



U.S. ENVIRONMENTAL PROTECTION AGENCY

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

EPA Reg. Number:

45002-50

Date of Issuance:

6/29/22

NOTICE OF PESTICIDE:

Registration
 Reregistration
(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

SULFENTRAZONE MTZ

Name and Address of Registrant (include ZIP Code):

Albaugh LLC
1525 NE 36th Street
Ankeny, IA 50021

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

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

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

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Continues page 2

Signature of Approving Official:

Emily Schmid, Product Manager 25
Herbicide Branch, Registration Division (7505P)

Date:

6/29/22

2. You are required to comply with the data requirements described in the generic data call-in (GDCI) or endocrine disruptor screening program (EDSP) order identified below:
 - a. Metribuzin GDCI-101101-1304 and GDCI-101101-1825
 - b. Metribuzin EDSP-0057184

You must comply with all of the data requirements within the established deadlines. If you have questions about the GDCI and EDSP Order listed above, you may contact the Chemical Review Manager in the Pesticide Re-Evaluation Division:

<http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1>

3. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. You have 18 months from the date of registration to provide these data.
4. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, “EPA Reg. No. 45002-50.”
5. Submit one copy of the final printed label for the record before you release the product for shipment.

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

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The record for this product currently contains the following CSF(s):

- Basic CSF dated 8/11/2021

If you have any questions, please contact Sarah Meadows at 202-566-2828 or at meadows.sarah@epa.gov.

Enclosure

ACCEPTED

6/29/2022

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 45002-50

METRIBUZIN	GROUP	5	HERBICIDE
SULFENTRAZONE	GROUP	14	HERBICIDE

SULFENTRAZONE MTZ

A suspension Concentrate for use on Asparagus, Field Corn (grain, seed corn, forage, and silage), Potato, Soybeans, Sugarcane, and Tomato (transplants only); and other listed crops

ACTIVE INGREDIENT:	% BY WT.
Metribuzin:.....	27.0%
Sulfentrazone:.....	18.0%
OTHER INGREDIENTS:.....	55.0%
TOTAL:.....	100.0%

Contains 2.48 lbs Metribuzin and 1.66 lbs Sulfentrazone per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCION

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

FIRST AID	
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 a poison control center or doctor. • Do not give anything 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 to 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 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency medical treatment information, call CHEMTREC 800-424-9300	
HOTLINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 800-222-1222 for emergency medical treatment information.	

EPA Reg. No. 45002 - _ _ _ _

EPA Est. No. _____

NET CONTENTS: _____ Gallons

MANUFACTURED BY:
Albaugh, LLC
1525 NE 36th Street
Ankeny, IA 50021

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

1. Long-sleeved shirt and long pants
2. Chemical-resistant gloves
3. Protective eyewear
4. Shoes plus socks

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

ENGINEERING CONTROLS STATEMENTS

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

USER SAFETY RECOMMENDATIONS

Users should:

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

ENVIRONMENTAL HAZARDS

This pesticide is toxic to marine/estuarine invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to terrestrial and aquatic plants in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate.

GROUNDWATER ADVISORY: This product contains metribuzin, a chemical which can travel (seep or leach) through soil and can contaminate groundwater which may be used as drinking water. Metribuzin has been found in groundwater as a result of agricultural use. Users are advised not to apply metribuzin where the water table (groundwater) is close to the surface, and where the soils are very permeable, i.e., well drained soils such as loamy sands. Contact your local agricultural agencies for further information on the type of soil in your area and the location of groundwater.

DO NOT use this product on sandy soil types that have <1% organic matter.

SURFACE WATER ADVISORY: This product contains sulfentrazone, which can contaminate surface water through spray drift. Under some conditions, sulfentrazone may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several to many months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlying tile drainage systems that drain to surface waters.

PHYSICAL OR CHEMICAL HAZARDS

Do not mix with oxidizing agents or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

DIRECTIONS FOR USE

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

Read entire label before using this product. This label must be in the possession of the user at the time of pesticide application.

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 12 hours.

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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

- Coveralls
- Waterproof gloves
- Shoes plus socks

PRODUCT INFORMATION

SULFENTRAZONE MTZ is a broad-spectrum herbicide for selective pre-emergence or pre-plant incorporated weed control in asparagus, field corn (grain, seed corn, forage and silage), potato, soybeans, sugarcane and transplanted tomatoes. When applications are made according to the instructions on this label, this product will control listed broadleaf and sedge weeds, and provide suppression of grass weeds listed.

SULFENTRAZONE MTZ mode of action involves product uptake by weed roots and shoots. Applications of this product made as pre-emergence and pre-plant incorporated require rainfall or irrigation to activate the herbicide. The amount of water necessary to activate the product after application is dependent upon soil organic matter content, moisture and texture. Generally, a minimum of 0.5 to 1.0 inch of rainfall or irrigation water within 7 to 10 days of application is sufficient for activation. Shallow field cultivation may be necessary if minimum moisture threshold is not obtained.

SULFENTRAZONE MTZ will provide control or suppression of labeled germinating weeds if there is sufficient moisture to move the product into the soil to target root zones.

Soil Types:

Fine: clay, clay loam, silty clay, silty clay loam

Medium: silt, silty loam, loam, sandy clay, sandy clay loam

Coarse: sandy loam, loamy sand, sand

USE RESTRICTIONS

- Do not mix or load this product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This restriction does

not apply to plugged abandoned well or wells that are properly capped and does not apply to impervious pads or mixing/loading areas that are properly diked.

- Mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well is strictly prohibited unless on an impervious pad constructed to withstand the weight of the heaviest load that could be on or moved across the pad. The pad must be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rainwater that may fall on the pad. Surface water must not be allowed to flow over or from the pad. To facilitate material removal, the pad must be sloped. A pad that is not under cover must have capacity to hold a minimum of 110% of the capacity of the largest pesticide product container or application equipment that will be on the pad. Covered pads that are completely protected from precipitation must have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment that will be on the pad. The containment capacities must be specified and maintained at all times. Minimum specific containment capacities do not apply to vehicles that deliver pesticides to the mixing/loading site. There may be additional state requirements regarding containment and well setback restrictions. Consult local authorities for additional information.
- This product must be used in a manner that will prevent back siphoning into wells and prevent spills.

ROTATIONAL CROP RESTRICTIONS:

CROP	INTERVAL (Months)
Corn (Field ¹), Soybeans, Sugarcane, Tomatoes (Transplanted only)	Anytime
Barley, Wheat	4
Rice	10
Alfalfa, Asparagus, Beans (Dry), Cotton ^{3,4} , Peanuts, Potatoes, Sunflower, Tobacco	12
Sorghum ⁵	18
Corn (Sweet ⁴), Any crop not listed ⁴	18
Canola ⁴ , Sugar beets ^{2,4}	24

1. Field corn (includes corn grown for grain, silage, popcorn, seed corn).
2. A rotation interval of 24 months is allowed with a successful bioassay.
3. Cotton may be planted after 12 months where SULFENTRAZONE MTZ was applied at rates of 5 fl. oz./acre or less and meets the following conditions:
 - pH <7.2
 - Medium and fine soils
 - Rainfall or irrigation must exceed 15" following application of SULFENTRAZONE MTZ to rotate to cotton.
4. Crops with rotational intervals that are greater than 12 months after a SULFENTRAZONE MTZ application are the result of crop injury concerns. These crops should only be planted following a successful bioassay.
5. Sorghum may be planted after 12 months where SULFENTRAZONE MTZ was applied at rates 20 fl. oz./acre or less in the previous cropping season.

RESISTANCE MANAGEMENT

METRIBUZIN	GROUP	5	HERBICIDE
SULFENTRAZONE	GROUP	14	HERBICIDE

This product contains the active ingredients sulfentrazone, a Group 14; and metribuzin a Group 5 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 14 and 5 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed. To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of this product or other Group 14 and 5 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures from a different group if such use is permitted; where information on resistance in target weeds species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.

- Fields should be scouted prior to application to identify the weed species present and their growth stage to determine if the intended application will be effective. Fields should be scouted after application to verify that the treatment was effective.
- 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.

Suspected herbicide-resistant weeds may be identified by these indicators:

- 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; and
 - 3) Surviving plants mixed with controlled individuals of the same species.
- 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.

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

APPLICATION INSTRUCTIONS

Do not apply this product with low-pressure, high-volume hand-wand equipment.

Use a standard low pressure (20 to 40 psi.) herbicide boom sprayer equipped with suitable nozzles and screens no finer than 50-mesh in nozzle and in-line strainers. Agitate thoroughly before and during application with bypass agitation.

Ground Application: Apply the proper rate of this product in a minimum of 10 to 40 gallons of spray mixture per acre broadcast.

Banded Application: Use proportionally less SULFENTRAZONE MTZ per acre in a band versus a broadcast application. For band application use 1/4 to 1 gallon of spray mix per inch of band width regardless of row spacing.

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

$$\frac{\text{Band width in inches}}{\text{Row spacing in inches}} \times \text{Broadcast rate per acre} = \text{Amount needed per acre of field}$$

Aerial Application: Where permitted, apply specified rate in a minimum of 2 to 10 gallons of spray mixture per acre.

MIXING INSTRUCTIONS

Clean spray equipment and remove any remaining pesticide deposits before making applications with this product. Follow the spray tank cleanout procedures specified on the label of product previously applied before adding This product to the spray tank.

This product applied alone:

- Select the application rate from the appropriate Crop Specific Use Instructions table
- Fill the spray tank with 1/2 the volume of water required for the treatment area.
- While agitating, open the bottle and add the specified amount of this product for area being treated, measuring directly into the spray tank.
- When mixing this product in a spray tank with anything other than clean water (fertilizer, previous herbicide mixtures, etc.), create a slurry of this product with clean water in a separate container before adding to the spray tank.
- Add the slurry to the spray tank. Rinse the slurry container and add the rinsate to the spray tank. Fill the spray tank to the desired level.
- Allow product to fully disperse, then add the remaining spray water.
- Maintain agitation during filling, mixing and application.
- Apply the spray mixture immediately after mixing.

Tank Mix Combinations with this product:

- Select the application rate for this product from the appropriate crop section.
- It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
- Conduct a jar test to ensure compatibility before mixing large volumes.

If a jar test indicates the mixture is compatible, prepare the tank mixture as follows:

- Fill the spray tank with approximately 1/2 the volume of water required for the treatment area.
- While agitating, open the bottle and add the specified amount of SULFENTRAZONE MTZ for area being treated, measuring directly into the spray tank.
- Allow product to fully disperse.
- Add the specified amount(s) of additional tank mix product(s) in the following order, allowing complete mixing and dispersing after each addition:
 - dry formulations (e.g., wettable powders, dry flowables)
 - liquid suspensions (e.g., flowables)
 - liquids (e.g., EC's), followed by remaining adjuvants and/or carrier
- Add water as necessary.
- Maintain agitation during filling, mixing and application.
- Apply spray mixture immediately after mixing.
- Do not store the spray tank overnight or for any extended period for time with spray mixture remaining in the tank.

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

MANDATORY SPRAY DRIFT DIRECTIONS

AERIAL APPLICATIONS:

- **DO NOT** release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Aerial application is allowed only when the field is too wet to safely apply pesticides using ground equipment.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a coarse or coarser droplet size (ASABE S572.1)
- 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.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- When wind speeds are 5 – 10 mph maintain a minimum downwind buffer zone of at least 1/2 mile from all crops and desirable vegetation, except the following:
 - 150 feet from dormant tree fruit/nut/vine crops and overwintering sugar beets.
 - 650 feet from garlic, jojoba, legumes, onions, pastures, small grains, seedling sugar beets, and non-targeted vegetable fallow beds.
- For upwind and side borders, maintain buffer zone of 150 feet from any non-targeted vegetable fallow bed, crop, or desirable vegetation.

GROUND BOOM APPLICATIONS:

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- For all applications, applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

BOOM-LESS GROUND APPLICATIONS:

- Applicators are required to use a coarse or coarser droplet size (ASABE S572.1) for all applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

SPRAY DRIFT MANAGEMENT ADVISORIES

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER

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

The following drift management requirements must be followed to avoid off target movement from aerial applications. These requirements do not apply to forestry applications, public health uses or to applications of dry materials.

1. The distance of the outermost nozzles on the boom must not exceed $\frac{3}{4}$ the length of the wingspan or rotor.
2. Nozzles must always point backward, parallel with the air stream, and never be pointed downwards more than 45 degrees.
3. Observe the regulations of the State where applications are made.
4. Applicators must observe and abide by the requirements of the Aerial Drift Reduction Advisory.

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage for pesticide performance. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (See information on Wind Temperature and Humidity and Temperature Inversions in subsequent sections).

Controlling Spray Droplet Size

Volume – Use high-flow-rate nozzles to apply the greatest practical spray volume. Nozzles with higher rated flow generally produce larger droplets.

Pressure When higher flow rates are needed, use higher flow-rate nozzles rather than increasing spray pressure.

Do not exceed the nozzle manufacturers recommended pressures. Lower pressure produces larger droplets in many types of nozzles.

Number of Nozzles - Use the minimum number of nozzles that provide uniform coverage.

Nozzle Orientation - For aerial application, the recommended practice is to orient nozzles so that the spray is released parallel to the airstream. This orientation usually produces larger droplets as compared to other nozzle orientations. Significant nozzle deflection from horizontal will reduce droplet size and increase drift potential.

Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low drift nozzles for both ground and aerial applications. Solid stream nozzles oriented straight back usually produce the largest droplets and the lowest drift potential in aerial applications.

Boom Length - For some aerial use patterns reducing the effective boom length to less than $\frac{3}{4}$ of the wingspan or

rotor length may further reduce drift without reducing swath width.

Application Height – Aerial application should not be made at a height greater than 10 feet above the top of the target plant canopy unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment - When aerial applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the upwind and downwind edges of the field, the applicator must compensate for this displacement by the path of the aircraft upwind. Swath adjustment or offset distance should increase when conditions favor increased drift potential (higher winds, smaller droplets, etc.)

Wind - Drift potential is between wind speeds of three to ten miles per hour. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential.

NOTE: Local terrain can influence wind patterns. Every applicator should be familiar. With local wind patterns and how they may potentially affect spray drift.

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

Temperature Inversions - Applications should not occur during a temperature inversion because drift potential is high temperature inversions restrict vertical air mixing which causes small suspended droplets to remain in a concentrated cloud. This cloud can move unpredictable directions due to the low speed and variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common during conditions of limited cloud cover and little to no wind. They often begin to form as the sun sets and may often continue into the morning. The presence of a temperature inversion may be indicated by ground fog. However, if fog is not present the movement of smoke from a ground source or an aircraft smoke generator can also identify inversions. Smoke that remains in layers and moves laterally in a concentrated cloud (under low speed wind conditions) indicates an inversion while smoke that moves upward and rapidly dissipates, indicates good vertical air mixing.

Sensitive Areas – The pesticide should only be applied when the wind is blowing away from sensitive areas (e.g. residential areas bodies of water known habitat for threatened or endangered species non-target crops)

Off Target Movement of SULFENTRAZONE MTZ

Drift of dilute spray mixtures containing SULFENTRAZONE MTZ must be prevented. Observation of the preceding environmental conditions correct application equipment design calibration and application practices will significantly diminish the risk of off target spray drift. SULFENTRAZONE MTZ can cause significant symptomology by drift on to sensitive crops and other plants. This symptomology may manifest initially as discreet localized spots where contacted by SULFENTRAZONE MTZ drift mixtures. Depending on concentration of the spray solution and droplets size (effectively determining the dosage of sulfentrazone) and depending on the inherent sensitivity of the plants involved, these spots or lesions may or may not coalesce. These effects will usually not have lasting effects on plant growth but will likely reduce the value of affected fruit or foliage where grade or quality is associated with appearance. In severe drift instances with particularly sensitive crops, defoliation of affected foliage could result. Failure to follow these guidelines and environmental prohibitions that then result in off-target movement or drift of SULFENTRAZONE MTZ on to unintended crops or plants irrespective of severity constitutes misapplication of this product. Albaugh accepts no responsibility or liability for potential crop effects that may result from such misapplication of SULFENTRAZONE MTZ.

WEEDS CONTROLLED

Common Name	Scientific Name
BROADLEAF WEEDS	
Amaranth, Palmer	<i>Amaranthus, Palmeri</i>
Amaranth, spiny	<i>Amaranthus, spinosus</i>
Anoda, spurred	<i>Anoda cristata</i>
Beggarweed, Florida	<i>Desmodium tortuosum</i>
Carpetweed	<i>Mollugo verticillata</i>
Copperleaf, Hophornbeam	<i>Acalypha ostryaefolia</i>
Croton, tropic	<i>Croton glandulosus</i>
Daisy, American	<i>Eclipta alba</i>
Galinsoga, hairy	<i>Galinsoga ciliata</i>
Groundcherry, clammy	<i>Physalis heterophylla</i>
Groundcherry, cutleaf	<i>Physalis angulata</i>
Jimsonweed	<i>Datura stramonium</i>
Kochia	<i>Kochia scoparia</i>
Ladysthumb	<i>Polygonum persicaria</i>
Lambsquarters, common	<i>Chenopodium album</i>
Morningglory, Entireleaf	<i>Ipomoea integruscula</i>
Morningglory, Ivyleaf	<i>Ipomoea hederacea</i>
Morningglory, Palmleaf	<i>Ipomoea Wrightii</i>
Morningglory, purple	<i>Ipomoea turbinata</i>
Morningglory, red	<i>Ipomoea coccinea</i>
Morningglory, smallflower	<i>Jacquemontia tamnifolia</i>
Morningglory, tall	<i>Ipomoea, purpurea</i>
Nightshade, Eastern black	<i>Solanum ptycanthum</i>
Nightshade, hairy	<i>Solanum sarrachoides</i>
Nightshade, silverleaf	<i>Solanum elaeagnifolium</i>
Pigweed, redroot	<i>Amaranthus retroflexus</i>
Pigweed, smooth	<i>Amaranthus hybridus</i>
Poorjoe	<i>Diodia teres</i>
Purslane, common	<i>Portulaca oleracea</i>
Senna, coffee	<i>Cassia occidentalis</i>
Sida, prickly (Teaweed)	<i>Sida spinosa</i>
Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>
Smell melon	<i>Cucumis melo</i>
Spurge, spotted	<i>Euphorbia maculata</i>
Starbur, bristly	<i>Acanthospermum hispidum</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Waterhemp, common	<i>Amaranthus rudis</i>
Waterhemp, tall	<i>Amaranthus tuberculatus</i>
SEDGES (SUPPRESSION ONLY)	
Nutsedge, purple	<i>Cyperus rotundus</i>
Nutsedge, yellow	<i>Cyperus esculentus</i>
Sedge, annual	<i>Cares compressus</i>
GRASSES (SUPPRESSION ONLY)	
Broadleaf signalgrass	<i>Brachiaria platyphylla</i>
Crabgrass, large	<i>Digitaria sanguinalis</i>
Crabgrass, smooth	<i>Digitaria ischaemum</i>
Goosegrass	<i>Eleusine indica</i>
Johnsongrass, seedling	<i>Sorghum halepense</i>
Orchardgrass	<i>Dactylis glomerata</i>
Panicum, fall	<i>Panicum dichotomiflorum</i>
Panicum, Texas	<i>Panicum texanum</i>

For winter annual weeds (such as those listed below, and/or other emerged weeds), add the specified rate of 2,4-D, or glyphosate-based product to SULFENTRAZONE MTZ applications.

Chickweed, common	<i>Stellaria media</i>
Deadnettle, purple	<i>Lamium purpureum</i>
Field Pennycress	<i>Thlaspi arvense</i>
Henbit	<i>Lamium amplexicaule</i>
Marestail	<i>Hippuris vulgaris</i>
Mustard spp.	<i>Brassica</i> spp.
Prickly Lettuce	<i>Lactuca serriola</i>
Shepherd's Purse	<i>Capsella bursa pastoris</i>
Speedwell spp.	<i>Veronica</i> spp.
Virginia Pepperweed	<i>Lepidium virginicum</i>

CROP SPECIFIC USE INSTRUCTIONS

ASPARAGUS

Make broadcast application to crowns established for one or more years. Make application in the spring before the crop and weeds emerge. Apply at 10.8 to 28.9 fluid ounces per acre (0.21 – 0.56 lb. a.i./A metribuzin and 0.14 – 0.37 lb. a.i./A sulfentrazone) in 10 to 40 gallons of finished spray per acre. Applications of SULFENTRAZONE MTZ may be made with other pesticides registered for use with asparagus.

SULFENTRAZONE MTZ Use Rates - Asparagus

Spring - Pre-Emergence Applications			
Soil Texture	<1.5% Organic Matter (Fl. Oz./Acre)	1.5 - 3.0% Organic Matter (Fl. Oz./Acre)	>3.0% Organic Matter (Fl. Oz./Acre)
Coarse	10.8 – 14.7 (0.21 – 0.28 lb. a.i./A metribuzin and 0.14 – 0.19 lb. a.i./A sulfentrazone)	14.7 – 19.3 (0.28 – 0.37 lb. a.i./A metribuzin and 0.19 – 0.25 lb. a.i./A sulfentrazone)	19.3 – 24.7 (0.37 – 0.47 lb. a.i./A metribuzin and 0.25 – 0.32 lb. a.i./A sulfentrazone)
	14.7 – 19.3 (0.28 – 0.37 lb. a.i./A metribuzin and 0.19 – 0.25 lb. a.i./A sulfentrazone)	19.3 – 24.7 (0.37 – 0.47 lb. a.i./A metribuzin and 0.25 – 0.32 lb. a.i./A sulfentrazone)	24.7 – 28.9 (0.47 – 0.56 lb. a.i./A metribuzin and 0.32 – 0.37 lb. a.i. sulfentrazone)
Medium	19.3 (0.37 lb. a.i./A metribuzin and 0.25 lb. a.i./A sulfentrazone)	24.7 (0.47 lb. a.i./A metribuzin and 0.32 lb. a.i./A sulfentrazone)	28.9 (0.56 lb. a.i./A metribuzin and 0.37 lb. a.i./A sulfentrazone)
Fine	See "Soil Types" chart in the PRODUCT INFORMATION section of this label for information on soil texture. Soils with pH <7.0: Use higher rates. Soil with pH >7.0: Use lower rates.		

Weeds Controlled – SULFENTRAZONE MTZ will provide control of the following weeds in Asparagus when applied according to directions:

- Amaranth, Palmer
- Galinsoga, hairy
- Lambsquarters, common
- Morningglory, ivyleaf
- Nightshade, Eastern black
- Nutsedge, yellow

Pigweed (redroot & smooth)

For information on other weeds not listed above, refer to **LIST OF WEEDS CONTROLLED** section in this label.

Use Directions - Asparagus

These use directions are crop-specific and are based upon the effects of SULFENTRAZONE MTZ (metribuzin and sulfentrazone) and primary soil and environmental factors, which may impact the product’s activity on various weed species and affect tolerance among crops.

Use Precautions - Asparagus

Not all varieties or cultivars of a given crop species have been tested with applications of SULFENTRAZONE MTZ. Consult your local University or Extension Weed Management specialists for additional information on specific varieties or cultivars and any other related information on SULFENTRAZONE MTZ under specific local conditions.

Use Restrictions - Asparagus

- **DO NOT** apply more than 0.375 lb. a.i./A/year sulfentrazone from all sources.
- Pre-Harvest Interval: 14 days
- Aerial application is prohibited.
- **DO NOT** make application of more than 29 fl.oz. of this product (0.56 lb. a.i./A metribuzin and 0.37 lb. a.i./A sulfentrazone) per acre per 12-month period.
- **DO NOT** apply more than one SULFENTRAZONE MTZ application per acre per 12-month period. The 12-month period is considered to begin upon the initial SULFENTRAZONE MTZ application.
- **DO NOT** use on sandy soils classified, which have less than 1% organic matter.

FIELD CORN (Grain, Seed Corn, forage and silage)

SULFENTRAZONE MTZ Use Rates – Field Corn

Fall or Spring - Early Pre-Plant, Pre-Emergence & Pre-Plant Incorporated Applications			
Soil Texture	<1.5% Organic Matter (Fl. Oz./Acre)	1.5 - 3.0% Organic Matter (Fl. Oz./Acre)	>3.0% Organic Matter (Fl. Oz./Acre)
Coarse	4.1 – 10.8 (0.08 – 0.21 lb. a.i./A metribuzin and 0.06 – 0.14 lb. a.i./A sulfentrazone)	7.2 – 10.8 (0.14 – 0.21 lb. a.i./A metribuzin and 0.09 – 0.14 lb. a.i./A sulfentrazone)	9.3 – 12.9 (0.18 – 0.25 lb. a.i./A metribuzin and 0.12 – 0.16 lb. a.i./A sulfentrazone)
	Medium	7.2 – 10.8 (0.14 – 0.21 lb. a.i./A metribuzin and 0.09 – 0.14 lb. a.i./A sulfentrazone)	9.3 – 14.7 (0.18 – 0.28 lb. a.i./A metribuzin and 0.12 – 0.19 lb. a.i./A sulfentrazone)
Fine	9.3 – 12.9 (0.18 – 0.25 lb. a.i./A metribuzin and 0.12 – 0.16 lb. a.i./A sulfentrazone)	10.8 – 16.5 (0.21 -0.32 lb. a.i./A metribuzin and 0.14 – 0.21 lb. a.i./A sulfentrazone)	14.7 – 19.3 (0.28 – 0.37 lb. a.i./A metribuzin and 0.19 – 0.25 lb. a.i./A sulfentrazone)

See "Soil Types" chart in the PRODUCT INFORMATION section of this label for information on soil texture.
Soils with pH <7.0: Use higher rates.
Soil with pH >7.0: Use lower rates.

Fall Applications - Early Pre-Plant Applications

SULFENTRAZONE MTZ application may be made in the fall as a residual treatment before corn planting the following spring. SULFENTRAZONE MTZ can be used alone or in a tank mixture with other herbicides to control labeled broadleaves, sedges and grasses in corn. Make application of SULFENTRAZONE MTZ in conventional tillage or conservation tillage (reduced tillage or no-tillage) cropping systems using specified use rates. SULFENTRAZONE MTZ should be applied to the stubble or soil surface and allow for moisture from rainfall or snow to move the product into the soil. Do not mechanically incorporate product in the fall or spring as doing so can destroy the herbicide barrier allowing weed escapes to occur. To prevent SULFENTRAZONE MTZ runoff from rain or snowmelt that may occur following application, do not make application to frozen soils or existing snow cover. To control emerged weeds in the fall or residual soil herbicides that are labeled for fall use on corn, SULFENTRAZONE MTZ may be tank mixed with other burndown herbicides. It is the pesticide user’s responsibility to ensure that all products in the listed

mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Select the correct SULFENTRAZONE MTZ use rate for corn for the soil type and organic matter. Use the SULFENTRAZONE MTZ mid to high rate within the labeled rate range for the appropriate soil type and organic matter due to the extended period of time between the fall application and corn planting.

Spring Applications - Early Pre-Plant and Pre-Emergence

Make pre-plant or pre-emergence application of SULFENTRAZONE MTZ at 4.1 – 19.3 fl. oz./A (0.08 – 0.37 lb. a.i./A metribuzin and 0.06 – 0.25 lb. a.i./A sulfentrazone) for control or suppression of labeled grass, broadleaf, and sedge weeds including certain herbicide resistant weeds. Make pre-plant applications within 4 weeks before planting. Make pre-emergence applications from planting up to 3 days post planting, if seedlings have not broken the soil surface and the seed furrow is completely closed. Plant corn at a minimum depth of 2 inches. Make applications by ground equipment in a minimum of 10 gallons of finished spray per acre or by aerial application in a minimum of 5 gallons of finished spray per acre.

SULFENTRAZONE MTZ may be tank mixed with an herbicide labeled for burndown application such as Glyphosate, Paraquat, Dicamba, 2,4-D or other appropriate pre-plant or pre-emergence herbicides at the proper labeled rate, if weeds are present. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

For season-long control, a post-emergence application of atrazine, glyphosate, glufosinate, or other suitable herbicide following an application of SULFENTRAZONE MTZ, is recommended. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Split or sequential pre-emergence applications of SULFENTRAZONE MTZ may be made to the same crop to provide season-long control of difficult to control existing or late emerging weeds.

Pre-Plant Incorporated (PPI) Applications

A pre-plant incorporated application of SULFENTRAZONE MTZ may be made the spring before planting in reduced and conventional tillage corn. Shallowly incorporate or mix thoroughly SULFENTRAZONE MTZ into the soil to a depth no greater than 2 inches using a field cultivator, field finisher or disk harrow that has been adjusted properly. If SULFENTRAZONE MTZ is incorporated deeper than 2 inches, inconsistent or poor weed control may result. Use the specified rate for the soil texture, organic matter, and pH level of the soil. SULFENTRAZONE MTZ can be tank mixed with other soil-applied herbicides and insecticides labeled for pre-plant incorporation in corn. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Aerial Applications

Use nozzle types and arrangements that provide optimum coverage while producing a minimal amount of fine droplets. Make application in sufficient spray volume to achieve adequate coverage. Make application in a minimum of 5 gallons of finished spray per acre. Do not make application when wind speed favors drift beyond the area intended for treatment. Aerial application is allowed only when environmental conditions prohibit ground application.

Use Directions - Field Corn

These use directions are crop-specific and are based upon the effects of SULFENTRAZONE MTZ (metribuzin and sulfentrazone) and primary soil and environmental factors, which may impact the product's activity on various weed species and affect tolerance among crops.

Use Precautions - Field Corn

Not all varieties or cultivars of a given crop species have been tested with applications of SULFENTRAZONE MTZ. Consult your local University or Extension Weed Management specialists for additional information on specific varieties or cultivars and any other related information on SULFENTRAZONE MTZ under specific local conditions.

Use Restrictions - Field Corn

- Do not apply more than 0.375 lb./A/year sulfentrazone from all sources.
- Do not make application of more than 29 fl.oz. of this product per acre (0.56 lb. a.i./A metribuzin and 0.37 lb. a.i./A sulfentrazone) of SULFENTRAZONE MTZ per 12-month period. The 12-month period is considered to begin upon the initial SULFENTRAZONE MTZ application.
- Do not make application to coarse soils classified as sand, which have less than 1% organic matter.
- Do not make application after crop emerges, or if the seedling is close to the soil surface.

- Do not make application to frozen soils or existing snow cover to prevent SULFENTRAZONE MTZ runoff from rain or snowmelt that may occur following application.
- Do not use low-pressure high volume hand wand equipment to make applications of SULFENTRAZONE MTZ.

POTATOES

SULFENTRAZONE MTZ Use Rates – POTATOES

Pre-Emergence Applications			
Soil Texture	<1.5% Organic Matter (Fl. Oz./Acre)	1.5 - 3.0% Organic Matter (Fl. Oz./Acre)	>3.0% Organic Matter (Fl. Oz./Acre)
Coarse	7.2 – 10.8 (0.14 – 0.21 lb. a.i./A metribuzin and 0.09 – 0.14 lb. a.i./A sulfentrazone)	7.2 – 10.8 (0.14 – 0.21 lb. a.i./A metribuzin and 0.09 – 0.14 lb. a.i./A sulfentrazone)	10.8 – 14.7 (0.21 – 0.28 lb. a.i./A metribuzin and 0.14 – 0.19 lb. a.i./A sulfentrazone)
Medium	7.2 – 10.8 (0.14 – 0.21 lb. a.i./A metribuzin and 0.09 – 0.14 lb. a.i./A sulfentrazone)	9.3 – 14.7 (0.18 -0.28 lb. a.i./A metribuzin and 0.12 – 0.19 lb. a.i./A sulfentrazone)	12.9 – 16.5 (0.25 – 0.32 lb. a.i./A metribuzin and 0.16 – 0.21 lb. a.i./A sulfentrazone)
Fine	9.3 – 12.9 (0.18 -0.25 lb. a.i./A metribuzin and 0.12 – 0.16 lb. a.i./A sulfentrazone)	10.8 – 14.7 (0.21 -0.28 lb. a.i./A metribuzin and 0.14 – 0.19 lb. a.i./A sulfentrazone)	14.7 – 19.3 (0.28 – 0.37 lb. a.i./A metribuzin and 0.19 – 0.25 lb. a.i./A sulfentrazone)

See "Soil Types" chart in the **PRODUCT INFORMATION** section of this label for information on soil texture.
Soils with pH <7.0: Use higher rates.
Soil with pH >7.0: Use lower rates.

Ground and Aerial Applications

Make application of SULFENTRAZONE MTZ by air as a pre-emergence treatment following planting and after drag-off, but before potato emergence. Optimum product performance can be achieved if SULFENTRAZONE MTZ application is made to the soil surface and either rainfall or overhead irrigation is used to activate the product. If moisture is not received within 7 days after application in areas without irrigation, a shallow incorporation (no greater than 2 inches) may be needed before weed and potato emergence to activate the product. Select the use rate based on soil texture and organic matter. A burndown herbicide and adjuvants labeled for use in potatoes may be tank mixed with SULFENTRAZONE MTZ for control of emerged weeds at the time of the application. Do not make application of SULFENTRAZONE MTZ if the potatoes have emerged from the soil as adverse crop response may result. SULFENTRAZONE MTZ may be tank mixed with other herbicides labeled for use in potatoes by soil application to improve weed management and increase weed control spectrum. Make application of SULFENTRAZONE MTZ in a minimum of 10 gallons of spray by ground application and minimum of 5 gallons of spray by air.

Chemigation Applications

Application of SULFENTRAZONE MTZ may be made to potatoes through sprinkler irrigation systems including center pivot, lateral move, end tow, solid set or hand move irrigation systems. Make application of SULFENTRAZONE MTZ before potato emergence using sufficient water (0.25 to 0.5 inch per acre) to provide thorough soil surface coverage, but to avoid runoff of irrigation water. Application of SULFENTRAZONE MTZ may be made with other products labeled for chemigation use in potatoes.

Note: Irrigating with water that is highly alkaline (pH higher than 7.5) following a SULFENTRAZONE MTZ soil application may increase the amount of sulfentrazone available in soil solution and can result in adverse crop response or injury. This response depends on the initial SULFENTRAZONE MTZ application rate, application timing, amount and pH of irrigation water; the sensitivity of the crop and the crop growth stage when irrigated. The risk of adverse crop response is reduced as the crop growth stage progresses.

Weeds Controlled - SULFENTRAZONE MTZ will provide control of the following weeds in Potatoes when applied according to directions:

- Amaranth, Palmer
- Filaree, redstem

Kochia (ALS and Triazine Resistant)
Lambsquarters, common
Morningglory (ivyleaf & tall)
Nightshade, Eastern black
Pigweed (redroot & smooth)
Thistle, Russian
Waterhemp (common & tall)

Refer to **LIST OF WEEDS CONTROLLED** section in this label for information on other weeds not listed above.

Use Directions - Potatoes

Potato varieties may vary in their sensitivity or tolerance to herbicide applications. When making an application of SULFENTRAZONE MTZ on an untested variety, always determine the crop tolerance prior to planting or spraying with this product. Some potato varieties, including Sangre, Shepody and Snowden, have shown sensitivity to application of SULFENTRAZONE MTZ. Use caution if planting these varieties on marginal coarse soils.

These use directions are crop-specific and are based upon the effects of SULFENTRAZONE MTZ (metribuzin and sulfentrazone) and primary soil and environmental factors, which may impact the product's activity on various weed species and affect tolerance among crops.

Use Precautions - Potatoes

Not all varieties or cultivars of a given crop species have been tested with applications of SULFENTRAZONE MTZ. Consult your local University or Extension Weed Management specialists for additional information on specific varieties or cultivars and any other related information on SULFENTRAZONE MTZ under specific local conditions.

Use Restrictions - Potatoes

- Do not apply more than 0.25 lb./A/year sulfentrazone from all sources.
- Do not make application of more than 19.3 fl.oz. of this product (0.37 lb. a.i./A metribuzin and 0.25 lb. a.i./A sulfentrazone) per 12-month period. The 12-month period is considered to begin upon the initial SULFENTRAZONE MTZ application.
- Use of low pressure and high volume wand equipment is prohibited.
- Do not use on sandy soils which have less than 1% organic matter.
- Do not make application of SULFENTRAZONE MTZ after potato emergence from the soil as undesirable crop response may occur.

SOYBEANS (Except in CA)

SULFENTRAZONE MTZ may be applied as a pre-emergence or pre-plant incorporated treatment for the control of weeds in soybeans as described below.

Soybean Tolerance

SULFENTRAZONE MTZ has been tested on a number of soybean varieties, however, it has not been tested on all soybean varieties. The vast majority of varieties tested have demonstrated tolerance when the product is used according to label directions for SULFENTRAZONE MTZ. A limited number of soybean cultivars have shown some level of crop response when used according to label directions and should not be planted when a SULFENTRAZONE MTZ spray program is planned (see list below).

Do not use SULFENTRAZONE MTZ on the following soybean varieties as adverse crop response may occur: Altona, AP55, AP 71, Asgrow 6520, Burlison, Coker 102, Coker 156, Dassel, GL 3202, Govan, Maple Amber, NB 3665, NKS 1884, Paloma 350, Portage, Regal, Semmes, Terra-Vig 505, Terra-Vig 606, Tracy, Vansoy, and Vinton 81. Consult your local University or Extension Weed Management specialists for additional information on specific local varieties or cultivars for crop tolerance and any other pertinent information on SULFENTRAZONE MTZ under specific local conditions before to applying product.

Refer to "Soybeans - Standard Rate" table for conventional soybeans or "Soybeans - Reduced Rate" table for reduced rate soybeans for the proper application rates. SULFENTRAZONE MTZ must be thoroughly mixed before application or prior to adding another product to the spray tank. Soybean stunting or stand loss could occur if cool/cold weather or heavy rainfall occurs immediately following a SULFENTRAZONE MTZ application. Yields have not been affected where early season stunting has occurred. Crop injury to soybeans can also occur under the below conditions:

- boom/spray overlap,
- excessive rate for soil type,

- improper spray equipment calibration,
- error in mixing procedures,
- applications made to soils with pH greater than 7.5 or having a calcareous surface area
- soil incorporation deeper than specified,
- when applications are made with organophosphate pesticides,
- when heavy rains occur after application, particularly in areas that are poorly drained,
- when soybeans are planted at a depth of less than 1 ½ inches, and
- on any soil with less than 0.5% organic matter.

Ground Applications

Use ground spray equipment with a boom that has the appropriate nozzles, spray tips and screens and that is adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures. Use nozzles that produce minimal amounts of fine spray droplets to avoid spray drift or inadequate foliar and/or soil coverage. Make application in a minimum of 10 gallons of finished spray per acre by ground. Take note that overlaps and slower ground speeds while starting, stopping or turning while spraying may result in excessive application and subsequent adverse crop response.

Do not make application when wind speed favors drift beyond the area intended for treatment.

Aerial Applications

Use nozzle types and arrangements that provide optimum coverage while producing a minimal amount of fine droplets. Make application in sufficient spray volume to achieve adequate coverage. Make application in a minimum of 5 gallons of finished spray per acre. Do not make application when wind speed favors drift beyond the area intended for treatment. Aerial application is allowed only when environmental conditions prohibit ground application.

Fall Applications

Application of SULFENTRAZONE MTZ may be made in no-till and conservation tillage production systems as a fall treatment to the stubble of harvested crops for burndown of existing vegetation and pre-emergence control of labeled weeds the following spring. Applications of SULFENTRAZONE MTZ can be made to the stubble of a harvested crop in no-till or to the soil surface of conservation tillage fields after harvest when the soil temperature at a depth of 4 inches is sustained at 55°F and falling. Make application after September 30th in those areas North of Interstate 90 and after October 15th in those areas North of Interstate 40. In order to obtain adequate weed control in all areas, soils must have sustained temperature of 55°F or lower. Treatments to ridge till production systems must be made after the formation of ridges or beds.

For emerged weeds at the time of application, use a burndown herbicide in the tank mixture at labeled rates for the target weeds. Apply fall burndown treatments in a minimum of 15 gallons per acre for adequate coverage of the weeds being treated. Increase spray volume where weed density is high or heavy crop residue levels are present. The addition of adjuvants such as crop oil concentrate (COC) or methylated seed oil (MSO) to the spray mixture can be used to enhance the burndown activity of the application when making burndown applications to emerged weeds. If weeds are present at time of SULFENTRAZONE MTZ treatment, tank mix with an appropriate burndown herbicide(s) for improved control of existing weeds. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. For SULFENTRAZONE MTZ application rates refer to the Soybean Standard Rate table for standard rate programs and Soybean Reduced Rate table for reduced rate programs in glyphosate and glufosinate tolerant soybean systems.

Spring Applications - Early Pre-Plant

Application of SULFENTRAZONE MTZ may be made up to 30-45 days before planting (early pre-plant) in no-till or minimum till cropping systems. For applications earlier than 30 days before planting, the high rate in the rate range may be needed for extended residual control. SULFENTRAZONE MTZ has limited burndown control of small weeds. Application of SULFENTRAZONE MTZ made early pre-plant must be applied in combination with an appropriate burndown herbicide such as glyphosate, glufosinate, gramoxone, and/or 2,4-D to achieve acceptable control of existing weeds present during application. The addition of crop oil concentrate at 1 quart per acre or non-ionic surfactant at 0.25% will increase burndown effectiveness of SULFENTRAZONE MTZ. For SULFENTRAZONE MTZ application rates refer to the Soybean Standard Rate table for standard rate programs and Soybean Reduced Rate table for reduced rate programs in glyphosate and glufosinate tolerant soybean systems.

Pre-Plant Incorporated (PPI)

Application of SULFENTRAZONE MTZ may be made pre-plant incorporated before planting soybeans. Application of SULFENTRAZONE MTZ may be made alone or in combination with other pre-plant incorporated herbicides labeled for soybeans. Do not incorporate product deeper than 2 inches. Improper soil incorporation may result in erratic or poor weed control and/or crop injury. Application of SULFENTRAZONE MTZ may be followed by labeled post-emergence soybean herbicides for increased control of grass and broadleaf weeds. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. For SULFENTRAZONE MTZ application rates refer to the Soybean Standard Rate table for standard rate programs and Soybean Reduced Rate table for reduced rate programs in glyphosate and glufosinate tolerant soybean systems.

Pre-Emergence Applications

Application of SULFENTRAZONE MTZ can be made from 30 days before planting and up to 3 days after planting, but before the crop seeds germinate to prevent injury to emerging crop seedlings. Application of SULFENTRAZONE MTZ made after crop emergence will cause severe crop injury. Refer to Soybean Tolerance for more information regarding soybean tolerance. Application of SULFENTRAZONE MTZ can be made alone or in combination with other labeled soybean herbicides for pre-emergence grass control. Application of SULFENTRAZONE MTZ can be made pre-emergence following the use of a pre-plant incorporated grass herbicide labeled for use on soybeans. If weeds are present at time of SULFENTRAZONE MTZ application, appropriate burndown herbicides should be tank mixed for improved control of existing weeds. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. It is required that seed furrows be completely closed before SULFENTRAZONE MTZ application to avoid crop injury. For SULFENTRAZONE MTZ application rates refer to the Soybean Standard Rate table for standard rate programs and Soybean Reduced Rate table for reduced rate programs in glyphosate and glufosinate tolerant soybean systems.

SULFENTRAZONE MTZ may be tank mixed with other products containing metribuzin. Do not exceed the maximum annual amount of metribuzin.

SULFENTRAZONE MTZ Standard Use Rates – SOYBEANS

Fall, Early Pre-plant, Pre-Plant, Pre-Plant Incorporated, Pre-Emergence Conservation or Conventional Tillage*		
Soil Texture**	1.0 - 2.0% Organic Matter (Fl. Oz./Acre)	2.0 - 4.0% Organic Matter (Fl. Oz./Acre)
Coarse	10.3 – 12.4	12.4 – 13.9
	(0.20 – 0.24 lb. a.i./A metribuzin and 0.14 – 0.16lb. a.i./A sulfentrazone)	(0.24 – 0.27 lb. a.i./A metribuzin and 0.16 – 0.18lb. a.i./A sulfentrazone)
Medium	12.4 – 13.9	13.9 – 15.5
	(0.24 – 0.27 lb. a.i./A metribuzin and 0.16 – 0.18lb. a.i./A sulfentrazone)	(0.27 – 0.30 lb. a.i./A metribuzin and 0.18 – 0.20lb. a.i./A sulfentrazone)
Fine	13.9 – 15.5	15.5 – 17.8
	(0.27 – 0.30 lb. a.i./A metribuzin and 0.18 – 0.20lb. a.i./A sulfentrazone)	(0.30 – 0.34 lb. a.i./A metribuzin and 0.20 – 0.23lb. a.i./A sulfentrazone)

*Use the higher rate for suppression of grasses and sedges.

**Do not use this product on sandy soil types that have <1% organic matter.

See "**Soil Types**" chart in the **PRODUCT INFORMATION** section of this label for information on soil texture. Adverse crop response may result if applications are made on soils with pH greater than 7.5. To reduce adverse crop response, use a maximum of 10.3 fl. oz. of SULFENTRAZONE MTZ on soils with pH greater than 7.5.

Reduced Rate Programs- SOYBEANS

Fall, Early Pre-plant, Pre-Plant, Pre-Plant Incorporated, Pre-Emergence Conservation or Conventional Tillage*		
<i>(Reduced Rates for Suppression of Listed Weeds to Reduce Early Season Weed Competition in Glyphosate and Glufosinate Tolerant Soybean Systems)</i>		
Soil Texture**	1.0 - 2.0% Organic Matter (Fl. Oz./Acre)	2.0 - 4.0% Organic Matter (Fl. Oz./Acre)

Coarse	7.2 (0.14 lb. a.i./A metribuzin and 0.09 lb. a.i./A sulfentrazone)	7.2 – 8.8 (0.14 – 0.17 lb. a.i./A metribuzin and 0.09 – 0.11 lb. a.i./A sulfentrazone)
Medium	7.2 – 8.8 (0.14 – 0.17 lb. a.i./A metribuzin and 0.09 – 0.11 lb. a.i./A sulfentrazone)	8.8 – 10.8 (0.17 – 0.20 lb. a.i./A metribuzin and 0.11 – 0.14 lb. a.i./A sulfentrazone)
Fine	8.8 – 10.8 (0.17 – 0.20 lb. a.i./A metribuzin and 0.11 – 0.14 lb. a.i./A sulfentrazone)	10.8 – 12.4 (0.20 – 0.24 lb. a.i./A metribuzin and 0.14 – 0.16 lb. a.i./A sulfentrazone)
<p>*For fall applications use the higher rate for the appropriate soil texture and organic matter. Use the higher rate for suppression of grasses and sedges.</p> <p>**Do not use this product on sandy soil types that have <1% organic matter. See "Soil Types" chart in the PRODUCT INFORMATION section of this label for information on soil texture. Adverse crop response may result if applications are made on soils with pH greater than 7.5. To reduce adverse crop response, use the minimum rate for the appropriate % organic matter and soil texture on soils with pH greater than 7.5.</p>		

Reduced Rate

SULFENTRAZONE MTZ Reduce Rate Programs Followed by Post-Emergence Herbicide Treatments (refer to the Soybean Reduced Rate Program table)

Application of SULFENTRAZONE MTZ may be made as an early pre-plant, pre-plant incorporated, or pre-emergence treatment followed by labeled post-emergence soybean herbicides for increased control of grass and broadleaf weeds. Application of SULFENTRAZONE MTZ may also be followed by a post-emergence application of a glyphosate product to glyphosate tolerant soybeans. Make application at the specified use rate for SULFENTRAZONE MTZ for the suppression of weeds in glyphosate tolerant soybeans, maintaining control with sequential applications of post-emergence herbicides labeled for use. Refer to the partner product labels for use directions, weeds controlled, precautionary statements, restrictions and other information.

Replanting Instructions

If the initial planting of soybeans fails to produce a stand, only soybeans may be replanted in fields treated with SULFENTRAZONE MTZ used according to directions in Soybean section of this label. Unless specifically allowed in other sections of this label, do not retreat field with a second application of SULFENTRAZONE MTZ or adverse crop response or injury may result. Do not replant treated fields with any crop at intervals that are inconsistent with the Rotational Crop Guidelines found on this label. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Use Restrictions - Soybeans

- Do not apply more than 0.375 lb./A/year sulfentrazone from all sources.
- Do not make application of more than 17.8 fluid ounces by weight per acre (0.34 lb. a.i./A metribuzin and 0.23 lb. a.i./A sulfentrazone) of SULFENTRAZONE MTZ per 12-month season. The 12-month period is considered to begin upon the initial SULFENTRAZONE MTZ application.
- Do not make application of SULFENTRAZONE MTZ after soybeans have emerged.
- Do not make application to sandy soils, which have less than 1% organic matter.
- Do not make application of SULFENTRAZONE MTZ to frozen soil.
- Do not incorporate at depth greater than 2 inches.
- Do not graze treated soybean or harvest for forage or hay.

SUGARCANE

Application of SULFENTRAZONE MTZ may be made to sugarcane as a pre-emergence treatment at planting or lay-by timing.

SULFENTRAZONE MTZ Use Rates – SUGARCANE

Planting Time and Lay-by Applications
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Soil Texture*	1.0 - 2.0% Organic Matter (Fl. Oz./Acre)	2.0 - 4.0% Organic Matter (Fl. Oz./Acre)
Coarse	13.9 – 17.8 (0.27 – 0.34 lb. a.i./A metribuzin and 0.18 – 0.23lb. a.i./A sulfentrazone)	17.8 – 22.7 (0.34 – 0.44 lb. a.i./A metribuzin and 0.23 – 0.29lb. a.i./A sulfentrazone)
	Medium	17.8 – 22.7 (0.34 – 0.44 lb. a.i./A metribuzin and 0.23 – 0.29lb. a.i./A sulfentrazone)
Fine		22.7 – 26.3 (0.44 – 0.51 lb. a.i./A metribuzin and 0.29 – 0.34lb. a.i./A sulfentrazone)

*Use the higher rates for soils with pH less than 7.0. Use the lower rates within the rate range for pH greater than 7.0.
See “**Soil Types**” chart in the **PRODUCT INFORMATION** section of this label for information on soil texture.
Soils with pH <7.0: Use higher rates.
Soil with pH >7.0: Use lower rates.

Planting Time Application

Application of SULFENTRAZONE MTZ can be made to newly planted or ratoon sugarcane as a broadcast or banded pre-emergent soil applied treatment for the control of broadleaf weeds, grasses and sedges in sugarcane. Use the higher use rate on clay soils and/or soils with organic matter content that is higher than 2 percent. Make application either by air in a minimum of 5 gallons of spray per acre or by ground equipment in a minimum of 10 gallons of spray volume per acre. Application of SULFENTRAZONE MTZ may be made with other herbicides registered for use in sugarcane.

For application made by air, apply SULFENTRAZONE MTZ at a minimum distance of 400 feet upwind from sensitive plants to assure that spray does not adversely affect adjacent sensitive non-target crops.

Use Restrictions - Sugarcane

- Do not apply more than 0.375 lb./A/year sulfentrazone from all sources.
- Pre-Harvest Interval: 120 days
- Do not make application of more than 28.9 fluid ounces per acre (0.56 lb. a.i./A metribuzin and 0.37 lb. a.i./A sulfentrazone) of SULFENTRAZONE MTZ per 12-month season. The 12-month period is considered to begin upon the initial SULFENTRAZONE MTZ application.
- Do not graze treated sugarcane or harvest for forage or hay.
- Use of low-pressure, high volume hand wand equipment is prohibited.

TOMATOES (Transplanted Only)

SULFENTRAZONE MTZ Use Rates – TOMATOES (Transplanted Only)

Pre-Plant Incorporated (PPI) Applications			
Soil Texture*	<1.5% Organic Matter (Fl. Oz./Acre)	1.5 - 3.0% Organic Matter (Fl. Oz./Acre)	>3.0% Organic Matter (Fl. Oz./Acre)
Coarse	5.4 – 7.2 (0.10 – 0.14 lb. a.i./A metribuzin and 0.07 – 0.09 lb. a.i./A sulfentrazone)	7.2 – 13.9 (0.14 – 0.27 lb. a.i./A metribuzin and 0.09 – 0.18 lb. a.i./A sulfentrazone)	13.9 – 17.8 (0.27 – 0.34 lb. a.i./A metribuzin and 0.18 – 0.23 lb. a.i./A sulfentrazone)
	Medium	7.2 – 10.8 (0.14 -0.20 lb. a.i./A metribuzin and 0.09 – 0.14 lb. a.i./A sulfentrazone)	13.9 (0.27 lb. a.i./A metribuzin and 0.18 lb. a.i./A sulfentrazone)

Fine	7.2 – 13.9 (0.14 – 0.27 lb. a.i./A metribuzin and 0.09 – 0.18 lb. a.i./A sulfentrazone)	13.9 – 17.8 (0.27 – 0.34 lb. a.i./A metribuzin and 0.18 – 0.23 lb. a.i./A sulfentrazone)	17.8 (0.34 lb. a.i./A metribuzin and 0.23 lb. a.i./A sulfentrazone)
<p>*Do not use this product on sandy soil types that have <1% organic matter. See "Soil Types" chart in the PRODUCT INFORMATION section of this label for information on soil texture. Soils with pH <7.0: Use higher rates. Soil with pH >7.0: Use lower rates.</p>			

Pre-Plant Incorporated (PPI) Applications

Application of SULFENTRAZONE MTZ may be made pre-plant incorporated at 1" - 2" depth as a broadcast application. Applications must be made before transplanting.

Weeds Controlled - SULFENTRAZONE MTZ will provide control of the following weeds in Tomatoes when applied according to directions:

- Galinsoga
- Lambsquarters, common
- Morningglory, ivyleaf
- Nightshade, Eastern black
- Nutsedge, yellow
- Pigweed, redroot
- Waterhemp (common & tall)

Use Directions - Tomatoes

These use directions are crop-specific and are based upon the effects of SULFENTRAZONE MTZ (metribuzin and sulfentrazone) and primary soil and environmental factors, which may impact the product's activity on various weed species and affect tolerance among crops.

Use Precautions - Tomatoes

Not all varieties or cultivars of a given crop species have been tested with applications of SULFENTRAZONE MTZ. Consult your local University or Extension Weed Management specialists for additional information on specific varieties or cultivars and any other related information on SULFENTRAZONE MTZ under specific local conditions.

Use Restrictions - Tomatoes

- Do not make application of more than 0.375 lb. a.i. of sulfentrazone or 1.0 lb. a.i. of metribuzin per year.
- Do not make application of more than 17.8 fluid ounces (0.34 lb. a.i./A metribuzin and 0.23 lb. a.i./A sulfentrazone) of SULFENTRAZONE MTZ per acre per 12-month period. The 12-month period is considered to begin upon the initial SULFENTRAZONE MTZ application.
- Do not make application by air.
- Do not make post-emergence applications of other herbicides that contain metribuzin to transplanted tomatoes within 14 days of application of SULFENTRAZONE MTZ.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage, disposal or cleaning of equipment. Containers are not to be reused or refilled.

PESTICIDE STORAGE:

Store in a cool, dry place and in such a manner as to prevent potential contamination of water, food, or feed by storage or disposal. Store in original container and out of reach of children, preferably in a locked storage area. Containers are not to be reused or refilled unless marked as refillable.

Do not store above 100°F for extended periods of time. Storage below 20°F can result in formation of crystals. If product crystallizes, store at 50°F to 70°F and agitate to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

PESTICIDE DISPOSAL:

Open dumping is prohibited. Pesticide wastes are toxic. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the hazardous waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

Rigid, Nonrefillable containers small enough to shake (i.e. with capacities equal to or less than five gallons).

Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure 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 and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Once container is rinsed, offer for recycling if available, or puncture and dispose of in a sanitary landfill.

Rigid, Nonrefillable containers that are too large to shake (i.e. with capacities greater than 5 gallons or 50 lb).

Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank.

Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Once container is rinsed, offer for recycling if available, or puncture and dispose of in a sanitary landfill.

LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following CONDITIONS, DISCLAIMER OF WARRANTIES and LIMITATIONS OF LIABILITY.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully.

However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of ALBAUGH. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, ALBAUGH makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of ALBAUGH is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, ALBAUGH disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at ALBAUGH's election, the replacement of product.

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LABEL HISTORY

(Not included in final printed label)

045002-000##.20210811.DRAFT (SULFENTRAZONE MTZ)	081121	SECTION 3 label
045002-000LN.20220629.DRAFT	062922	Revised per EPA Request