredients:

Atrazine (CAS No. 1912-24-9)	33.0%
Atrazine related compounds	0.7%
S-metolachlor (CAS No. 87392-12-9)	26.1%
Other Ingredients:	40.2%
Total:	100.0%

Medal II ATZ contains 3.1 lb atrazine + relateds per gallon and 2.4 lb S-metolachlor active ingredient per gallon.

Medal II ATZ is formulated as a suspension concentrate (SC).

EPA Reg. No. 100-817
EPA Est. 100-LA-001

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

SCP 817B-L1R 0814
4048903

2.5 gallons

Net Contents

FIRST AID	
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire or Accident), Call **1-800-888-8372**	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE)

Some of the materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for Category A on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators, flaggers, and other handlers not using engineering controls must wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing and loading, or exposed to the concentrate

Mixers, loaders, applicators, and other handlers using engineering controls must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves and apron for mixers and loaders

See engineering controls for additional requirements.

continued…

PRECAUTIONARY STATEMENTS *(continued)*

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Engineering Control Statements

Pilots must use an enclosed cockpit in a manner that is consistent with the WPS for Agricultural Pesticides [40 CFR 170.240(d)(6)]. Pilots must wear the PPE required on this labeling for applicators, however, they need not wear chemical-resistant gloves when using an enclosed cockpit.

Flaggers supporting aerial applications must use an enclosed cab that meets the definition on the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection.

Mixers and loaders supporting aerial applications must use a closed system that meets the requirements for dermal protection listed in the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240(d)(4)] and must: wear the personal protective equipment required for mixers and loaders, wear protective eyewear if the system operates under pressure, and be provided and have immediately available for use in an emergency, such as a spill or equipment breakdown: chemical-resistant footwear.

When applicators use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

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

Environmental Hazards

This product is toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsate. This pesticide contains atrazine, which has been shown to be toxic to aquatic invertebrates. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply when weather conditions favor drift from treated areas.

Ground Water Advisory

Medal II ATZ contains both the active ingredients atrazine and *S*-metolachlor.

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

S-metolachlor has the potential to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Surface Water Advisory

S-metolachlor has the potential to contaminate surface water through ground spray drift. Under some conditions, *S*-metolachlor may also have a high potential for runoff into surface water (primarily via dissolution in runoff water) for several months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water. 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 for contamination of water from runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

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 equipment.

This product must 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.

Additional State imposed requirements regarding well-head setbacks and operational area containment must be observed.

This product must 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 applied aerially or by ground within 66 ft of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 ft around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66-ft buffer or setback from runoff entry points must be planted to crop, or seeded with grass or other suitable crop.

Tile-Outletted Terraced Fields Containing Standpipes

One of the following restrictions must be used in applying atrazine to tile-terraced fields containing standpipes.

1. Do not apply this product within 66 ft of standpipes in tile-outletted terraced fields.
2. Apply this product to the entire tile-outletted terraced field and immediately incorporate it to a depth of 2-3 inches in the entire field.
3. Apply this product to the entire tile-outletted terraced field under a no-till practice only when a high crop residue management practice is practiced. High crop residue management is described as a crop management practice where little or no crop residue is removed from the field during and after crop harvest.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

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

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

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

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

DIRECTIONS FOR USE

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

ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION OF FEDERAL LAW. Before using this product, you must consult the Atrazine Watershed Information Center (AWIC) to determine whether the use of this product is prohibited in your watershed. AWIC can be accessed through www.atrazine-watershed.info or 1-866-365-3014. If use of this product is prohibited in your watershed, you may return this product to your point of purchase or contact Syngenta Crop Protection, LLC for a refund.

Medal II ATZ must be used only in accordance with use directions on this label or in separately published EPA accepted supplemental labeling for this product.

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.

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours. Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls over short-sleeve shirt and short pants
- Chemical-resistant gloves made of any waterproof materials
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposures

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

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

GENERAL INFORMATION

Medal II ATZ is a selective herbicide recommended for preplant, preemergence, or postemergence control of most annual grasses and broadleaf weeds in corn. Medal II ATZ can also be used before crop emergence for control of most annual grasses and broadleaf weeds in grain or forage sorghum, provided the sorghum seed has been properly treated by the seed company with Concep®. This product may be tank mixed with other herbicides for weed control in conventional, minimum-till, and no-till corn, grain sorghum, or forage sorghum.

Note: Tank mixtures are permitted only in those states where the tank mix partner is registered. Refer to and follow the label of each tank mix product used for precautionary statements, directions for use, geographic and other restrictions.

When tank mixing or sequentially applying atrazine or products containing atrazine to corn or sorghum, do not exceed an application rate of 2.0 pounds active ingredient of atrazine per acre for any single application and the total pounds of atrazine applied (lb ai per acre) must not exceed 2.5 pounds active ingredient per acre per year.

Following many years of continuous use of atrazine (one of the ingredients in Medal II ATZ), and products chemically related to atrazine, biotypes of some of the weeds listed on this label which are controlled by the atrazine component have been reported to develop resistance to this and chemically related herbicides. Where this is known or suspected, and weeds controlled by this product are expected to be present along with resistant biotypes, we recommend the use of Medal II ATZ in combination or in sequence with registered herbicides which do not contain triazines. Consult with your State Agricultural Extension Service for specific recommendations.

Precautions: (1) If sorghum seed is not properly pretreated with Concep, Medal II ATZ will severely injure the crop. (2) Injury may occur to sorghum following the use of Medal II ATZ under abnormally high soil moisture conditions during early development of the crop.

Medal II ATZ alone or in tank mixture with AAtrex®, Balance®, Dual Magnum®, Dual II Magnum®, or Princep® may be applied early preplant, preplant surface, preplant incorporated, or preemergence on corn, in water or fluid fertilizer. Apply postemergence treatments of Medal II ATZ to corn, alone or in combination, using water only as the carrier. Medal II ATZ may be applied in tank mix combination with Gramoxone® brands, Landmaster® BW, Touchdown®, or Roundup® with or without the above herbicides preplant surface or preemergence to corn. Medal II ATZ alone may also be applied on sorghum early preplant, preplant incorporated, preplant surface, or preemergence in water or in fluid fertilizer.

Medal II ATZ may be applied in water by aircraft. Applications in fluid fertilizer should be only by ground equipment.

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

Do not apply this product through any type of irrigation system.

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

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

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

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.

Dry weather following preemergence application of Medal II ATZ or a tank mixture may reduce effectiveness. Cultivate if weeds develop in conventional tillage corn or sorghum.

Observe all precautions and limitations on the label of each product used in tank mixtures.

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 other materials, or crop damage or sprayer clogging of the application device may occur.

RESISTANT WEED MANAGEMENT

Medal II ATZ herbicide contains the active ingredients atrazine which inhibits the photosynthetic pathway of photosystem II (PSII, Site of Action Group 5) and *S*-metolachlor which inhibits the formation of very long chain fatty acids (VLCFA, Site of Action Group 15). Some naturally-occurring weed populations have been identified as resistant to Group 5 and 15 herbicides. Selection of resistant biotypes, through repeated use of these herbicides or lower than recommended use rates in the same field, may result in weed control failures. A resistant biotype may be present where poor performance cannot be attributed to adverse environmental conditions or improper application methods. If resistance is suspected, contact your local Syngenta representative and/or agricultural advisor for assistance.

General principles of herbicide resistant weed management:

- Employ integrated weed management practices. Use multiple herbicide sites-of-action with overlapping weed spectrums in rotation, sequences, or mixtures.
- Use the full recommended herbicide rate and proper application timing for the hardest to control weed species present in the field.
- Scout fields after herbicide application to ensure control has been achieved. Avoid allowing weeds to reproduce by seed or to proliferate vegetatively.
- Monitor site and clean equipment between sites.
- Start with a clean field and control weeds early by using a burndown treatment or tillage in combination with a preemergence residual herbicide as appropriate.
- Use cultural practices such as cultivation and crop rotation, where appropriate.
- Use good agronomic principles that enhance crop competitiveness.

SOIL TEXTURE INFORMATION

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

Recommendations are based upon soil textures, which are defined as follows:

COARSE	Sand, loamy sand, sandy loam
MEDIUM	Loam, silt loam, silt
FINE	Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay

MEDAL II ATZ APPLIED ALONE – CORN (ALL TYPES), GRAIN SORGHUM, OR FORAGE SORGHUM

Weeds Controlled or Partially Controlled by Early Preplant, Preplant Surface-Applied, Preplant Incorporated, or Preemergence Applications of Medal II ATZ

Weeds Controlled		Weeds Partially Controlled**
barnyardgrass (watergrass)	carpetweed	sandbur
browntop panicum	chickweed	seedling johnsongrass
crabgrass	cocklebur*	shattercane
crowfootgrass	common purslane	sicklepod
fall panicum	common ragweed	volunteer sorghum
foxtail millet	Florida pusley	woolly cupgrass
giant foxtail	galinsoga	
goosegrass	giant ragweed*	
green foxtail	henbit	
prairie cupgrass	jimsonweed	
red rice	lambsquarters	
signalgrass *(Brachiaria)**	morningglory	
southwestern cupgrass	mustards	
witchgrass	nightshades	
yellow foxtail	pigweed	
yellow nutsedge*	smartweed	
	velvetleaf*	
	waterhemp	

*Control of these weeds can be erratic, especially under dry weather conditions. Control escaped weeds with cultivation or application of an appropriate EPA-registered postemergence herbicide. On fine-textured soils, only partial control can be expected.

**Control may be improved by following these suggested procedures:

1. **In corn,** apply up to the maximum single application rate in Table 1 for your given soil texture and rate limitation based on your soil conservation practices.
2. **Thoroughly till moist soil** to destroy germinating and emerged weeds. If Medal II ATZ is to be applied preplant incorporated, this tillage may be used to incorporate Medal II ATZ if uniform 2-inch incorporation is achieved as recommended under **Application Procedures**.
3. Plant crop into moist soil **immediately after tillage**. If Medal II ATZ is to be used preemergence, apply at planting or immediately after planting.
4. If available, **sprinkler irrigate** within 2 days after application. Apply 1/2-1 inch of water. Use lower water volume (1/2 inch) on coarse-textured soils and higher volume (1 inch) on fine-textured soils.
5. 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.

Medal II ATZ Rate Limitations – Corn and Sorghum*

*Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or greater setbacks) which are different from the label, the more restrictive/protective requirements must be followed. Certain states may have established rate limitations 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.

Note: For purposes of calculating total atrazine active ingredient applied, Medal II ATZ contains 3.1 lb ai atrazine + relateds per gal (0.775 lb ai/qt).

ATRAZINE USE RESTRICTIONS:

Medal II ATZ contains both atrazine and *S*-metolachlor as active ingredients.

FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE

- **On Highly Erodible Land (as defined by the Natural Resource Conservation Service)**
  If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply a maximum of 2.58 qt/A of Medal II ATZ (2.0 lb ai/A) as a broadcast spray. Refer to "B" in tables following.

  If the soil coverage with plant residue is less than 30% at planting, a maximum of 2.1 qt/A of Medal II ATZ (1.6 lb ai/A) may be applied. Refer to "A" in tables following.
- **On Land Not Highly Erodible**
  Apply a maximum of 2.58 qt/A of Medal II ATZ (2.0 lb ai/A) as a broadcast spray. Refer to "B" in tables following.

FOR POSTEMERGENCE APPLICATION OF ATRAZINE TO CORN

If no atrazine was applied prior to corn emergence, apply a maximum of 2.58 qt/A of Medal II ATZ (2.0 lb ai/A) broadcast. If a postemergence treatment is required following an earlier atrazine application, the total atrazine applied may not exceed 2.5 lb active ingredient (3.2 qt of Medal II ATZ) per acre per calendar year.

Rotational Crops

Do not rotate to food or feed crops other than those listed below:

(1) If treated crop is lost due to poor germination, hail, flood, insects, etc., corn may be replanted immediately or sorghum may be replanted immediately, provided the seed has been properly treated with Concep. Do not make a second broadcast application. If the original application was banded and the second crop is planted in the untreated row middles, a second banded treatment may be applied. (2) Corn, sorghum, soybeans, cotton, or peanuts may be planted the spring following treatment. Do not graze or feed forage or fodder from cotton to livestock, or illegal residues may result. (3) Injury may occur to soybeans planted the year following application on soils having a calcareous surface layer. (4) In eastern parts of the Dakotas, KS, western MN, and NE, do not rotate to soybeans for 18 months following application if the rate applied to corn or sorghum was more than 2.0 lb ai of atrazine or equivalent band application rate, or soybean injury may occur. (5) If applied after June 10, do not rotate with crops other than corn or sorghum the next year, or crop injury may occur. (6) In the High Plains and Intermountain areas of the West, where rainfall is sparse and erratic or where irrigation is required, use only when corn or sorghum is to follow corn or sorghum, or a crop of untreated corn or sorghum is to precede other rotational crops. (7) Do not plant sugar beets, tobacco, vegetables (including dry beans), spring-seeded small grains, or small-seeded legumes the year following application, or injury may occur.

APPLICATION PROCEDURES

Early Preplant (Corn): 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 recommended rate of Medal II ATZ as a split treatment 30-45 days before planting and the remainder at planting, using the rates in Table 1. Applications made less than 30 days prior to planting may be as either a split or single treatment. Use the lower rate for light expected weed infestations and the higher rate for heavy expected weed infestations. On coarse-textured soils, apply 2.1 qt/A of Medal II ATZ not more than 2 weeks prior to planting. The above procedure may be followed if AAtrex, Dual Magnum, Dual II Magnum, or Princep is used in tank mixtures with Medal II ATZ. Tank mixtures with Balance may be applied up to 14 days before planting field corn. Substitute a fluid fertilizer for some or all of the water carrier for burndown of existing annual weeds listed on this label up to the 2-leaf stage of development. The addition of crop oil concentrate to the spray mixture will enhance the burndown activity. If larger weeds are present at the time of treatment, apply in a tank mixture combination with a contact herbicide (for example, Gramoxone brands, Touchdown, or Roundup). Observe directions for use, precautions, and restrictions on the label of the contact herbicide. When tank mixing atrazine containing products, do not exceed 2.0 lb ai/A of atrazine as a pre or post application or 2.5 lb ai/A as the total of pre plus post applications per calendar year.

On medium- and fine-textured soils with minimum- or no-tillage systems in DE, MD, MI, NY, OH, PA, VA, and WV, early preplant applications may be applied following the directions for use above. If the amount of rainfall results in unsatisfactory length of weed control following the earlier treatment, a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide may be used, i.e., AAtrex, Beacon®, Basagran®, 2,4-D, Banvel, Buctril®, or Marksman®. If the postemergence treatment includes the herbicide used early preplant, do not exceed the labeled rate for corn on a given soil texture. Observe all directions for use, precautions, and limitations on the label of the postemergence herbicide.

Medal II ATZ may be used according to the above directions to control winter wheat planted as a cover crop in IN, KY, and OH, in addition to providing residual weed control. The wheat must be less than 6 inches tall (preferably still in a dormant or semi-dormant state coming out of winter) at the time of application. Depending on rainfall, 10-20 days may be required to completely kill the wheat. In the event that adequate rainfall does not occur, control of the winter wheat may be unsatisfactory and the application of a contact herbicide (i.e., Gramoxone brands, Touchdown brands, or Roundup brands) may be required before planting the crop.

Medal II ATZ may be applied in the fall, as a single application, for control of the winter weeds listed on this label within the ecofallow (no-till) production areas of NE and KS where wheat (or other small grain cereals) will be rotated to corn. The application must be made to untilled wheat stubble in the fall following wheat harvest, but before soil freeze-up. The ground must remain untilled through the establishment of the corn crop.

On medium- and fine-textured soils following final seedbed preparation in the Blacklands and Gulf Coast areas of TX, an early preplant application of Medal II ATZ at 1.6-1.9 qt/A may be made 30-45 days before planting. Grass suppression of 2-3 weeks after planting can be expected as a result of this application. Do not incorporate or disturb the soil before planting, and avoid moving the soil during the planting operation. A follow-up application of Dual Magnum, or Dual II Magnum may be needed in fields with a history of heavy grass pressure. Apply after planting, but before corn and grass weeds emerge.

***S*-metolachlor Notes:** (1) If a follow-up application of Dual Magnum or Dual II Magnum is needed, do not exceed a total of 1.6 lb ai of *S*-metolachlor per acre, including the preplant Medal II ATZ application on medium- or fine-textured soils. On fine-textured soils with more than 3% organic matter, do not exceed 1.9 lb ai of *S*-metolachlor.

[To determine the total lb ai of *S*-metolachlor per acre, use the following 2-step method:

A. Determine the lb ai of *S*-metolachlor applied as Medal II ATZ (1.0 qt = 0.6 lb ai of *S*-metolachlor); then,

B. If Dual Magnum or Dual II Magnum or any other source of *S*-metolachlor is to be used, add the lb ai to be applied in these products to the lb in Step A above.]

(2) 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.

Table 1: Medal II ATZ – Early Preplant – Corn

Soil Texture	Single Application	Split Application*	
		30-45 DBP**	At Planting
COARSE Sand, loamy sand, sandy loam	2.1 qt/A	DO NOT APPLY	
MEDIUM Loam, silt loam, silt	**A.** 2.1 qt/A	1.4 qt/A	0.7 qt/A
	B. 2.1-2.58 qt/A	1.4 qt/A to 1.75 qt/A	0.7 qt/A to 0.9 qt/A
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	**A.** 2.1 qt/A	1.4 qt/A	0.7 qt/A
	B. 2.58 qt/A	1.75 qt/A	0.9 qt/A

*Split applications can be made less than 30 days before planting if desired.
**DBP – Days before planting

footnotes continued on the following page…

A. Do not exceed this rate on highly erodible land with less than 30% plant residue cover. Control of certain weeds may be reduced and a tank mix partner or an application of a postemergence herbicide may be needed.

B. Use these rates for all other applications.

Early Preplant (Sorghum-Seed Treated with Concep): For minimum-tillage and no-tillage systems only, Medal II ATZ may be applied up to 45 days before planting grain sorghum in IA, IL, eastern KS, MO, NE, and SD, using the rates in Table 2. Use only split applications for treatments made 30-45 days before planting with 2/3 the recommended rate applied initially and the remaining 1/3 at planting. Applications made less than 30 days prior to planting may be made as either a split or single application.

Substitute a fluid fertilizer for some or all of the water carrier for burndown of existing annual weeds listed on this label up to the 2-leaf stage of development. The addition of crop oil concentrate to the spray mixture will enhance the burndown activity. If larger weeds are present at the time of treatment, apply in a tank mixture combination with a contact herbicide (for example, Gramoxone brands, Landmaster BW, Touchdown brands, or Roundup brands). Observe directions for use, precautions, and restrictions on the label of the contact herbicide. Under dry conditions, irrigation after application is recommended to move Medal II ATZ into the soil.

Note: 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. Do not use on coarse soils. Do not use on medium soils with less than 1.0% organic matter.

On medium- and fine-textured soils following final seedbed preparation in the Blacklands, Panhandle, and Gulf Coast areas of TX, an early preplant application of Medal II ATZ at 1.6-1.9 qt/A may be made 30-45 days before planting. Grass suppression of 2-3 weeks after planting can be expected as a result of this application. Do not incorporate or disturb the soil before planting, and avoid moving the soil during the planting operation. A follow-up application of a Dual Magnum, or Dual II Magnum product may be needed in fields with a history of heavy grass pressure. Apply after planting, but before sorghum and grass weeds emerge.

Notes: (1) Do not use on soils with a pH greater than 8.0 if grain sorghum is to be planted. (2) If a follow-up application of a Dual Magnum, or Dual II Magnum formulation is needed, do not exceed a total of 1.4 lb of *S*-metolachlor ai per acre, including the early preplant Medal II ATZ application on medium-textured soils. On fine-textured soils, do not exceed 1.6 lb of *S*-metolachlor ai per acre.

[To determine the total lb ai of *S*-metolachlor per acre, use the following 2-step method:

A. Determine the lb ai of *S*-metolachlor applied as Medal II ATZ (1.0 qt = 0.6 lb ai of *S*-metolachlor); then,

B. If Dual Magnum or Dual II Magnum is to be used, add the lb ai to be applied in these products to the lb in Step A above.]

Table 2: Medal II ATZ – Early Preplant – Grain or Forage Sorghum (Seed treated with Concep)

Soil Texture	Organic Matter Content		Single Application	Split Application*	
				30-45 DBP**	At Planting
COARSE Sand, loamy sand, sandy loam	any level		DO NOT USE	DO NOT USE	
MEDIUM Loam, silt loam, silt	**A.**	more than 1.0%	2.1 qt/A	1.4 qt/A	0.7 qt/A
	B.	less than 1.0%	DO NOT USE	DO NOT USE	
		more than 1.0%	2.1. qt/A to 2.33 qt/A	1.4 qt/A to 1.6 qt/A	0.7 qt/A to 0.8 qt/A
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	**A.**	more than 1.0%	2.1 qt/A	1.4 qt/A	0.7 qt/A
	B.	1.0%-1.5%	2.1 qt/A to 2.33 qt/A	1.4 qt/A to 1.6 qt/A	0.7 qt/A to 0.8 qt/A
		more than 1.5%	2.33 qt/A to 2.58 qt/A	1.6 qt/A to 1.75 qt/A	0.8 qt/A to 0.9 qt/A

*****Split applications can be made less than 30 days before planting if desired.

******DBP – Days before planting

A. Do not exceed this rate on highly erodible land with less than 30% plant residue cover. Control of certain weeds may be reduced and a tank mix partner or an application of a postemergence herbicide may be needed.

B. Use these rates for all other applications.

Preplant Surface, Preplant Incorporated, or Preemergence (Corn or Sorghum-Seed Treated with Concep): Apply Medal II ATZ preplant surface, preplant incorporated, or preemergence, using the appropriate rates from Table 3 for corn, or from Table 4 for sorghum.

Preplant Surface: Apply uniformly to the soil surface within 14 days before planting. Where applications are made to coarse soils more than 7 days before planting, use the rates in Table 1 for corn.

Preplant Incorporated: Apply to the soil and incorporate into the top 2 inches of the soil within 14 days before planting, using a finishing disk, finishing harrow, rolling cultivator, or similar implement capable of providing uniform 2-inch incorporation. Use the preplant incorporated method if furrow irrigation is used or when a period of dry weather after application is expected. If crop is to be planted on beds, apply and incorporate after bed formation.

Preemergence: Apply to the soil surface at planting (behind the planter) or after planting, but before weeds or crop emerge.

Table 3: Medal II ATZ – Preplant Surface, Preplant Incorporated, or Preemergence – Corn

Soil Texture	Broadcast Rate Per Acre	
	Less Than 3% Organic Matter	3% Organic Matter or Greater
COARSE Sand, loamy sand, sandy loam	1.3 qt	1.6 qt
MEDIUM Loam, silt loam, silt	1.6 qt	2.1 qt
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1 qt	A. 2.1 qt B. 2.1-2.58 qt*
Muck or peat soils (more than 20% organic matter)	DO NOT USE	

*For cocklebur, yellow nutsedge, and velvetleaf control on fine-textured soils above 3% organic matter: Apply 2.58 qt of Medal II ATZ per acre.

A. Do not exceed this rate on highly erodible land with less than 30% plant residue cover. Control of certain weeds may be reduced and a tank mix partner or an application of a postemergence herbicide may be needed.

B. Use this rate for all other applications.

Notes: (1) In the event of escape of annual weeds following an early preplant, preplant surface, preplant incorporated, or preemergence treatment of Medal II ATZ applied alone or in combination, follow with a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide, i.e., AAtrex, Accent®, Banvel, Basagran, Beacon, Buctril, Marksman, or 2,4-D. If the postemergence treatment includes the herbicide used in the earlier treatment, do not exceed the labeled rate for corn on a given soil texture. (2) Buctril may be applied postemergence alone or in tank mix combination with AAtrex. Do not exceed 1.2 lb ai/A of AAtrex in tank mix combination with Buctril postemergence. Refer to the AAtrex and Buctril labels for specific rates and precautions. (3) If AAtrex or another product containing atrazine is used postemergence following application of Medal II ATZ, do not exceed a preemergent plus postemergent application total of 2.5 lb ai/A of atrazine per year on a corn crop. (4) Substitute a fluid fertilizer for some or all of the water carrier for burndown of existing annual weeds listed on this label up to the 2-leaf stage of development. The addition of crop oil concentrate to the spray mixture will enhance the burndown activity. If larger weeds are present, add a contact herbicide as noted in the **Medal II ATZ Combinations** section of this label.

Table 4: Medal II ATZ – Preplant Surface, Preplant Incorporated, or Preemergence – Grain or Forage Sorghum* (Seed treated with Concep)

Soil Texture	Organic Matter	Broadcast Rate Per Acre
COARSE Sand, loamy sand, sandy loam	any level	DO NOT USE
MEDIUM and FINE Loam, silt loam, silt, sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	less than 1.0%	DO NOT USE
	more than 1.0%	1.6 - 2.1 qt

*Do not use in NM or TX, except in the TX Panhandle, Gulf Coast, and Blacklands areas. Do not apply preplant incorporated in AZ or the Imperial Valley of CA.

Note: Substitute a fluid fertilizer for some or all of the water carrier for burndown of existing annual weeds listed on this label up to the 2-leaf stage of development. The addition of crop oil concentrate to the spray mixture will enhance the burndown activity. If larger weeds are present at the time of treatment, add a contact herbicide as noted in the **Medal II ATZ Combinations** section of this label.

Precautions: To avoid possible crop injury, (1) Do not apply Medal II ATZ on highly alkaline soils (pH greater than 8.0) or on eroded areas where calcareous subsoils are exposed. (2) Do not apply Medal II ATZ when sorghum is planted in deep furrows because heavy rains following application can cause excessive concentrations of herbicide in the furrow. (3) Do not apply to sorghum grown under dry mulch tillage. (4) Injury may occur if both Medal II ATZ applied early preplant, preplant surface, preplant incorporated, or preemergence and an at-planting systemic insecticide applied in-furrow are used. (5) In addition, sorghum growing under stress caused by minor element deficiency may be injured by Medal II ATZ.

Note: To avoid possible illegal residues, do not graze or feed sorghum forage for 60 days following preemergent use.

Postemergence Broadcast – Corn

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

Application: Apply early postemergence, using the appropriate rate from Table 5. Apply this treatment before grass and broadleaf weeds pass the 2-leaf stage and before corn exceeds 12 inches in height. Application to weeds larger than the 2-leaf stage will generally result in unsatisfactory control. Occasional corn leaf burn may result, but this should not affect later growth or yield. Do not apply postemergence in fluid fertilizer, or severe crop injury may occur.

Note: To avoid possible illegal residues, (1) do not graze or feed field corn forage from treated areas for 60 days or sweet corn forage for 45 days following application and (2) do not harvest sweet corn ears from treated areas for 30 days following application.

Table 5: Medal II ATZ Postemergence Broadcast – Corn

Soil Texture	Broadcast Rate Per Acre
COARSE Sand, loamy sand, sandy loam	1.6 qt
MEDIUM Loam, silt loam, silt	2.1 qt
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1-2.58 qt*

*For better residual control of cocklebur, velvetleaf, and yellow nutsedge on fine-textured soils above 3% organic matter, apply 2.58 qt of Medal II ATZ per acre.

Atrazine and *S*-metolachlor Notes: (1) If Medal II ATZ has been applied early preplant, preplant surface, preplant incorporated, or preemergence, do not exceed a total of 3.23 qt/A of Medal II ATZ on a corn crop. (2) If AAtrex (atrazine) or AAtrex plus Dual Magnum or Dual II Magnum tank mixtures have been applied early preplant, preplant surface, preplant incorporated, or preemergence, limit the Medal II ATZ early post application not to exceed a total of 2.5 lb of active ingredient atrazine per calendar year. If Dual Magnum or Dual II Magnum tank mixtures have been applied, limit the Medal II ATZ early post application not to exceed a total of 3.75 lb of the active ingredient *S*-metolachlor.

Rotational Crops: Follow the preceding crop rotation instructions for **Medal II ATZ – Early Preplant, Preplant Surface-Applied, Preplant Incorporated, or Preemergence**.

Postemergence-Directed – Corn

Medal II ATZ may be applied at 1.3-2.58 qt/A in a minimum of 15 gal of water as a postemergence-directed treatment to corn to extend control of weeds listed in the **Early Preplant, Preplant Surface-Applied, Preplant Incorporated, Preemergence, or Postemergence Broadcast** section of the corn label. Apply using the appropriate rate from Table 6.

For best results, apply Medal II ATZ to weed-free soil following use of a preplant surface, preplant incorporated, or preemergence herbicide, or following a lay-by cultivation. If weeds have emerged at the time of Medal II ATZ application, apply before grass and broadleaf weeds exceed the 2-leaf stage. Application to weeds larger than the 2-leaf stage will generally give unsatisfactory control. Apply to corn not exceeding 12 inches in height. Minimize contact with corn leaves. Do not apply postemergence in fluid fertilizer, or severe crop injury may occur.

Note: To avoid possible illegal residues, (1) do not graze or feed field corn forage from treated areas for 60 days or sweet corn forage for 45 days following application and (2) do not harvest sweet corn ears from treated areas for 30 days following application.

Table 6: Postemergence-Directed – Corn

Soil Texture	Broadcast Rate Per Acre
COARSE Sand, loamy sand, sandy loam	1.3 qt
MEDIUM Loam, silt loam, silt	2.1 qt
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1-2.58 qt*

*For better residual control of cocklebur, velvetleaf, and yellow nutsedge on fine-textured soils above 3% organic matter, apply 2.58 qt of Medal II ATZ per acre.

Atrazine and *S*-metolachlor Notes: (1) If Medal II ATZ has been applied early preplant, preplant surface, preplant incorporated, or preemergence, do not exceed a total of 3.23 qt/A of Medal II ATZ on a corn crop. (2) If AAtrex (atrazine) or AAtrex plus Dual Magnum, or Dual II Magnum tank mixtures have been applied preplant surface, preplant incorporated, or preemergence, limit the Medal II ATZ post-directed application not to exceed a total of 2.5 lb of the active ingredient atrazine per calendar year. If Dual Magnum or Dual II Magnum tank mixtures have been applied, limit the Medal II ATZ post-directed application not to exceed a total of 3.75 lb of the active ingredient *S*-metolachlor.

SPRAY EQUIPMENT

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

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

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

Low Carrier Application (Broadcast Ground Application Only): Use sprayers, such as Ag-Chem RoGator®, Hagie, John Deere Hi-Cycle™, John Deere 4700 Sprayer, Melroe Spra-Coupe, Tyler Patriot™, or Willmar Air Ride®, that provide accurate and uniform application. **Only water may be used as a carrier.** Screens in suction and in-line strainers should be 50-mesh. Manufacturers may require that tip screens as fine as 100-mesh be used with some nozzles. Use a pump with capacity to: (1) maintain up to 35-40 psi at the nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension. Use a minimum of 5.0 gal of spray mixture per acre. Maximum recommended sprayer speed is 15 mph. Maintain uniform travel speed while spraying. Rinse sprayer thoroughly with clean water immediately after each use.

Note: Low pressure nozzles are recommended to reduce drift and increase application accuracy. Care should be taken when using automatic rate controlling devices to spray the material within the rated working pressure and flow ranges of the nozzle 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 (For Medal II ATZ Alone): Use aerial application only where broadcast applications are specified. Use the appropriate amount of this product in sufficient water to equal a minimum of 2.0 gal/A of total spray. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. In order to assure that spray will be controllable within the target area when used according to the 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 Medal II ATZ by aircraft at a minimum upwind distance of 400 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 should be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory Information** section below.

Aerial Drift Reduction Advisory Information

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **Wind, Temperature and Humidity,** and **Temperature Inversions**).

Controlling Droplet Size

- **Volume** – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles** – Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** – Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height

Applications should not be made at a height greater than 10 ft above the top of the largest plants, unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified 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.

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).

MIXING PROCEDURES

Shake 2.5 gal jugs well or thoroughly recirculate larger containers and bulk tanks before using. Medal II ATZ is a liquid that may be mixed with water or fluid fertilizer and applied as a spray. Medal II ATZ may also be sprayed onto dry bulk granular fertilizer and applied with the granular fertilizer.

Dry Bulk Granular Fertilizers

Many dry bulk granular fertilizers may be impregnated or coated with Medal II ATZ and used to control weeds in corn or Concep-treated sorghum.

When applying Medal II ATZ with dry bulk granular fertilizers, follow all directions for use and precautions on the Medal II ATZ label regarding target crops, rates per acre, soil texture, application methods, and rotational crops.

- Impregnation of bulk fertilizer is restricted to commercial facilities. On-farm fertilizer impregnation is prohibited.
- No more than 500 tons of dry bulk fertilizer can be impregnated per day.
- No single facility may impregnate fertilizer with this product for more than 30 days per calendar year.
- The commercial facility impregnating the dry bulk fertilizer must inform, in writing, the user (applicator) of the dry bulk fertilizer that:
    - Applicators must wear long-sleeved shirt, long pants, shoes, and socks
    - The restricted entry interval is 24 hours

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

Prepare the herbicide/fertilizer mixture by using any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Nozzles used to spray Medal II ATZ onto the fertilizer must be placed to provide uniform spray coverage. Care should be taken to aim the spray onto the fertilizer only, avoiding the walls of the blender.

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

Calculate the amount of Medal II ATZ to be used by the following:

$$\frac{\text{tons of fertilizer}}{\text{acre}} \times \text{qt of Medal II ATZ per acre} = \text{qt of Medal II ATZ per ton of fertilizer}$$

Pneumatic (Compressed Air) Application

High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer may cause fertilizer mixtures to build up or plug the distributor head, air tubes, or nozzle deflector plates. To minimize buildup, premix Medal II ATZ with Exxon Aromatic 200 at a rate of 2.0-2.5 pt/gal of Medal II ATZ. 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.

Notes: (1) Mixtures of Medal II ATZ 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 Medal II ATZ 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 another drying agent of 6/30 particle size is recommended. (3) Drying agents are not recommended for use with On-The-Go impregnation equipment.

Precautions: To avoid potential for explosion, (1) Do not impregnate Medal II ATZ on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers. (2) Do not combine Medal II ATZ with a single superphosphate (0-20-0) or treble superphosphate (0-46-0). (3) Do not use Medal II ATZ on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

Application

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

Precautions: (1) To help avoid rotational crop injury, make applications as early as possible, since Medal II ATZ impregnated onto dry bulk granular fertilizers can be expected to last longer in the soil than when Medal II ATZ is applied as a spray in water or fluid fertilizer. (2) To avoid potential crop injury, do not use the herbicide/fertilizer mixture on crops where planting beds are to be formed.

Application in Water or Fluid Fertilizers

Medal II ATZ Alone: Fill the spray tank 1/2-3/4 full with water or fluid fertilizer, add the proper amount of Medal II ATZ, then add the rest of the water or fluid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform suspension.

Tank Mixtures: Fill the spray tank 1/2-3/4 full with water or fluid fertilizer, add the proper amount of Medal II ATZ, then add AAtrex, Balance, Banvel®, Linuron, or Princep; next add Dual Magnum, or Dual II Magnum; then add Gramoxone brands, Landmaster BW, Touchdown brands, Roundup brands or other glyphosate products, depending on the tank mix combination desired; and finally, add the rest of the water or fluid fertilizer. Only water may be used with Medal II ATZ + Liberty® Herbicide when applied postemergence to corn designated as tolerant to Liberty (glufosinate); and with Roundup brands or Touchdown brands when applied postemergence to corn designated as glyphosate-tolerant (e.g. Agrisure® or Roundup Ready®). Provide sufficient agitation during mixing and application to maintain a uniform suspension.

Compatibility Test

A jar test is recommended before tank mixing to ensure compatibility of Medal II ATZ with other pesticides. The following test assumes a spray volume of 25 gal/A. For other spray volumes, make appropriate changes in the ingredients.

Note: Nitrogen solutions or complete fluid fertilizers may replace all or part of the water in the spray. Because liquid fertilizers vary, even within the same analysis, **always check compatibility with pesticide(s) before use**. Incompatibility of tank mixtures is more common with suspensions of fertilizer and pesticides.

Test Procedure

1. Add 1.0 pt of carrier (fertilizer or water) to each of 2 one qt jars with tight lids. **Note:** Use the same source of water that will be used for the tank mix and conduct the test at the temperature the tank mix will be applied.
2. To one of the jars, add 1/4 tsp. or 1.2 milliliters of a compatibility agent approved for this use, such as Compex® or Unite® (1/4 tsp. is equivalent to 2.0 pt/100 gal spray). Shake or stir gently to mix.
3. To both jars, add the appropriate amount of pesticide(s) in their relative proportions based on recommended label rates. If more than one pesticide is used, add them separately with dry pesticides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix.
4. After adding all ingredients, put lids on and tighten, and invert each jar ten times to mix. Let the mixtures stand 15-30 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (a) slurry the dry pesticide(s) in water before addition, or (b) add 1/2 the compatibility agent to the fertilizer or water and the other 1/2 to the emulsifiable concentrate or flowable pesticide before addition to the mixture. If incompatibility is still observed, do not use the mixture.

5. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the **Storage and Disposal** section in this label.

CROP USE DIRECTIONS

MEDAL II ATZ COMBINATIONS – CORN*

Always follow label instructions for tank mix products when mixing with Medal II ATZ.

*When tank mixing Medal II ATZ with AAtrex formulations, refer to the **Medal II ATZ Rate Limitations** section of this label. Do not exceed the following:

On highly erodible land with less than 30% plant residue cover prior to crop emergence	1.6 lb ai of atrazine
On other land prior to crop emergence	2.0 lb ai of atrazine
Postemergence applications only – any land	2.0 lb ai of atrazine
Preemergence + postemergence applications	2.5 lb ai of atrazine

Tank Mixture with AAtrex, Dual Magnum, Dual II Magnum, Princep, or Balance

Note: Check the compatibility of Medal II ATZ tank mixtures with Balance before mixing in spray tank by using the procedure described under **Application in Water or Fluid Fertilizers**.

AAtrex (4L or Nine-O®): Add up to 1.0 qt of AAtrex 4L (1.1 lb of Nine-O) per acre to the rate of Medal II ATZ recommended in Table 3 (do not exceed the above atrazine limit) in the southeastern U.S. where high rainfall can shorten the duration of control of broadleaf weeds, and in all areas where heavy infestations of cocklebur, morningglory, velvetleaf, or other broadleaf weeds claimed are expected.

Dual Magnum Products: Add up to 0.33 pt of Dual Magnum or Dual II Magnum per acre to the rate of Medal II ATZ recommended in Table 3 when heavy infestations of yellow nutsedge, sandbur, or seedling johnsongrass are expected.

Princep (4L or Caliber 90®): Add up to 1.0 qt of Princep 4L (1.1 lb of Caliber 90) per acre to the rate of Medal II ATZ recommended in Table 3 where heavy infestations of crabgrass or fall panicum are expected or additional control of certain broadleaves is desired.

Balance (Field Corn Only): The tank mixture of Medal II ATZ + Balance provides control of weeds listed on the Medal II ATZ label, certain weed biotypes resistant to ALS-inhibitor herbicides and to triazine herbicides, velvetleaf, and others on the respective product labels. Balance will contribute to the control of problem grass and other broadleaf species on its label. Application may be preplant (surface-applied up to 14 days before to planting), preplant incorporated, or preemergence in conventional tillage, conservation tillage, and no-till systems. Refer to **Table 1: Medal II ATZ – Early Preplant** for the early preplant application rate (8-14 days before planting) or refer to **Table 3** for the appropriate rate for preplant (surface-applied 0-7 days before planting), preplant incorporated, or preemergence application. Refer to the **Application Procedures** and **Tank Mix Directions** on the Balance label, but to reduce the potential for injury from Balance contact with corn, use 1.0 oz/A of Balance on coarse-textured soils and 1.0-1.5 oz/A on medium- and fine-textured soils in conventional, conservation, and no-tillage systems. For early preplant applications 8-14 days before planting, add 0.5 oz/A of Balance to the rates of Balance described above.

Observe all applicable directions, precautions, and limitations on the Medal II ATZ and Balance labels when applying these products in tank mix combination in states where Balance is registered. Where difficult species and/or severe weed populations are expected, use the maximum rates of Medal II ATZ and Balance where rate ranges are listed for this tank mixture.

Tank Mixture of Medal II ATZ Alone or Medal II ATZ + AAtrex, Balance, Dual Magnum, Dual II Magnum, or Princep, with Gramoxone Brands, Landmaster BW, Touchdown Brands, or Roundup Brands

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 Gramoxone brands, Landmaster BW, Touchdown, or Roundup should be tank mixed with Medal II ATZ alone or with Medal II ATZ + AAtrex, Balance, Dual Magnum, Dual II Magnum, or Princep. When used as directed, the Gramoxone brands portion of the tank mixture controls most emerged annual weeds and suppresses many perennial weeds. Landmaster BW, Touchdown, or Roundup combinations will control emerged annual and perennial weeds when applied as directed on its label. The Medal II ATZ portion of the tank mixture provides preemergence control of the weeds listed on this label in the **Medal II ATZ Alone** section for corn. The addition of AAtrex, Balance, Dual Magnum, Dual II Magnum, or Princep offers the advantage indicated above.

Application: Apply before, during, or after planting, but before corn emerges, at the appropriate rate in Table 7. Up to 0.75 qt of AAtrex 4L (0.8 lb of Nine-O), or 1.0-2.0 oz of Balance (refer to **Tank Mixture with Balance** for specific rate), or 0.33 pt of Dual Magnum or Dual II Magnum or 1.0 qt of Princep 4L (1.1 lb of Caliber 90) per acre may be added to the rate of Medal II ATZ recommended in Table 7. Add Gramoxone brands, Landmaster BW, Touchdown brands, or Roundup brands at labeled rates. **Tank mixtures with Balance can be used only preemergence on field corn.**

Apply in 20-60 gal of water per acre with conventional spray equipment.

Tank Mixture of Medal II ATZ Alone or Medal II ATZ + AAtrex, or Balance, with 2,4-D or 2,4-D + Banvel

In minimum-tillage or no-tillage systems where corn is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, Medal II ATZ may be applied in combination with AAtrex or Balance. When used as directed, the Medal II ATZ portion of the tank mixture provides preemergence control of the weeds listed on this label in the **Medal II ATZ Alone** section for corn.

Application: Apply Medal II ATZ before, during, or after planting, but before corn emerges, at the appropriate rate in Table 7. Up to 0.75 qt of AAtrex 4L (0.8 lb of Nine-O), or 1.0-2.0 oz of Balance (refer to **Tank Mixture with Balance** for specific rate), per acre may be added to the rate of Medal II ATZ recommended in Table 7.

For control of broadleaf weeds or where heavy crop residues exist, add an appropriately labeled 2,4-D amine or low volatile ester to the spray tank last and apply in a minimum of 25 gal 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 qt/100 gal of diluted spray, or another surfactant cleared for use on growing crops at its recommended rate. Apply before weeds exceed 3 inches in height. If alfalfa is present, add Banvel to the spray mixture at 0.33-0.5 pt/A 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 Gramoxone brands at the rate of 2.5 pt/A in place of, or in addition to, 2,4-D as indicated above. Do not apply Gramoxone brands in suspension-type liquid fertilizer. Observe all directions for use, precautions, and limitations on the respective product labels when applying these products in tank mix combination.

Table 7: Medal II ATZ for Minimum-Tillage or No-Tillage Corn

Soil Texture	Broadcast Rate Per Acre
COARSE Sand, loamy sand, sandy loam	1.6 qt
MEDIUM Loam, silt loam, silt	2.1 qt
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	**A.** 2.1 qt **B.** 2.1-2.58 qt*
Muck or peat soils	DO NOT USE

*For cocklebur, yellow nutsedge, and velvetleaf control on fine-textured soils above 3% organic matter, apply 2.58 qt of Medal II ATZ per acre.

A. Do not exceed this rate on highly erodible land with less than 30% plant residue cover. Control of certain weeds may be reduced and a tank mix partner or an application of a postemergence herbicide may be needed.

B. Use this rate for all other applications.

Tank Mixtures For Postemergence Weed Control in Field Corn

For postemergence control of weeds in specific types of field corn, the combinations listed below with Medal II ATZ 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 as listed below can be used to provide residual control for the remainder of the season.

Notes: (1) Follow all label directions, instructions, precautions, and limitations for each product. (2) Do not use fluid fertilizer with these mixtures or corn injury may occur. (3) For each tank mixture with Medal II ATZ, apply only to the specific field corn type specified on the tank mix product label. (4) In-row weed control may be reduced because of lack of coverage when applied to corn over 4 inches tall.

A. Medal II ATZ + Liberty or Ignite® 280 SL Herbicide for Postemergence Use in LibertyLink® Corn - The tank mixture of Medal II ATZ + Liberty or Ignite 280 SL Herbicide can be applied postemergence to weeds and corn from seed designated as LibertyLink or corn warranted by Bayer CropScience as being tolerant to Liberty Herbicide. Liberty or Ignite 280 SL Herbicide provides postemergence control of a broad spectrum of grass and broadleaf weeds and the Medal II ATZ provides residual control of grasses and broadleaf weeds listed in the label section **Medal II ATZ Applied Alone - Weeds Controlled**. For the proper rate of Medal II ATZ applied postemergence with Liberty or Ignite 280 SL Herbicide, refer to Table 3 and use the minimum rate per soil texture for season-long residual control. Refer to the Liberty or Ignite 280 SL Herbicide label for the postemergence application rate according to weed species and their maximum height at the time of postemergence application. Where multiple weed species are present, use the highest Liberty or Ignite 280 SL Herbicide rate recommended to control the species and growth stages present.

Follow all applicable use directions, limitations, precautions, and information regarding application to corn on the Medal II ATZ and Liberty Herbicide labels.

B. **Medal II ATZ + Touchdown Brands or Roundup Brands for Postemergence Application to Glyphosate-Tolerant (e.g. Agrisure or Roundup Ready)** - The tank mixture of Medal II ATZ + Touchdown brands or Roundup brands can be applied postemergence to weeds and to corn designated as glyphosate-tolerant. Application may be applied postemergence to glyphosate-tolerant corn up to 12 inches in height. This mixture will provide post-emergence control of weed species on the Touchdown brand or Roundup brand label, and also residual control of weed species on the Medal II ATZ label. Use the minimum Medal II ATZ rate postemergence with Touchdown or Roundup in glyphosate-tolerant corn as specified in Table 3 of this label. Refer to each product label and follow all appropriate use directions, application procedures, precautions, and limitations. Apply Touchdown or Roundup for control of labeled broadleaf and grass weeds. Refer to the Touchdown brand or Roundup brand label for directions to control problem species.

C. **Medal II ATZ + Spirit®** - Apply 1.33-1.75 qt/A of Medal II ATZ + 1.0 oz/A of Spirit to corn that is 4-12 inches tall. The application may be broadcast, semi-directed, or directed. The Medal II ATZ rate is based on soil texture with 1.33 qt/A on coarse and 1.75 qt/A on medium and fine soils. Add a nonionic surfactant at 0.25% v/v. This mixture is effective for control of many annual and broadleaf weeds and some grasses. A few instances of broadleaf weed control antagonism have been observed with this combination. Control of certain annual grasses can be improved with the addition of Accent.

Note: Do not use fertilizer or crop oil concentrate with these mixtures or injury to field corn may occur. The combination of Medal II ATZ with other products for postemergence weed control in corn is generally not recommended. **These combinations may cause injury and/or weed control concerns that would not exist when the products are used separately.** A certain inherent risk is involved with the various combinations of these products used postemergence in corn. [It should be noted that early preplant, preplant incorporated, or preemergence control of these weeds would usually provide more timely weed control resulting in higher yields than total postemergence treatments.]

Mixing Order

Add these products to the tank mix in the following order:

1. Products in water-soluble bags should be added first.
2. Medal II ATZ
3. Additives

Precautions: (1) Follow all label instructions, precautions, and rotational restrictions for individual products when making these applications to field corn. When Medal II ATZ is applied after June 10, crop injury may occur the following year if you rotate to crops other than corn or sorghum. (2) In-row weed control may be reduced because of lack of coverage when applied to corn over 4 inches tall.

Medal II ATZ Combinations – Grain Sorghum (Seed treated with Concep)

Tank Mixture of Medal II ATZ with Gramoxone Brands, Landmaster BW, Touchdown Brands, or Roundup Brands for Minimum-Tillage or No-Tillage Systems

In minimum-tillage or no-tillage systems where grain sorghum is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, the contact herbicides Gramoxone brands, Landmaster BW, Touchdown, or Roundup may be tank mixed with Medal II ATZ. When used as directed, the Gramoxone brands portion of the tank mixture controls most emerged annual weeds and suppresses many perennial weeds. Landmaster BW, Touchdown, or Roundup combinations will control emerged annual and perennial weeds when applied as directed on its label. The Medal II ATZ portion of the tank mixture provides preemergence control of the weeds listed on this label in the **Medal II ATZ Applied Alone** section.

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

Application: Apply before, during, or after planting, but before grain sorghum emerges, at the appropriate rate in Table 8. Add Gramoxone brands, Landmaster BW, or Roundup at labeled rates.

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

Table 8: Medal II ATZ for Minimum-Tillage or No-Tillage Grain Sorghum* (Seed treated with Concep)

Soil Texture	Organic Matter	Broadcast Rate Per Acre
COARSE Sand, loamy sand, sandy loam	any level	DO NOT USE
MEDIUM and FINE Loam, silt loam, silt, sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	less than 1.0% 1.0-1.5% more than 1.5%	DO NOT USE 1.6 qt 1.8-2.1 qt

*Do not use in NM or TX, except in the TX Panhandle, Gulf Coast, and Blacklands areas. Do not apply preplant incorporated in AZ or the Imperial Valley of CA.

Precautions: To avoid possible crop injury, (1) Do not apply Medal II ATZ on highly alkaline soils (pH greater than 8.0) or on eroded areas where calcareous subsoils are exposed. (2) Do not apply Medal II ATZ when sorghum is planted in deep furrows because heavy rains following application can cause excessive concentrations of herbicide in the furrow. (3) Do not apply to sorghum grown under dry mulch tillage. (4) Injury may occur if both Medal II ATZ applied early preplant, preplant surface, preplant incorporated, or preemergence and an at-planting systemic insecticide applied in-furrow are used. (5) In addition, sorghum growing under stress caused by minor element deficiency may be injured by Medal II ATZ. (6) Postemergence applications to sorghum must be made before the crop reaches 12 inches in height.

Rotational Crops: Follow the crop rotation instructions in the **Medal II ATZ Alone** section.

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a dry and cool place. Do not irradiate directly with sunlight.

Pesticide Disposal

Open dumping is prohibited. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

Container Handling [equal to or less than 5 gallons]

Non-refillable 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. Drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

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. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night. If the container is damaged and leaking or material has been spilled follow these procedures:

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

continued...

STORAGE AND DISPOSAL *(continued)*

Container Handling [greater than 5 gallons]

Refillable container. Refill this container with Medal II ATZ Herbicide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities. If the container is damaged, leaking, or obsolete, contact Syngenta Crop Protection, LLC at 1-800-888-8372.

Container Handling [greater than 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

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. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night. If the container is damaged and leaking or material has been spilled follow these procedures:

1. Cover spill with absorbent material.
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4. Do not allow to contaminate water supplies.
5. Dispose of according to instructions.

AAtrex®, AAtrex Nine-O®, Agrisure®, Beacon®, Medal® II ATZ, Concep®, Dual Magnum®, Dual II Magnum®, Gramoxone®, Princep®, Princep Caliber 90®, Touchdown®, and Spirit® are Trademarks of a Syngenta Group Company

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Tyler Patriot™ trademark of Tyler Ltd. Partnership

Unite® trademark of HACO, Inc.

Willmar Air Ride® trademark of Willmar Manufacturing

X-77® trademark of Loveland Industries, Inc.

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For non-emergency (e.g., current product information), call
Syngenta Crop Protection at 1-800-334-9481.

Manufactured for:
Syngenta Crop Protection, LLC
P. O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 817B-L1R 0814
4048903

RESTRICTED USE PESTICIDE

(GROUND AND SURFACE WATER CONCERNS)

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

THIS PRODUCT IS A RESTRICTED-USE HERBICIDE DUE TO GROUND AND SURFACE WATER CONCERNS. USERS MUST READ AND FOLLOW ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUND AND SURFACE WATER.

GROUP 5 15 HERBICIDES

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

Medal® II ATZ

Herbicide

For weed control in corn and grain or forage sorghum

Active Ingredients:

Atrazine (CAS No. 1912-24-9)	33.0%
Atrazine related compounds	0.7%
S-metolachlor (CAS No. 87392-12-9)	26.1%
Other Ingredients:	40.2%
Total:	100.0%

Medal II ATZ contains 3.1 lb atrazine + relateds per gallon and 2.4 lb *S*-metolachlor active ingredient per gallon.

Medal II ATZ is formulated as a suspension concentrate (SC).

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional directions for use and Storage and Disposal in attached booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-817 EPA Est. 100-LA-001

Medal® II ATZ and the Syngenta logo are trademarks of a Syngenta Group Company

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Manufactured for:
Syngenta Crop Protection, LLC
P. O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 817B-L1R 0814 4048903

2.5 gallons

Net Contents

(01) 0 07 02941 46215 1

Precautionary Statements

Hazards to Humans and Domestic Animals

Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

FIRST AID

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person. **If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. **If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. **If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

HOT LINE NUMBER: For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire or Accident), Call **1-800-888-8372**.

Environmental Hazards: This product is toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsate. This pesticide contains atrazine, which has been shown to be toxic to aquatic invertebrates. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply when weather conditions favor drift from treated areas.

Ground Water Advisory: Medal II ATZ contains both the active ingredients atrazine and *S*-metolachlor. Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable, i.e., well-drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water. *S*-metolachlor has the potential to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Surface Water Advisory: *S*-metolachlor has the potential to contaminate surface water through ground spray drift. Under some conditions, *S*-metolachlor may also have a high potential for runoff into surface water (primarily via dissolution in runoff water) for several months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water. 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 for contamination of water from runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

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 equipment. This product may not be mixed/loaded or used within 50 ft of all wells, including abandoned wells, drainage wells, and sink holes*.

This product must 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 applied aerially or by ground within 66 ft of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 ft around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66-ft buffer or setback from runoff entry points must be planted to crop, or seeded with grass or other suitable crop.*

*For exceptions to these restrictions, see the **Environmental Hazards** section of the **Precautionary Statements** in attached booklet.

Aerial Drift Management Requirements: Do not apply this product by air, unless the supplemental labeling on **Aerial Drift Management** in attached booklet is followed.

Chemigation Prohibition: Do not apply this product through any type of irrigation system.

Container Handling [equal to or less than 5 gallons]: Non-refillable 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. Drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

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. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night. If the container is damaged and leaking or material has been spilled follow these procedures:

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