



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

November 10, 2021

Mary Beth Endres
Regulatory Manager
Axion Ag Products, LLC
1880 Fall River Drive, Suite 100
Loveland, CO 80538

Subject: Registration Review Label Amendments for Atrazine & Metolachlor
Incorporating Mitigation Measures from the Interim Decisions and the Technical
Registrants' Commitments for the Endangered Species Act (ESA) Biological
Evaluation for Atrazine
Product Name: AX ATZ S-MET HERBICIDE
EPA Registration Number: 89167-41
Application Date: 11/23/2020 & 04/15/2021
Decision Number: 579575 & 579581

Dear Ms. Endres:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Atrazine & Metolachlor Interim Decisions and with the atrazine technical registrants' commitments for the ESA Biological Evaluation. The Agency has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved

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labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Samantha Thomas at Thomas.samantha@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Linda Arrington", with a long horizontal flourish extending to the right.

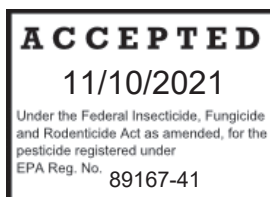
Linda Arrington, Branch Chief
Risk Management and Implementation Branch 4
Pesticide Re-Evaluation Division
Office of Pesticide Programs

Enclosure

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.



ATRAZINE	GROUP	5	HERBICIDE
S-METOLACHLOR	GROUP	15	HERBICIDE

AX ATZ S-MET Herbicide

FOR WEED CONTROL IN CORN AND GRAIN OR FORAGE SORGHUM

ACTIVE INGREDIENTS:	% BY WT.
Atrazine (CAS No. 1912-24-9)	33.0%
Atrazine related compounds	0.7%
S-metolachlor (CAS No. 87392-12-9)	26.1%
OTHER INGREDIENTS:	<u>40.2%</u>
TOTAL:	100.0%

AX ATZ S-MET contains 3.1 lbs. atrazine + relateds per gallon and 2.4 lbs. S- metolachlor active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION / PRECAUCIÓN

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

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300.

[See inside booklet for additional PRECAUTIONARY STATEMENTS.]

[See inside booklet for additional Precautionary Statements and Directions for Use.]

Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.

EPA Reg. No.: 89167-41

EPA Est. No.: _____

NET CONTENTS: ____ GAL (____ L)

Manufactured For:

AXION AG PRODUCTS, LLC
1880 Fall River Drive, Suite 100
Loveland, CO 80538

110221

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none"> • 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 do so by the poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOTLINE NUMBER	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 or your poison control center at 1-800-222-1222. For Chemical Spill, Leak, Fire or Exposure, call CHEMTREC 800-424-9300.</p>	

**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 reaction in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves made of barrier laminate, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils or viton ≥ 14 mils
- 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 made of barrier laminate, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils or viton ≥ 14 mils
- Apron for mixers and loaders

See engineering controls for additional requirements.

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 waterproof 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

AX ATZ S-MET 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.

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

Surface Water Advisory

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

Non-Target Organism Advisory

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

Reporting Ecological Incidents:

To report ecological incidents, including mortality, injury, or harm to plants and animals, call 844-425-8488.

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 or loaded within 50 feet 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 feet around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66 feet buffer or setback from runoff entry points must be planted to crop, or seeded with grass or other suitable crop.

This product must not be mixed/loaded or used within 50 feet of all wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet 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

Tile-Outletted Terraced Fields Containing Standpipes

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

- **DO NOT** apply this product within 66 feet of standpipes in tile-outletted terraced fields.
- Apply this product to the entire tile-outletted terraced field and immediately incorporate it to a depth of 2 to 3 inches in the entire field.
- 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.

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 Axion AG Products, LLC for a refund.

AX ATZ S-MET 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 waterproof gloves
- 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.

Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.

PRODUCT INFORMATION

AX ATZ S-MET is a selective herbicide recommended for preplant, preemergence, or postemergence control of most annual grasses and broad leaf weeds in corn. AX ATZ S-MET can also be used before crop emergence for control of most annual grasses and broad leaf weeds in grain or forage sorghum, provided the sorghum seed has been properly treated with a seed safener that provides tolerance to S-metolachlor. 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.

Endangered Species Protection Requirements:

It is a Federal offense to use any pesticide in a manner that results in an unauthorized "take" (e.g., kill or otherwise harm) of an endangered species and certain threatened species under the Endangered Species Act section 9. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult <http://www.epa.gov/espp/>, call 1-844-447-3813, or email ESPP@epa.gov. You must use the Bulletin valid for the month in which you will apply the product.

Tank Mixing

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in

tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

AX ATZ S-MET alone or in tank mixture with, atrazine, metolachlor/S-metolachlor or simazine may be applied early preplant, preplant surface, preplant incorporated, or preemergence on corn, in water or fluid fertilizer. Apply postemergence treatments of AX ATZ S-MET to corn, alone or in combination, using water only as the carrier. AX ATZ S-MET may be applied in tank mix combination with glyphosate, glyphosate + 2,4-D or paraquat with or without the above herbicides preplant surface or preemergence to corn. AX ATZ S-MET alone may also be applied on sorghum early preplant, preplant incorporated, preplant surface, or preemergence in water or in fluid fertilizer.

Following many years of continuous use of atrazine (one of the ingredients in AX ATZ S-MET), 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 AX ATZ S-MET in combination or in sequence with registered herbicides which **DO NOT** contain triazines. Consult with your State Agricultural Extension Service for specific recommendations.

AX ATZ S-MET may be applied in water by aircraft. Applications in fluid fertilizer should be only by ground equipment.

Precautions

- If sorghum seed is not properly pretreated with a seed safener that provides tolerance to S-metolachlor, AX ATZ S-MET will severely injure the crop.
- Injury may occur to sorghum following the use of AX ATZ S-MET under abnormally high soil moisture conditions during early development of the crop.
- Avoid spray overlap, as crop injury may result.
- 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 AX ATZ S-MET or a tank mixture may reduce effectiveness. Cultivate if weeds develop in conventional tillage corn or sorghum.

Restrictions

- **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.
- **DO NOT** use a sprayer or applicator contaminated with other materials, or crop damage or sprayer clogging of the application device may occur. Thoroughly clean sprayer or other application device before using. Dispose of cleaning solution in a responsible manner.
- 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.
- **DO NOT** apply atrazine and propazine products in the same sorghum acre.
- Application via mechanically pressurized handguns in sweet corn is prohibited.
- Not for use in the states of Hawaii or Alaska, or in the U.S. territories (Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands, and the North Mariana Islands).
- Use on roadside, Conservation Reserve Program (CRP) land, conifers, including Christmas Tree plantings, timber, forestry; and, Miscanthus and other perennial bioenergy crops is prohibited.
- **To prevent off-site movement due to runoff or wind erosion:**
 - 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.
 - **DO NOT** apply to impervious substrates, such as paved or highly compacted surfaces.

- **DO NOT** use tailwater from the first flood or furrow irrigation of treated fields to treat nontarget crops, unless at least $\frac{1}{2}$ inch of rainfall has occurred between application and the first irrigation.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, this product contains Group 5 (atrazine) and Group 15 (S-metolachlor) herbicides. Any weed population may contain plants naturally resistant to Group 5 and/or Group 15 herbicides. The resistant individual may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

Weed Management

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

- Rotate the use of this product or other Group 5 and Group 15 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in the field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact AXION AG PRODUCTS, LLC at 844-425-8488.

Management of Resistant Biotypes

Since the occurrence of resistant weeds cannot be determined until after product use and scientific confirmation, manufacturer is not responsible for any losses that may result from the failure of this product to control resistant weed biotypes.

The following good agronomic practices are recommended to reduce the spread of resistant biotypes:

- If a naturally occurring resistant biotype is present in your application site, this product should be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g. crop rotation or tillage) may also be used as appropriate.
- Scout treated application site after herbicide applications and control escaping weeds including resistant biotypes before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.

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

Integrated Pest (Weed) Management

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

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Applications:

- Applicators are required to use a coarse or coarser droplet size (ASABE S572).
- User must maintain a 150 foot (46 meter) in-field downwind buffer (in the direction in which the wind is blowing) from the edge of streams and rivers, as well as high-tide line for all estuarine/marine environments.
- If the wind speed is 10 miles per hour or less, applicators must use 1/2 swath displacement upwind at the downwind edge of the field. When the wind speed is between 11 to 15 miles per hour, applicators must use 3/4 swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Do not apply during temperature inversions.

Ground Boom Applications:

- User must only apply with the release height recommended by manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a coarse or coarser droplet size (ASABE S572).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- User must maintain a 15 foot (4.6 meter) in-field downwind buffer (in the direction in which the wind is blowing from the edge of streams and rivers, as well as high-tide line for all estuarine/marine environments).
- **DO NOT** apply during temperature inversions.

Boomless Ground Applications:

- Applicators are required to use a coarse or coarser droplet size (ASABE S572) for all applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- User must maintain a 15 foot (4.6 meter) in-field downwind buffer (in the direction in which the wind is blowing from the edge of streams and rivers, as well as high-tide line for all estuarine/marine environments).
- **DO NOT** apply during temperature inversions.

SPRAY DRIFT ADVISORIES

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

IMPORTANCE OF DROPLET SIZE

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

Controlling Droplet Size – Ground Boom

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

Controlling Droplet Size – Aircraft

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

Boomless Ground Applications:

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

Handheld Technology Applications

Take precautions to minimize spray drift.

BOOM HEIGHT – Ground Boom

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

RELEASE HEIGHT – Aircraft

Higher release heights increase the potential for spray drift.

SHIELDED SPRAYERS

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

TEMPERATURE AND HUMIDITY

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

TEMPERATURE INVERSIONS

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

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WINDCONDITIONS.

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

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.

Directions 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

AX ATZ S-MET APPLIED ALONE - CORN (ALL TYPES), GRAIN SORGHUM, OR FORAGE SORGHUM

Weeds Controlled or Partially Controlled by Early Preplant, Preplant Surface- Applied, Pre plant Incorporated, or Preemergence Applications of AX ATZ S-MET

Weeds Controlled		Weeds Partially Controlled**
Barnyardgrass (watergrass)	henbit	sandbur
browntop panicum	jimsonweed	seedling johnsongrass
carpetweed	lambsquarters	shattercane
chickweed	morningglory	sicklepod

cocklebur*	mustards	volunteer sorghum
common purslane	nightshades	woolly cupgrass
common ragweed	pigweed	
crabgrass	prairie cupgrass	
crowfootgrass	red rice	
fall panicum	signalgrass (<i>Brachiaria</i>) *	
Florida pusley	smartweed	
foxtail millet	southwestern cupgrass	
galinsoga	velvetleaf*	
giant foxtail	waterhemp	
giant ragweed*	witchgrass	
goosegrass	yellow foxtail	
green foxtail	yellow nutsedge*	

* 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 AX ATZ S-MET is to be applied preplant incorporated, this tillage may be used to incorporate AX ATZ S-MET if uniform 2-inch incorporation is achieved as recommended under **Application Procedures**.
3. Plant crop into moist soil **immediately after tillage**. If AX ATZ S-MET is to be used preemergence, apply at planting or immediately after planting.
4. If available, **sprinkler irrigate** within 2 days after application. Apply $\frac{1}{2}$ -1 inch of water. Use lower water volume ($\frac{1}{2}$ 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.

AX ATZ S-MET 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, AX ATZ S-MET contains 3.1 pounds active ingredient atrazine + related compounds per gal. (0.775 lb ai per quart)

ATRAZINE USE RESTRICTIONS:

AX ATZ S-MET 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 quarts (2.0 lb ai) per acre of AX ATZ S-MET as a broadcast spray.
- If the soil coverage with plant residue is less than 30% at planting, a maximum of 2.1 quarts (1.6 lb ai) per acre of AX ATZ S-MET may be applied. Refer to "A" in tables following.

- **On Land Not Highly Erodible**

Apply a maximum of 2.58 quarts (2.0 lb ai) per acre of AX ATZ S-MET as a broadcast spray.

FOR POSTEMERGENCE APPLICATION OF ATRAZINE TO CORN

If no atrazine was applied prior to corn emergence, apply a maximum of 2.58 quarts (2.0 lb ai) per acre of AX ATZ S-MET broadcast. If a postemergence treatment is required following an earlier atrazine

application, the total atrazine applied may not exceed 2.5 pounds active ingredient (3.2 quarts of AX ATZ S-MET) per acre per calendar year.

Replant and Rotational Crops

Replant Crops: 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 a seed safener that provides tolerance to S-metolachlor. If the original application was banded and the second crop is planted in the untreated row middles, a second banded treatment may be applied.

Rotational Crops: Corn, sorghum, soybeans, cotton, or peanuts may be planted the spring following treatment.

Precautions

- Injury may occur to soybeans planted the year following application on soils having a calcareous surface layer.
- If applied after June 10, **DO NOT** rotate with crops other than corn or sorghum the next year may result in crop injury.
- Avoid planting sugar beets, tobacco, vegetables (including dry beans), spring-seeded small grains, or small-seeded legumes the year following application, or injury may occur.

Restrictions

- **DO NOT** make a second broadcast application to replanted crops.
- **DO NOT** rotate to food or feed crops other than those listed above.
- **DO NOT** graze or feed forage or fodder from cotton to livestock
- 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.
- 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.

COVER CROPS

A cover crop can be an important tool for the overall farm cropping system. Cover crops are planted for conservation purposes, soil erosion control, soil health improvement, water quality improvement and weed management. A cover crop can be a single crop or a combination of crops, including grasses and/or broadleaf crops.

After harvest of a LIBETY S-MOC ATZ treated crop, planting of a cover crop is allowed provided the cover crop is not grazed or fed to livestock nor harvested for food. Terminate the cover crop through natural causes such as frost or intentional termination by herbicide application, crimping, rolling, tillage or cutting.

All possible cover crops or cover crop combinations have not been tested for tolerance to this product. Before planting the cover crop, determine the level of tolerance for the intended cover crops by conducting a field bioassay. Refer to the **Field Bioassay for Cover Crops** section for instructions.

Field Bioassay for Cover Crops

A field bioassay is a method of determining if herbicide residues are present in the soil at concentrations high enough to adversely affect crop growth.

Conduct the field bioassay by planting several strips of the desired cover crop across the field which has been previously treated with AX ATZ S-MET. Plant the cover crop strips perpendicular to the direction of application of this product. The strips should be located so that all the different field conditions are encountered, including differences in field terrain, soil texture, organic matter, pH, and drainage.

If the cover crop does not show adverse effects such as crop injury and/or stand reduction, the field can be planted to this cover crop. If injury and/or stand reduction are visible, wait two to four weeks for further herbicide degradation to occur and repeat the bioassay. Alternatively, select a different cover crop and repeat the bioassay. Only plant cover crops that show acceptable tolerance in the field bioassay.

CORN AND SORGHUM USE PRECAUTIONS AND RESTRICTIONS

For purposes of calculating the amount of active ingredient applied, 1 quart of AX ATZ S-MET contains 0.775 lb ai atrazine + related compounds and 0.6 lb ai S-metolachlor.

To determine the total pounds of active ingredient (lb ai) of atrazine or S-metolachlor per acre resulting from all products, use the following 2-step method:

- A. Determine the lb ai of atrazine or S-metolachlor applied as AX ATZ S-MET (1.0 quart = 0.775 lb ai atrazine + related compounds and 0.6 lb ai S-metolachlor); then,
- B. If this product or any other source of S-metolachlor is to be used, add the lb ai S-metolachlor to be applied in these products to the lb ai S-metolachlor in Step A above; or if any other source of atrazine is to be used, add the lb ai atrazine to be applied in these products to the lb ai atrazine + related compounds in Step A above.

Restrictions –Corn Applications

- The combined amount of this product resulting from all applications to corn must not exceed a total of 3.23 quarts (2.5 lb ai atrazine and 1.9 lb ai S-metolachlor) per acre per year.
- When tank mixing or sequentially applying atrazine or products containing atrazine, **DO NOT** exceed a single application rate of 2.0 pounds active ingredient of atrazine (2.58 quarts of this product) per acre.
- When tank mixing or sequentially applying atrazine or products containing atrazine, the total pounds of atrazine applied (lb ai) must not exceed 2.5 lb per acre per year.
- If other products containing S-metolachlor have been applied, the combined total amount of S-metolachlor resulting from all applications must not exceed 3.75 lb per acre per year.
- Application via mechanically pressurized handguns in sweet corn is prohibited.
- **DO NOT** graze or feed field corn forage from treated areas for 60 days or sweet corn forage for 45 days following application of this product.
- **Preharvest Interval (PHI): DO NOT** harvest sweet corn ears from treated areas for 30 days following application.

Precautions - Sorghum Applications

- If sorghum seed is not properly pretreated with a seed safener that provided tolerance to S-metolachlor, application of this product will result in severe crop injury or death.
- Injury may occur to sorghum following the use of this product under abnormally high soil moisture conditions during early development of the crop.

Restrictions - Sorghum Applications

- **DO NOT** apply atrazine and propazine products in the same sorghum acre.
- The combined amount of this product resulting from all applications to sorghum must not exceed a total of 2.58 quarts (2 lb ai atrazine and 1.5 lb ai S-metolachlor) per acre per year.
- When tank mixing or sequentially applying atrazine or products containing atrazine, **DO NOT** exceed a single application rate of 2.0 pounds active ingredient of atrazine (2.58 quarts of this product) per acre.
- When tank mixing or sequentially applying atrazine or products containing atrazine, the total pounds of atrazine applied (lb ai) must not exceed 2.5 pounds per acre per year.
- If other products containing S-metolachlor have been applied, the combined total amount of S-metolachlor resulting from all applications must not exceed 1.7 pound per acre per year.
- **DO NOT** graze or feed sorghum forage for 60 days following preemergence use of this product.
- **Preharvest Interval (PHI): DO NOT** harvest grain sorghum from treated areas for 75 days following application.

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 AX ATZ S-MET as a split treatment 30 to 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 quarts (1.6 lb ai atrazine and 1.3 lb ai S-metolachlor) per acre of AX ATZ S-MET not more than 2 weeks prior to planting. The above procedure may be followed if atrazine, metolachlor, S-metolachlor or simazine is used in tank mixtures with AX ATZ S-MET. Tank mixtures with isoxaflutole 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, glyphosate or paraquat). 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 per acre of atrazine as a pre or post application or 2.5 lb ai per acre 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. 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.

AX ATZ S-MET 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 to 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., glyphosate or paraquat) may be required before planting the crop.

AX ATZ S-MET 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 AX ATZ S-MET at 1.6 to 1.9 quarts (1.2 to 1.5 lb atrazine and 1.0 to 1.1 lb ai S-metolachlor) per acre may be made 30 to 45 days before planting. Grass suppression of 2 to 3 weeks after planting can be expected as a result of this application. A follow-up application of metolachlor or s-metolachlor may be needed in fields with a history of heavy grass pressure. Apply after planting, but before corn and grass weeds emerge.

Read and follow all restrictions in the **Restrictions – All AX ATZ S-MET Corn Applications** section above.

Precaution

- Avoid soil incorporation or disturbing the soil after application of this product and before planting. Moving treated soil out of the row or moving untreated soil to the surface during planting will result in diminished weed control.

Table 1: AX ATZ S-MET – Early Preplant – Corn

Soil Texture	Single Application (Quarts per Acre)	Split Application* (Quarts per Acre)	
		30-45 DBP**	At Planting
COARSE Sand, loamy sand, sandy loam	2.1 (1.6 lb atrazine and 1.3 lb S-metolachlor)	DO NOT APPLY	
MEDIUM Loam, silt loam, silt	A. 2.1 (1.6 lb atrazine and 1.3 lb S-metolachlor)	1.4 (1.1 lb atrazine and 0.8 lb S-metolachlor)	0.7 (0.5 lb atrazine and 0.4 lb S-metolachlor)
	B. 2.1-2.58 (1.6 to 2.0 lb atrazine and 1.3 to 1.5 lb S-metolachlor)	1.4 - 1.75 (1.1 to 1.4 lb atrazine and 0.8 to 1.1 lb S-metolachlor)	0.7 - 0.9 (0.5 to 0.7 lb atrazine and 0.4 to 0.5 lb S-metolachlor)
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	A. 2.1 (1.6 lb atrazine and 1.3 lb S-metolachlor)	1.4 (1.1 lb atrazine and 0.8 lb S-metolachlor)	0.7 (0.5 lb atrazine and 0.4 lb S-metolachlor)
	B. 2.58 (2.0 lb atrazine and 1.5 lb S-metolachlor)	1.75 (1.4 lb atrazine and 1.1 lb S-metolachlor)	0.9 (0.7 lb atrazine and 0.5 lb S-metolachlor)
*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.			

Early Preplant (Sorghum-Seed Treated with a seed safener that provides tolerance to S-metolachlor): For minimum-tillage and no-tillage systems only, AX ATZ S-MET 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 to 45 days before planting with 2/3 the specified 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, glyphosate or glyphosate + 2,4-D, paraquat). Observe directions for use, precautions, and restrictions on the label of the contact herbicide. Under dry conditions, irrigation after application is recommended to move AX ATZ S-MET into the soil.

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 AX ATZ S-MET at 1.6 to 1.9 quarts per acre may be made 30 to 45 days before planting. Grass suppression of 2 to 3 weeks after planting can be expected as a result of this application. A follow-up application of a metolachlor/S-metolachlor product may be needed in fields with a history of heavy grass pressure. Apply after planting, but before sorghum and grass weeds emerge.

Precaution

- Avoid soil incorporation or disturbing the soil after application and before planting. Moving treated soil out of the row or moving untreated soil to the surface during planting will result in diminished weed control.

Restrictions

- **DO NOT** use on soils with a pH greater than 8.0 if grain sorghum is to be planted.
- **DO NOT** use on coarse soils.
- **DO NOT** use on medium soils with less than 1.0% organic matter.
- If a follow-up application of a metolachlor/S-metolachlor is needed, **DO NOT** exceed a total of 1.4 lbs. of S-metolachlor a.i. per acre, including the early preplant AX ATZ S-MET application on medium-textured soils.

Table 2: AX ATZ S-MET - Early Preplant - Grain or Forage Sorghum (Seed treated with a seed safener that provides tolerance to S-metolachlor)

Soil Texture	Organic Matter Content	Single Application (Quarts per Acre)	Split Application* (Quarts per Acre)	
			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 (1.6 lb ai atrazine and 1.3 lb S-metolachlor)	1.4 (1.1 lb ai atrazine and 0.8 lb S-metolachlor)	0.7 (0.5 lb ai atrazine and 0.4 lb S-metolachlor)
	B. less than 1.0%	DO NOT USE	DO NOT USE	
	more than 1.0%	2.1 to 2.33 (1.6 to 1.8 lb ai atrazine and 1.3 to 1.4 lb S-metolachlor)	1.4 to 1.6 (1.1 to 1.2 lb ai atrazine and 0.8 to 1.0 lb S-metolachlor)	0.7 to 0.8 (0.5 to 0.6 lb ai atrazine and 0.4 to 0.5 lb S-metolachlor)
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	A. more than 1.0%	2.1 (1.6 lb ai atrazine and 1.3 lb S-metolachlor)	1.4 (1.1 lb ai atrazine and 0.8 lb S-metolachlor)	0.7 (0.5 lb ai atrazine and 0.4 lb S-metolachlor)
	B. 1.0%-1.5%	2.1 to 2.33 (1.6 to 1.8 lb ai atrazine and 1.3 to 1.4 lb S-metolachlor)	1.4 to 1.6 (1.1 to 1.2 lb ai atrazine and 0.8 to 1.0 lb S-metolachlor)	0.7 to 0.8 (0.5 to 0.6 lb ai atrazine and 0.4 to 0.5 lb S-metolachlor)
	more than 1.5%	2.33 to 2.58 (1.8 to 2.0 lb ai atrazine and 1.4 to 1.5 lb S-metolachlor)	1.6 to 1.75 (1.2 to 1.4 lb ai atrazine and 1.0 to 1.1 lb S-metolachlor)	0.8 to 0.9 (0.6 to 0.7 lb ai atrazine and 0.54 to lb S-metolachlor)
<p>*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.</p>				

Preplant Surface, Preplant Incorporated, or Preemergence (Corn or Sorghum - Seed Treated with a seed safener that provides tolerance to S-metolachlor): Apply AX ATZ S-MET 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: AX ATZ S-MET - Preplant Surface, Preplant Incorporated, or Preemergence – Corn

Soil Texture	Broadcast Rate (Quarts per Acre)	
	Less Than 3% Organic Matter	3% Organic Matter or Greater
COARSE San, loamy sand, sandy loam	1.3 (1.0 lb ai atrazine and 0.8lb S-metolachlor)	1.6 (1.2 lb ai atrazine and 1.0 lb S-metolachlor)
MEDIUM Loam, silt loam, silt	1.6 (1.2 lb ai atrazine and 1.0 lb S-metolachlor)	2.1 (1.6 lb ai atrazine and 1.3 lb S-metolachlor)
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1 (1.6 lb ai atrazine and 1.3 lb S-metolachlor)	A. 2.1 (1.6 lb ai atrazine and 1.3 lb S-metolachlor)
		B. 2.1-2.58* (1.6 to 2.0 lb ai atrazine and 1.3 to 1.5 lb S-metolachlor)
*For cocklebur, yellow nutsedge, and velvetleaf control on fine-textured soils above 3% organic matter: Apply 2.58 quarts (2.0 lb ai atrazine and 1.5 lb ai S-metolachlor) of AX ATZ S-MET 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.		

Precaution:

- In the event of escape of annual weeds following an early preplant, preplant surface, preplant incorporated, or preemergence treatment of this product applied alone or in combination, follow with a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide. 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.
- 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 **AX ATZ S-MET Tank Mixtures** section of this label.

Read and follow all restrictions in the Restrictions for **AX ATZ S-MET Corn Applications** section above.

Table 4: AX ATZ S-MET - Preplant Surface, Preplant Incorporated, or Preemergence – Grain or Forage Sorghum* (Seed treated with a seed safener that provides tolerance to S-metolachlor)

Soil Texture	Organic Matter	Broadcast Rate (Quarts 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 to 2.1

	(1.2 to 1.6 lb ai atrazine and 1.0 to 1.3 lb S-metolachlor)
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Read and follow all sorghum related precautions and restrictions in the **Corn and Sorghum Use Precautions and Restrictions** section above.

A fluid fertilizer may be substituted 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 AX ATZ S-MET Combinations section of this label.

Precautions

- Avoid applying this product on highly alkaline soils (pH greater than 8.0) or on eroded areas where calcareous subsoils are exposed, or crop injury may result.
- Avoid applying this product when sorghum is planted in deep furrows because heavy rains following application can cause excessive concentrations of herbicide in the furrow.
- Avoid applying to sorghum grown under dry mulch tillage or crop injury may result.
- Injury may occur if both this product applied early preplant, preplant surface, preplant incorporated, or preemergence and an at-planting systemic insecticide applied in-furrow are used.
- Sorghum growing under stress caused by minor element deficiency may be injured by this product.

Restrictions

- **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.

Postemergence Broadcast - Corn

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

Application: Apply early postemergence, using the appropriate rate from Table 5. Apply this treatment before grass and broad leaf weeds pass the 2-leaf stage and before corn exceeds 12 inches in height. Occasional corn leaf burn may result, but this should not affect later growth or yield.

Precautions:

- Application to weeds larger than the 2-leaf stage will likely result in unsatisfactory control.
- Avoid applying postemergence in fluid fertilizer, or severe crop injury may occur.
- Do not apply postemergence in fluid fertilizer, or severe crop injury may occur.

Table 5: AX ATZ S-MET Postemergence Broadcast – Corn

Soil Texture	Broadcast Rate (Quarts per Acre)
COARSE	1.6
Sand, loamy sand, sandy loam	(1.2 lb ai atrazine and 1.0 lb S-metolachlor)
MEDIUM	2.1

Loam, silt loam, silt	(1.6 lb ai atrazine and 1.3 lb S-metolachlor)
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1-2.58* (1.6 to 2.0 lb ai atrazine and 1.3 to 1.5 lb S-metolachlor)
* For better residual control of cocklebur, velvetleaf, and yellow nutsedge on fine-textured soils above 3% organic matter, apply 2.58 quarts (2.0 lb ai atrazine and 1.5 lb ai S-metolachlor) of AX ATZ S-MET per acre.	

Read and follow all corn related precautions and restrictions in the **Corn and Sorghum Use Precautions and Restrictions** section above.

Postemergence-Directed - Corn

AX ATZ S-MET may be applied at 1.3 to 2.58 quarts (1.0 to 2.0 lb ai atrazine and 0.8 to 1.5 lb ai S-metolachlor) per acre in a minimum of 15 gallons 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 AX ATZ S-MET 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 application of this product, 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.

Read and follow all corn related precautions and restrictions in the **Corn and Sorghum Use Precautions and Restrictions** section above.

Precautions

- Application to weeds larger than the 2-leaf stage will likely result in unsatisfactory control.
- Avoid postemergence application in fluid fertilizer, or severe crop injury may result.
- Do not apply postemergence in fluid fertilizer, or severe crop injury may occur.

Table 6: Postemergence-Directed – Corn

Soil Texture	Broadcast Rate (Quarts per Acre)
COARSE Sand, loamy sand, sandy loam	1.3 (1.0 lb ai atrazine and 0.8lb S-metolachlor)
MEDIUM Loam, silt loam, silt	2.1 (1.6 lb ai atrazine and 1.3 lb S-metolachlor)
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1-2.58* (1.6 to 2.0 lb ai atrazine and 1.3 to 1.5 lb S-metolachlor)
* For better residual control of cocklebur, velvetleaf, and yellow nutsedge on fine-textured soils above 3% organic matter, apply 2.58 quarts (2.0 lb ai atrazine and 1.5 lb ai S-metolachlor) of AX ATZ S-MET per acre.	

Read and follow all corn related precautions and restrictions in the **Corn and Sorghum Use Precautions and Restrictions** section above.

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 to 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 gallons 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 to 40 psi at the nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension. Use a minimum of 5.0 gals. of spray mixture per acre. Maximum recommended sprayer speed is 15 mph. Maintain uniform travel speed while spraying. Rinse sprayer thoroughly with clean water immediately after each use.

Use appropriate nozzles to reduce drift and increase application accuracy. Use nozzle screens when directed by the manufacturer. Place all nozzles on 20-inch centers, except flooding types. Place flooding type nozzles on 40-inch centers. When Flat Fan-type nozzles are used, angles of 80° or 110°. Always read and follow the manufacturer's directions for optimum setup and performance of their nozzles or tips.

Aerial Application (For AX ATZ S-MET 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 gallons per acre 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 feet, 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 AX ATZ S-MET by aircraft at a minimum upwind distance of 400 feet from sensitive plants.

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

MIXING PROCEDURES

Shake 2.5 gallons jugs well or thoroughly recirculate larger containers and bulk tanks before using. AX ATZ S-MET is a liquid that may be mixed with water or fluid fertilizer and applied as a spray. AX ATZ S-MET 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 AX ATZ S-MET and used to control weeds in corn or sorghum treated with a seed safener that provides tolerance to S-metolachlor.

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

Restrictions

- Impregnation of bulk fertilizer is restricted to commercial facilities. On-farm fertilizer impregnation is prohibited.
- No more than 340 tons of dry bulk fertilizer can be impregnated per worker per day for no more than 30 days per calendar year for use on corn and sorghum.
- 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 AX ATZ S-MET 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 AX ATZ S-MET to be used by the following:

$$\frac{\text{Tons of fertilizer}}{\text{Acre}} \times \text{Quarts of AX ATZ S-MET per acre} = \text{Quarts of AX ATZ-SMET per ton of fertilizer}$$

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 AX ATZ S-MET with Exxon Aromatic 200 at a rate of 2.0 to 2.5 pints per gallon of AX ATZ S-MET. Aromatic 200 is a noncombustible/nonflammable petroleum product. Aromatic 200 may be used in either a fertilizer blender or through direct injection systems. Drying agents should not be used when using Aromatic 200.

Precautions

- Use mixtures of this product and Aromatic 200 on dry fertilizer only. Poor results or crop injury may result if these mixtures are used in water or liquid fertilizer solutions for spraying applications.
- When impregnating this product in a blender before application, a drier mixture can be attained by substituting a drying agent for Aromatic 200. The use of Agsorb FG or another drying agent of 6/30 particle size is recommended.
- Drying agents are not recommended for use with On-The-Go impregnation equipment.
- To avoid potential for explosion
 - **DO NOT** impregnate this product on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers.
 - **DO NOT** combine this product with a single superphosphate (0-20-0) or treble superphosphate (0-46-0).
 - **DO NOT** use this product on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

Application

Apply 200 to 700 pounds 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

- To help avoid rotational crop injury, make applications as early as possible, since this product impregnated onto dry bulk granular fertilizers can be expected to last longer in the soil than when this product is applied as a spray in water or fluid fertilizer.
- Avoid use of the herbicide/fertilizer mixture on crops where planting beds are to be formed, or crop injury may occur.

Application in Water or Fluid Fertilizers

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

Tank Mixtures

This product maybe tank mixed with herbicides provided the specific product tank mixed is registered for use on the sites listed on this label. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

For each mixture, check compatibility as described below before mixing in spray tank. When adding ingredients to the mixture, allow time for each ingredient to be thoroughly mixed before adding the next. Be sure to agitate during mixing and application to maintain a uniform suspension.

1. Fill the spray tank 1/2 to 3/4 full with water or fluid fertilizer and start agitation
2. Add the proper amount of this product.
3. Add atrazine, dicamba, linuron or simazine.
4. Add metolachlor/S-metolachlor
5. Add burndown herbicide (e.g. paraquat or glyphosate) depending on the tank mix combination desired
6. Add the rest of the water or fluid fertilizer.

Only water may be used with AX ATZ S-MET + glufosinate when applied postemergence to corn designated as glufosinate-resistant and with glyphosate when applied postemergence to corn designated as glyphosate-resistant.

Compatibility

A jar test is recommended before tank mixing to ensure compatibility of AX ATZ S-MET with other pesticides. The following test assumes a spray volume of 25 gallons per acre. 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 pint of carrier (fertilizer or water) to each of 2 one quart 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 teaspoon or 1.2 milliliters of a compatibility agent approved for this use, such as Envelop (1/4 teaspoon is equivalent to 2.0 pints per 100 gallons spray). Shake or stir gently to mix.
3. To both jars, add the appropriate amount of pesticide(s) in their relative proportions based on specified 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 to 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.

CORN USE DIRECTIONS AX ATZ S-MET TANK MIXTURES

Read and follow all corn related precautions and restrictions in the **Corn and Sorghum Use Precautions and Restrictions** section of this label. Additionally, always follow label instructions for tank mix product when mixing with this product. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

When tank mixing AX ATZ S-MET with atrazine formulations, refer to the AX ATZ S-MET **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 Atrazine, Metolachlor/S-metolachlor or Simazine

Atrazine: Add the labeled rate of atrazine to the rate of AX ATZ S-MET referenced 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 broad leaf weeds, and in all areas where heavy infestations of cocklebur, morningglory, velvetleaf, or other broadleaf weeds claimed are expected.

Metolachlor/S-metolachlor: Add the labeled rate of Metolachlor/S-metolachlor to rate of AX ATZ S-MET referenced in Table 3 when heavy infestations of yellow nutsedge, sand bur, or seedling johnsongrass are expected.

Simazine: Add the labeled rate of simazine to the rate AX ATZ S-MET referenced in Table 3 where heavy infestations of crabgrass or fall panicum are expected or additional control of certain broadleaves is desired.

Isoxaflutole - Field Corn Only: The tank mixture of this product plus Isoxaflutole provides control of weeds listed on this product's label, certain weed biotypes resistant to ALS-inhibitor herbicides and to triazine herbicides, Velvetleaf, and others on the respective product labels. Isoxaflutole will contribute to the control of problem grass and other broadleaf species on its label.

Application may be pre-plant (surface applied up to 14 days before to planting), pre-plant incorporated or preemergence in conventional tillage, conservation tillage, and no-till systems. **Refer to Table 1: This Product - Early Pre-Plant Application** for the early pre-plant application rate (8 to 14 days before planting) or refer to Table 3 for the appropriate rate for pre-plant (surface applied 0 to 7 days before planting), pre-plant incorporated or pre-emergence application.

Where difficult species and/or severe weed populations are expected, use the maximum rates of this product and Isoxaflutole where rate ranges are listed for this tank mixture.

Tank Mixture of AX ATZ S-MET Alone or AX ATX-SMET + Atrazine, Isoxaflutole, Metolachlor/S-metolachlor or Simazine with Glyphosate or Paraquat

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

In minimum-tillage or no-tillage systems where corn is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, tank mix the contact herbicides glyphosate or paraquat with AX ATX-SMET alone or with AX ATX-SMET + atrazine, isoxaflutole, metolachlor/S-metolachlor or simazine. When used as directed the paraquat portion of the tank mixture controls most emerged annual weeds and suppresses many perennial weeds. Glyphosate will control emerged annual and perennial weeds when applied as directed on its label. The AX ATX-SMET portion of the tank mixture provides preemergence control of the weeds listed on this label in the **AX ATX-SMET Alone** section for corn. The addition of atrazine, metolachlor/S-metolachlor or simazine offers the advantage indicated above.

Application: Apply before, during, or after planting, but before corn emerges, at the appropriate rate in Table 7. The labeled rate of atrazine, isoxaflutole, metolachlor/S-metolachlor or simazine may be added to the rate of **AX ATX-SMET** recommended in Table 7. Add glyphosate or paraquat at labeled rates. Tank mixes with Isoxaflutole must only be used on field corn.

Apply in 20 to 60 gallons of water per acre with conventional spray equipment.

Tank Mixture of AX ATZ S-MET Alone or AX ATZ S-MET + Atrazine or Isoxaflutole with 2,4-D or 2,4-D + Dicamba

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

Application: Apply AX ATZ S-MET before, during, or after planting, but before corn emerges, at the appropriate rate in Table 7. The labeled rate of atrazine with labeled rate of isoxaflutole may be added to the rate of AX ATZ S-MET 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 gallons 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 a non-ionic surfactant (NIS) at 1.0 to 2.0 quarts per 100 gallons of diluted spray, or another surfactant cleared for use on growing crops at its specified rate. Apply before weeds exceed 3 inches in height. If alfalfa is present, add dicamba to the spray mixture at the labeled rate and apply before alfalfa exceeds 6 inches in height.

For fields with existing sod grasses (e.g., brome grass, orchardgrass, rye, or timothy), when existing weeds exceed 3 inches in height or when very dry conditions exist, add paraquat at the labeled rate in place of, or in addition to, 2,4-D as indicated above. **DO NOT** apply paraquat in suspension-type liquid fertilizer. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Table 7: AX ATZ S-MET for Minimum-Tillage or No-Tillage Corn

Soil Texture	Broadcast Rate (Quarts per Acre)
COARSE	1.6
Sand, loamy sand sandy loam	(1.2 lb ai atrazine and 1.0 lb S-metolachlor)
MEDIUM	2.1
Loam, silt loam, silt	(1.6 lb ai atrazine and 1.3 lb S-metolachlor)
FINE	A. 2.1

Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	(1.6 lb ai atrazine and 1.3 lb S-metolachlor)
	B. 2.1-2.58* (1.6 to 2.0 lb ai atrazine and 1.3 to 1.5 lb S-metolachlor)
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 quarts (2.0 lb ai atrazine and 1.5 lb ai S-metolachlor). of AX ATZ S-MET 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 all application of 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 AX ATZ S-MET 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.

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

Precautions

- Use of fluid fertilizer with these mixtures may result in corn injury.
- In-row weed control may be reduced because of lack of coverage when applied to corn over 4 inches tall.

- A. **AX ATZ S-MET + Glufosinate - Postemergence Use in Glufosinate-Tolerant Corn** - Tank mixture of AX ATZ S-MET + glufosinate can be applied postemergence to weeds and corn from seed tolerant to glufosinate. Glufosinate provides postemergence control of a broad spectrum of grass and broadleaf weeds and this product provides residual control of grasses and broadleaf weeds listed in the label section of **AX ATZ S-MET Applied Alone – Weeds Controlled**. For the proper rate of this product applied postemergence with glufosinate, refer to Table 3 and use the minimum rate per soil texture for season-long residual control. Refer to the glufosinate 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 glufosinate rate labeled to control the species and growth stages present.
- B. **AX ATZ S-MET + Glyphosate for Postemergence Application to Glyphosate-Resistant Corn** - The tank mixture of AX ATZ S-MET + glyphosate can be applied postemergence to weeds and to corn designated as glyphosate-tolerant. Application may be applied postemergence to glyphosate-resistant corn up to 12 inches in height. This mixture will provide postemergence control of weed species on the glyphosate label, and also residual control of weed species on the AX ATZ S-MET label. Use the minimum rate of this product postemergence with glyphosate in glyphosate-resistant 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 glyphosate for control of labeled broadleaf and grass weeds. Refer to the glyphosate label for directions to control problem species.
- C. **AX ATZ S-MET + Prosulfuron + Primisulfuron-methyl** - Apply 1.33 to 1.75 quarts (1.03 to 1.36 lb ai atrazine and 0.80 to 1.05 lb ai S-metolachlor) per acre of AX ATZ S-MET + labeled rate of prosulfuron + primisulfuron-methyl to corn that is 4 to 12 inches tall. The application may be broadcast, semi-directed, or directed. The rate of this product is based on soil texture with 1.33 quart (1.03 lb ai atrazine and 0.80 lb ai S-metolachlor) per acre on coarse and 1.75 quarts (1.36 lb ai atrazine and 1.05 lb ai S-metolachlor) per acre 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 nicosulfuron.

Precautions

- Avoid using fertilizer or crop oil concentrate with these mixtures or injury to field corn may occur.
- The combination of this product with other products for postemergence weed control in corn is not advised. 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. [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. AX ATZ S-MET
3. Additives

Precautions

- When this product is applied after June 10, crop injury may occur the following year if you rotate to crops other than corn or sorghum.
- In-row weed control may be reduced because of lack of coverage when applied to corn over 4 inches tall

SORGHUM USE DIRECTIONS AX ATZ S-MET TANK MIXTURES

AX ATZ S-MET may be applied to grain or forage sorghum in the tank mixtures described in this section provided the sorghum seed was treated with a seed safener that provided tolerance to S-metolachlor. Read and follow all sorghum related precautions and restrictions in the **Corn and Sorghum Use Precautions and Restrictions** section of this label. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank Mixture of AX ATZ S-MET with Glyphosate or Paraquat 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 glyphosate or paraquat may be tank mixed with AX ATZ S-MET. When used as directed, the paraquat portion of the tank mixture controls most emerged annual weeds and suppresses many perennial weeds. Glyphosate combinations will control emerged annual and perennial weeds when applied as directed on its label. The AX ATZ S-MET portion of the tank mixture provides preemergence control of the weeds listed on this label in the AX ATZ S-MET Applied Alone section

Application: Apply before, during, or after planting, but before grain sorghum emerges at the appropriate rate in Table 8. Add glyphosate or paraquat at labeled rates

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

Table 8: AX ATZ S-MET for Minimum-Tillage or No-Tillage Grain Sorghum* (Seed treated with a seed safener that provided tolerance to S-metolachlor)

Soil Texture	Organic Matter	Broadcast Rate (Quarts 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
	1.0 - 1.5%	1.6 (1.2 lb ai atrazine and 1.0 lb S-metolachlor)
	More than 1.5%	1.8 - 2.1 (1.4 to 21.6 lb ai atrazine and 1.1 to 1.3 lb S-metolachlor)

Precautions

- Avoid applying this product on highly alkaline soils (pH greater than 8.0) or on eroded areas where calcareous subsoils are exposed or crop injury may result.
- Avoid applying this product when sorghum is planted in deep furrows because heavy rains following application can cause excessive concentrations of herbicide in the furrow.
- Avoid applying to sorghum grown under dry mulch tillage or crop injury may result.
- Injury may occur if both this product applied early preplant, preplant surface, preplant incorporated, or preemergence and an at-planting systemic insecticide applied in-furrow are used.
- Sorghum growing under stress caused by minor element deficiency may be injured by this product.

Restrictions

- **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.
- Postemergence applications to sorghum must be made before the crop reaches 12 inches height.

Rotational Crops: Follow the crop rotation instructions in the **AX ATZ S-MET Alone** section.

<p>STORAGE AND DISPOSAL</p> <p>DO NOT contaminate water, food, or feed by storage, disposal, or cleaning of equipment</p> <p>Pesticide Storage: Store in a dry and cool place. DO NOT irradiate directly with sunlight</p> <p>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.</p> <p>Container Handling</p> <p>NONREFILLABLE CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS): DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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 or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.</p> <p>NONREFILLABLE CONTAINER (GREATER THAN 5 GALLONS): 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</p>
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into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows (all sizes): Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration, or by other procedures allowed by state and local authorities.

REFILLABLE CONTAINER: Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. After triple rinsing is complete, and the container is not suitable for refilling or reconditioning, offer the container 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.

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 CHEMTREC 1-800-424-9300, 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.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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