



METRIBUZIN	GROUP	5	HERBICIDE
SULFENTRAZONE	GROUP	14	HERBICIDE

# Metribuzin 27% + Sulfentrazone 18% WG

For Use on Asparagus, Field Corn (Grain, seed corn, forage and silage), Potato, Soybeans, Sugarcane, Tomato, Turf, and IVM.

<b>ACTIVE INGREDIENT:</b>	<b>Wt. By %</b>
Metribuzin: 4-Amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4H)-one .....	27.0%
Sulfentrazone: N-[2,4 dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1 H-1,2,4-triazol-1-yl]phenyl]methanesulfonamide .....	18.0%
<b>OTHER INGREDIENTS</b> .....	55.0%
<b>TOTAL</b> .....	<b>100.0%</b>

Contains 0.45 pound active ingredient per pound: 0.27 lb. metribuzin and 0.18 lb. sulfentrazone.

## KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

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

FIRST AID			
IF SWALLOWED	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>	IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
IF IN EYES	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li><li>• Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>	IF INHALED	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
HOTLINE NUMBERS			
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For 24-Hour Medical Emergency Assistance (Human or Animal), call: <b>1-800-222-1222</b> . For Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), call CHEMTREC: <b>1-800-424-9300</b>			

SEE LABEL BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, AND STORAGE AND DISPOSAL.

**Manufactured For:**  
RedEagle International, LLC  
5143 S. Lakeland Drive Suite 4  
Lakeland, FL 33813

**NET CONTENTS: 5 Lbs.**

EPA Reg. No. 85678-79

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### WARNING

Causes substantial but temporary eye injury. Harmful if swallowed. Harmful if absorbed through skin. Do not get in eyes or on clothing. Wear protective eyewear. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Wear long-sleeved shirt, long pants, socks, shoes, and waterproof gloves.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

Discard clothing and 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 separate from other laundry.

#### USER SAFETY RECOMMENDATIONS

Users should:

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

#### ENVIRONMENTAL HAZARDS

This pesticide is toxic to marine/estuarine invertebrates. Do not apply directly to water, 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 disposing of equipment washwaters or rinsate.

Drift and runoff of sulfentrazone products may be hazardous to plants in adjacent areas.

**Groundwater Advisory:** This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Do not use on coarse soils classified as sand, which have less than 1.0% organic matter.

**Surface Water Advisory:** Metribuzin 27% + Sulfentrazone 18% WG can contaminate surface water through spray drift. Under some conditions, Metribuzin 27% + Sulfentrazone 18% WG 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 over-lying tile drainage systems that drain to surface waters.

## DIRECTIONS FOR USE

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

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

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

Product must be used in a manner which will prevent back siphoning in wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsate.

## 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**.

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 long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

## RESISTANCE MANAGEMENT

**Metribuzin 27% + Sulfentrazone 18% WG** contains metribuzin, which is classified in the triazinone chemical class as a Group 5 herbicide, inhibitor of photosynthesis at photosystem II site A and sulfentrazone, which is classified in the triazinolinone chemical class as a Group 14 herbicide, inhibitor of protoporphyrinogen oxidase. Herbicide resistance is defined as the inherited ability of a plant to survive and reproduce following exposure to a dose of herbicide normally lethal to the wild type. In a plant, resistance may be naturally occurring or induced by such techniques as genetic engineering or selection of variants produced by tissue culture or mutagenesis. Any weed population may contain or develop plants that are naturally resistant to **Metribuzin 27% + Sulfentrazone 18% WG** and other Group 5 and 14 herbicides. Weed species with acquired resistance to Group 5 and 14 herbicides may eventually dominate the weed population if Group 5 and 14 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by **Metribuzin 27% + Sulfentrazone 18% WG** or other Group 5 and 14 herbicides.

To delay herbicide resistance, consider the below best practices for resistance management:

- Plant into weed-free fields and keep fields as weed-free as possible.
- To the extent possible, use a diversified approach toward weed management. Whenever possible, incorporate multiple weed-control practices such as mechanical cultivation, biological management practices, and crop rotation.
- Fields with difficult to control weeds must be rotated to crops that allow the use of herbicides with alternative mechanisms of action or different management practices.
- To the extent possible, do not allow weed escapes to produce seeds, roots or tubers. Manage weed seeds at harvest and post-harvest to prevent a buildup of the weed seed-bank.
- Prevent field-to-field and within-field movement of weed seed or vegetative propagules. Thoroughly clean plant residues from equipment before leaving fields.
- Prevent an influx of weeds into the field by managing field borders.
- Identify weeds present in the field through scouting and field history and understand their biology. The weed-control program must consider all the weeds present.
- Difficult to control weeds may require sequential applications of herbicides with differing mechanisms of action.
- Apply this herbicide at the correct timing and rate needed to control the most difficult weed in the field.
- Use a broad-spectrum soil-applied herbicide with a mechanism of action that differs from this product as a foundation in a weed-control program. Do not use more than 2 applications of any other herbicide with the same mechanism of action within a single growing season unless mixed with an herbicide with another mechanism of action with an overlapping spectrum for the difficult-to-control weeds.
- If resistance is suspected, treat weed escapes with an herbicide with a different MOA or use non-chemical methods to remove escapes.
- Monitor treated weed populations for loss of field efficacy.
- Scout field(s) before and after application.
- Report lack of performance to RedEagle International LLC or their representative.

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.

Contact your local sales representative, extension agent, or certified crop advisors to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of action for each target weed.

## PRODUCT INFORMATION

**Metribuzin 27% + Sulfentrazone 18% WG** is a dry flowable herbicide formulation for selective pre-emergence or pre-plant incorporated weed control in labeled crops including asparagus, field corn (grain, seed corn, forage and silage), potato, soybeans, sugarcane, and tomatoes (for transplants only). When applications are made according to directions, **Metribuzin 27% + Sulfentrazone 18% WG** will provide control of listed broadleaf, and sedge weeds, and provide grass suppression.

**Metribuzin 27% + Sulfentrazone 18% WG** works through uptake by weed roots and shoots. Pre-emergence and pre-plant incorporated treatments with **Metribuzin 27% + Sulfentrazone 18% WG** require rainfall or irrigation to activate the herbicide. The amount of rainfall or irrigation necessary for activation after application depends on amount of soil moisture, organic matter content and soil texture. If adequate moisture ( $\frac{1}{2}$ " to 1") is not received within 7 to 10 days following the **Metribuzin 27% + Sulfentrazone 18% WG** treatment, a shallow cultivation may be needed to obtain desired weed control. When sufficient moisture is received after dry conditions, **Metribuzin 27% + Sulfentrazone 18% WG** will provide control of susceptible weeds that are germinating.

### 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

**Proper Handling Instructions:** This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pads or properly diked mixing/loading areas. 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 washwater, and rainwater 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 100% of the largest pesticide container or application equipment on the pad; Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operation containment.

## APPLICATION INFORMATION

**Metribuzin 27% + Sulfentrazone 18% WG** is registered for use on asparagus, field corn (grain, seed corn, forage, and silage), potato, soybeans, sugarcane, and transplanted tomatoes.

Make applications using sprayers equipped with appropriate nozzles, and screens and adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures. To minimize spray drift or inadequate foliar and soil coverage, use nozzles that produce minimal number of fine spray droplets. Make application in a minimum of 10 gallons of finished spray per acre. Pay special attention that overlaps and slower ground speeds when starting, stopping, or turning while spraying may result in excessive product application and subsequent response.

Sprayer must be accurately calibrated before beginning application. Check sprayer frequently during application to be sure it is working properly.

When application is made alone, or when tank mixed with other soybean or sugarcane herbicides, water or liquid fertilizer must be used as the carrier for **Metribuzin 27% + Sulfentrazone 18% WG**. Conduct a jar test to determine compatibility with liquid fertilizer and **Metribuzin 27% + Sulfentrazone 18% WG** if the compatibility of the liquid fertilizer and **Metribuzin 27% + Sulfentrazone 18% WG** is unknown.

It is the pesticide user's responsibility to ensure that all products 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.

Maintain continuous agitation during application. Do not overlap. Turn off spray booms while turning, slowing, or stopping, as excessive product application may result. Do not store the sprayer overnight or for any extended period of time with the **Metribuzin 27% + Sulfentrazone 18% WG** spray mixture remaining in the tank.

## SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

### 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).

- Select nozzles and application pressure that deliver medium to coarse or larger spray droplets as indicated in the nozzle manufacturer's recommendations and in accordance with ASABE Standard S-572.
- Select coarse to very coarse droplet size when used as a preemergent/preplant application.
- Select medium to very coarse droplet size when used postemergence with a contact burndown herbicide.
- Applicators may spray only when wind speed is between 3 and 10 mph.
- Do not apply as spray droplets smaller than medium to coarse (defined by the ASAE standard).
- Volume: Ground applicators must use a minimum finished spray volume of 10 gallons per acre.
- When sulfentrazone is tank mixed with a contact burndown herbicide, ground applicators must use a minimum spray volume of 15 gallons per acre.
- Aerial application is allowed only when environmental conditions prohibit ground application.
- When this product is allowed to be applied by air, applicator must use a minimum finished spray volume of 5 gallons per acre.
- The maximum release height must be 10 feet from the top of the crop canopy, unless greater application height is required for pilot safety.

### Controlling Spray Droplet Size

**Volume** – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows usually produce larger droplets.

**Pressure** – Do not exceed the nozzle manufacturer's advised pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

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

**Nozzle Orientation** – For aerial application, the advised 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. 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 ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.

**Application Height** – Aerial applications must not be made at a height greater than 10 ft. 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 must increase when conditions favor increased drift potential (higher winds, smaller droplets etc.).

**Wind** – Drift potentials are lowest between wind speeds of 3 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Do not make applications in wind conditions outside of this range. **Note:** Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect spray drift.

**Temperature and Humidity** – When making applications in conditions of 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** – Do not apply **Metribuzin 27% + Sulfentrazone 18% WG** during temperature inversions because the drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the following morning. Their presence can be indicated by ground fog. However, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or a smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicate an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

**Sensitive Areas** – The pesticide must 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 Metribuzin 27% + Sulfentrazone 18% WG**

Drift of spray mixtures containing **Metribuzin 27% + Sulfentrazone 18% WG** 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. **Metribuzin 27% + Sulfentrazone 18% WG** can cause significant symptomology by drift onto sensitive crops and other plants. This symptomology may manifest initially as discolor, localized spots where contacted by **Metribuzin 27% + Sulfentrazone 18% WG** drift mixtures. Depending on concentration of the spray solution and droplets size (effectively determining the dosage of sulfentrazone) and also 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 are 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 **Metribuzin 27% + Sulfentrazone 18% WG** onto unintended crops or plants, irrespective of severity, constitutes misapplication of this product.

**BAND TREATMENT APPLICATIONS**

For band treatments, apply the broadcast equivalent rate and volume per treated acre. To determine these:

Band Width (Inches)

Row Width (Inches)

X

Broadcast Rate Per Acre

=

Band Rate

Band Width (Inches)

Row Width (Inches)

X

Broadcast Volume Per Acre

=

Band Volume

**MIXING INSTRUCTIONS**

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.

Spray equipment must be clean and free of existing pesticide residue before **Metribuzin 27% + Sulfentrazone 18% WG** is applied. Follow the spray tank cleanout procedures listed on the label of product previously applied before adding **Metribuzin 27% + Sulfentrazone 18% WG** to the tank.

For optimum results, fill spray tank with ½ the volume of clean water or liquid fertilizer solution needed for the field to be treated. Start agitation system. When mixing **Metribuzin 27% + Sulfentrazone 18% WG** in a spray tank with anything other than clean water (fertilizer, previous herbicide mixtures, etc.), **Metribuzin 27% + Sulfentrazone 18% WG** must be slurried in a separate container with clean water prior to being added to the spray tank.

Slowly add the slurry to the spray tank. Completely rinse the slurry container and add the rinsate to the spray tank. Fill the spray tank to the desired level. Continuous spray tank agitation is required to maintain a uniform spray solution. See the **Use Rate Table 1 - Soybeans (Standard Rate Programs)** or **Use Rate Table 2 - Soybeans (Reduced Rate Programs)** for the application use rates. Be sure **Metribuzin 27% + Sulfentrazone 18% WG** is thoroughly mixed prior to applying or before adding another product to the spray tank.

For tank mixtures with other soybean or sugarcane herbicide(s), a jar test must be conducted to ensure product compatibility before full-scale mixing. If the mixture is determined to be compatible, prepare the tank mixture as follows. Fill the spray tank ¼ full with clean water. With agitator operating, add the specified amounts of ingredients using the following order: dry granules first, liquid suspensions (flowables) second. Add EC products followed by remaining adjuvants and/or carrier to tank as agitation continues and tank is filled with liquid carrier.

Make application of **Metribuzin 27% + Sulfentrazone 18% WG** tank mixture immediately after mixing. Do not store mixture. If **Metribuzin 27% + Sulfentrazone 18% WG** was tank mixed with other soybean or sugarcane herbicides, all additional directions, restrictions, and precautions for the additional herbicides must also be followed.

**SPRAYER EQUIPMENT CLEAN-OUT**

As soon as possible after spraying **Metribuzin 27% + Sulfentrazone 18% WG** and prior to using sprayer equipment for any other applications, the sprayer must be thoroughly cleaned to avoid potential adverse crop effects using the procedure below. Residues left in mixing equipment, spray tanks, hoses, spray booms and nozzles can cause adverse crop effects if they are not properly cleaned. In addition, users must take appropriate steps to ensure proper equipment clean-out for any other products mixed with **Metribuzin 27% + Sulfentrazone 18% WG** as required on the other product labels.

1. Drain the spray tank, hoses, spray boom and spray nozzles. Use high-pressure wash with a detergent to remove physical sediment and residues from the inside of the sprayer tank and thoroughly rinse. Then, thoroughly flush spray hoses, boom and nozzles with clean water. Remove and clean spray nozzles and all filters and screens (tank, spray hose and spray tips) separately in the ammonia solution (Step 2).
2. Next, prepare a sprayer cleaning solution by adding 3 gallons of ammonia (containing at least 3% active) per 100 gallons of clean water. Prepare enough cleaning solution to allow the operation of the spray system for a minimum of 15 minutes to thoroughly flush hoses, boom and nozzles.
3. Convenient and thorough cleaning of the sprayer can be achieved if the ammonia solution or fresh water is left in the spray tank, hoses, booms and nozzles overnight or during storage.
4. Before using the sprayer, drain the sprayer system completely. Rinse the tank with clean water and flush through the hoses, boom, and nozzles with clean water. Remove and clean spray nozzles and all filters and screens (tank, spray hose, and spray tip) separately in an ammonia solution.
5. Properly dispose of all cleaning solution and rinseate according to Federal, State, and local regulations and guidelines.

#### Use Restrictions:

- Do not apply sprayer cleaning solutions or rinseate to sensitive crops.
- Do not store the sprayer overnight or for any extended period of time with **Metribuzin 27% + Sulfentrazone 18% WG** spray solution remaining in the tank, spray lines, spray boom plumbing, spray nozzles, or strainers.
- Do not drain or flush equipment on or near desirable trees or plants.
- Do not contaminate any body of water including irrigation water that may be used on other crops.
- Aerial application is allowed only when environmental conditions prohibit ground application.
- When this product is allowed to be applied by air, applicator must use a minimum finished spray volume of 5 gallons per acre.
- The maximum release height must be 10 feet from the top of the crop canopy, unless greater application height is required for pilot safety.

#### Use Precautions:

- If the sprayer has been stored or left idle, purge the spray boom and nozzles with clean water prior to beginning any application.
- If small quantities of **Metribuzin 27% + Sulfentrazone 18% WG** remain or the mixing, loading or spray equipment have been inadequately cleaned, adverse crop effects to certain crops and other vegetation may result.

### WEEDS CONTROLLED

When applied according to specific crop use directions, **Metribuzin 27% + Sulfentrazone 18% WG** applied alone or in labeled tank mixtures will provide control of the following weeds. See the specific crop section.

BROADLEAVES			
Common Name	Scientific Name	Common Name	Scientific Name
Amaranth, Palmer	<i>Amaranthus Palmeri</i>	Morningglory, Red	<i>Ipomoea coccinea</i>
Amaranth, Spiny	<i>Amaranthus spinosus</i>	Morningglory, Smallflower	<i>Jacquemontia tamnifolia</i>
Anoda, Spurred	<i>Anoda cristata</i>	Morningglory, Tall	<i>Ipomoea purpurea</i>
Beggarweed, Florida	<i>Desmodium tortuosum</i>	Nightshade, Eastern Black	<i>Solanum ptycanthum</i>
Carpetweed	<i>Mollugo verticillata</i>	Nightshade, Hairy	<i>Solanum sarrachoides</i>
Copperleaf, Hophornbeam	<i>Acalypha ostryifolia</i>	Nightshade, Silverleaf	<i>Solanum elaeagnifolium</i>
Croton, Tropic	<i>Croton glandulosus</i>	Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Daisy, American	<i>Eclipta alba</i>	Pigweed, Smooth	<i>Amaranthus hybridus</i>
Galinsoga, Hairy	<i>Galinsoga ciliata</i>	Poorjoe	<i>Diodia teres</i>
Groundcherry, Clammy	<i>Physalis heterophylla</i>	Purslane, Common	<i>Portulaca oleracea</i>
Groundcherry, Cutleaf	<i>Physalis angulata</i>	Senna, Coffee	<i>Cassia occidentalis</i>
Jimsonweed	<i>Datura stramonium</i>	Sida, Prickly (Teaweed)	<i>Sida spinosa</i>
Kochia	<i>Kochia scoparia</i>	Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>
Ladysthumb	<i>Polygonum persicaria</i>	Smell Melon	<i>Cucumis melo</i>
Lambsquarters, Common	<i>Chenopodium album</i>	Spurge, Spotted	<i>Euphorbia maculata</i>
Morningglory, Entireleaf	<i>Ipomoea integriscula</i>	Starbur, Bristly	<i>Acanthospermum hispidum</i>

Morningglory, Ivyleaf	<i>Ipomoea hederacea</i>	Velvetleaf	<i>Abutilon theophrasti</i>
Morningglory, Palmleaf	<i>Ipomoea wrightii</i>	Waterhemp, Common	<i>Amaranthus rudis</i>
Morningglory, Purple	<i>Ipomoea turbinata</i>	Waterhemp, Tall	<i>Amaranthus tuberculatus</i>

#### GRASSES (Suppression Only)

Common Name	Scientific Name	Common Name	Scientific Name
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>	Johnsongrass, Seedling	<i>Sorghum halepense</i>
Crabgrass, Large	<i>Digitaria sanguinalis</i>	Orchardgrass	<i>Dactylis glomerata</i>
Crabgrass, Smooth	<i>Digitaria ischaemum</i>	Panicum, Fall	<i>Panicum dichotomiflorum</i>
Goosegrass	<i>Eleusine indica</i>	Panicum, Texas	<i>Panicum texanum</i>

#### SEDGES\*

Common Name	Scientific Name	Common Name	Scientific Name
Nutsedge, Purple	<i>Cyperus rotundus</i>	Sedge, Annual	<i>Cyperus compressus</i>
Nutsedge, Yellow	<i>Cyperus esculentus</i>		

\*Use rates from Table 2 will provide suppression only.

**For Winter annual weeds, including those listed below, and/or other emerged weeds, add the appropriate rate of carfentrazone-ethyl, 2,4-D, or glyphosate-based product to Metribuzin 27% + Sulfentrazone 18% WG applications.**

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

#### ROTATIONAL CROP GUIDELINES

CROP	INTERVAL (Months)
Corn (Field <sup>1</sup> ), Soybean, Sugarcane, Tomatoes (Transplanted Only)	Anytime
Barley, Wheat	4
Rice	10
Alfalfa, Asparagus, Beans (Dry), Peanuts, Potatoes, Sunflower, Tobacco	12
Cotton <sup>3,5</sup> , Sorghum <sup>2</sup>	12,18
Corn (Sweet <sup>3</sup> ), Any crop not listed <sup>3</sup>	18
Canola <sup>3</sup> , Sugar Beets <sup>3,4</sup>	24

<sup>1</sup>Field Corn includes corn grown for grain, forage or silage, and seed corn.

<sup>2</sup>Sorghum may be planted after 12 months where **Metribuzin 27% + Sulfentrazone 18% WG** was applied at 20 oz./acre or less in the previous cropping season.

<sup>3</sup>Crops that have rotational intervals greater than 12 months after a **Metribuzin 27% + Sulfentrazone 18% WG** application are the result of crop injury concerns.

<sup>4</sup>A rotation interval of 24 months is allowed with a successful Bioassay.

<sup>5</sup>Cotton may be planted after 12 months where **Metribuzin 27% + Sulfentrazone 18% WG** was applied at rates 17 oz./acre or less and meets the following conditions:

- Medium and fine soils
- pH <7.2
- Rainfall or irrigation must exceed 15" after application of **Metribuzin 27% + Sulfentrazone 18% WG** to rotate to cotton.



## CROP - USE DIRECTIONS

### ASPARAGUS

Apply **Metribuzin 27% + Sulfentrazone 18% WG** as a broadcast treatment to crowns established for 1 or more years.

Make application of **Metribuzin 27% + Sulfentrazone 18% WG** in the Spring before the crop and weeds emerge at 12.5 - 33.3 oz./A in 10 - 40 gals. of finished spray per acre. **Metribuzin 27% + Sulfentrazone 18% WG** may be applied with other pesticides registered for use with asparagus.

#### Use Precautions - Asparagus

These crop specific use directions are based upon the active ingredients metribuzin and sulfentrazone, and soil and environmental factors that can affect the product activity on various weeds and tolerance among crops. Observe and follow the instructions in this label. Not all varieties or cultivars of a given crop species have been tested with **Metribuzin 27% + Sulfentrazone 18% WG**. Consult your local University or Extension weed management specialists for additional information on specific local varieties or cultivars and any other applicable information on **Metribuzin 27% + Sulfentrazone 18% WG** under specific local conditions.

#### Use Restrictions - Asparagus

- Do not make application within 14 days before harvest.
- Do not apply by air.
- Do not apply more than 33.3 oz. (0.53 lb. a.i./A metribuzin and 0.37 lb. a.i./A sulfentrazone) per acre per year.
- Do not make more than 1 **Metribuzin 27% + Sulfentrazone 18% WG** application per acre per year.
- Do not apply more than 0.375 lb./A per year of sulfentrazone.
- Do not use on soils classified as sand with less than 1% organic matter.

#### Weeds Controlled - Asparagus

When applied according to directions, **Metribuzin 27% + Sulfentrazone 18% WG** will provide control of:

Amaranth, Palmer	Lambsquarters, Common	Nightshade, Eastern Black	Pigweed, Redroot
Galinsooga, Hairy	Morningglory, Ivyleaf	Nutsedge, Yellow	Pigweed, Smooth

For information on other weeds not listed above, see the **WEEDS CONTROLLED** section in this label.

#### Use Rate Table - Asparagus

Broadcast Rates			
Spring Pre-Emergence Applications			
Soil Texture	Metribuzin 27% + Sulfentrazone 18% WG Oz./Acre (Wt.)		
	Organic Matter		
	Less than 1.5%	1.5 - 3.0%	Over 3.0%
<b>Coarse Soils</b> (sandy loam, loamy sand, sand)	12.5 - 16.7 (0.35 - 0.47)	16.7 - 22.2 (0.47 - 0.63)	22.2 - 28.1 (0.63 - 0.79)
<b>Medium Soils</b> (silt, silty loam, loam, sandy clay, sandy clay loam)	16.7 - 22.2 (0.47 - 0.63)	22.2 - 28.1 (0.63 - 0.79)	28.1 - 33.3 (0.79 - 0.94)
<b>Fine Soils</b> (clay, clay loam, silty clay, silty clay loam)	22.2 (0.63)	28.1 (0.79)	33.3 (0.94)

Use higher rates for soils of pH less than 7.0 and lower rates for pH greater than 7.0 within the rate range.

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## FIELD CORN (Grain, Seed Corn, Forage and Silage)

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### Pre-Plant (Fall Applications)

An application of **Metribuzin 27% + Sulfentrazone 18% WG** may be made in the Fall as a residual treatment before planting corn the following Spring.

**Metribuzin 27% + Sulfentrazone 18% WG** can be used alone or in a tank mixture with other herbicides to control susceptible broadleaves, sedges and grasses in corn. Make application of **Metribuzin 27% + Sulfentrazone 18% WG** in conventional tillage or conservation tillage (reduced tillage or no-tillage) cropping systems using listed application rates. **Metribuzin 27% + Sulfentrazone 18% WG** must be applied to the stubble or soil surface and allow moisture from precipitation to move the product into the soil. **Metribuzin 27% + Sulfentrazone 18% WG** may be tank mixed with other burndown herbicides to control emerged weeds in the Fall or residual soil herbicides that are labeled for Fall use on corn. Select the appropriate **Metribuzin 27% + Sulfentrazone 18% WG** use rate for corn for your soil type and organic matter. Because of the extended period of time between the Fall application and corn planting, select the mid to high **Metribuzin 27% + Sulfentrazone 18% WG** use rate within the listed rate range for the appropriate soil type and organic matter.

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.

### Pre-Plant or Pre-Emergence (Spring Applications)

#### Field Corn

Make application of **Metribuzin 27% + Sulfentrazone 18% WG** at 5 - 22.2 oz./A as a pre-plant or pre-emergence treatment for control or suppression of grass, broadleaf, and sedge weeds including certain herbicide resistant weeds. Make pre-plant applications within 28 days before planting. Make pre-emergence applications from planting up to 3 days after planting, if seedlings have not broken the soil surface and the seed furrow is completely closed. Corn must be planted at least 2" deep. Applications must be made with ground equipment in a minimum of 10 gals. of finished spray per acre or by air in a minimum of 5 gals. of finished spray per acre.

If weeds are present, **Metribuzin 27% + Sulfentrazone 18% WG** must be tank mixed with a burndown herbicide including dicamba, glyphosate, paraquat, carfentrazone-ethyl, or other appropriate pre-plant or pre-emergence herbicides at the labeled rate. See the tank mix partner product labels for specific use directions, weed control claims, precautionary statements, and restrictions. 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.

After an application of **Metribuzin 27% + Sulfentrazone 18% WG** is made, a post-emergence application of atrazine, glyphosate, glufosinate, or other suitable herbicides is advised for season-long weed control. See the tank mix partner product labels for specific use directions, weed control claims, precautionary statements, and restrictions. 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.

Two pre-emergence applications of **Metribuzin 27% + Sulfentrazone 18% WG** may be made to the same crop in split or sequential applications to provide season-long control of difficult-to-control existing or late emerging weeds. Do not exceed the maximum use rate.

#### Pre-Plant Incorporated

A pre-plant incorporated treatment of **Metribuzin 27% + Sulfentrazone 18% WG** may be made in the Spring prior to planting in reduced and conventional tillage corn. **Metribuzin 27% + Sulfentrazone 18% WG** must be shallowly incorporated or mixed thoroughly into the soil to a maximum depth of 2". Incorporating **Metribuzin 27% + Sulfentrazone 18% WG** deeper than 2" may result in inconsistent weed control. Use the specified rate for the soil texture, organic matter, and pH level of the soil. **Metribuzin 27% + Sulfentrazone 18% WG** can be tank mixed with other soil-applied herbicides and insecticides labeled for pre-plant incorporation in corn. Observe all precautions, instructions, and rotational cropping guidelines of each product's label when tank mixing, including all references to potential carryover and crop injury warnings or restrictions.

#### Aerial Application

Use nozzle types and arrangements that will provide optimum coverage while producing a minimal number of fine droplets. Apply sufficient spray volume to achieve adequate coverage. Apply a minimum of 5 gals. of finished spray per acre.

#### Use Precautions - Field Corn

These crop specific use directions are based upon the active ingredients metribuzin and sulfentrazone, and soil and environmental factors that can affect the product activity on various weeds and tolerance

among crops. Observe and follow the instructions in this label. Not all varieties or cultivars of a given crop species have been tested with **Metribuzin 27% + Sulfentrazone 18% WG**. Consult your local University or Extension weed management specialists for additional information on specific local varieties or cultivars and any other applicable information on **Metribuzin 27% + Sulfentrazone 18% WG** under specific local conditions.

#### Use Restrictions - Field Corn

- Do not apply more than 33.3 oz. (0.56 lb. a.i./A metribuzin and 0.37 lb. a.i./A sulfentrazone) per acre of **Metribuzin 27% + Sulfentrazone 18% WG** per year.
- Do not apply more than 0.375 lb./A per year of sulfentrazone.
- Do not apply to coarse soils classified as sand that have less than 1% organic matter.
- Do not apply after crop emerges, or if the seedling is close to the soil surface.
- Do not apply to frozen soils or existing snow cover to prevent **Metribuzin 27% + Sulfentrazone 18% WG** runoff from rain or snowmelt that may occur following application.
- Do not use low-pressure, high-volume hand wand equipment to apply **Metribuzin 27% + Sulfentrazone 18% WG**.
- Do not apply when wind speed favors drift beyond the area intended for treatment.
- Do not mechanically incorporate in the Fall or Spring as this operation can destroy the herbicide barrier allowing weed escapes to occur.

#### Use Rate Table - Field Corn

Broadcast Rates			
Fall, Spring Early Pre-Plant, Pre-Emergence, and Pre-Plant Incorporated Applications			
Soil Texture	Metribuzin 27% + Sulfentrazone 18% WG Oz. by Wt. (Lb. A.I.)/Acre		
	Organic Matter		
	Less than 1.5%	1.5 - 3.0%	Over 3.0%
<b>Coarse Soils</b> (sandy loam, loamy sand, sand)	5.0 - 12.5 (0.14 - 0.35)	8.3 - 12.5 (0.23 - 0.35)	10.4 - 14.6 (0.29 - 0.41)
<b>Medium Soils</b> (silt, silty loam, loam, sandy clay, sandy clay loam)	8.3 - 12.5 (0.23 - 0.35)	10.4 - 16.7 (0.29 - 0.47)	12.5 - 18.8 (0.35 - 0.53)
<b>Fine Soils</b> (clay, clay loam, silty clay, silty clay loam)	10.4 - 14.6 (0.29 - 0.41)	12.5 - 18.8 (0.35 - 0.53)	16.7 - 22.2 (0.47 - 0.63)
Use higher rates for soils of pH less than 7.0 and lower rates for pH greater than 7.0 within the rate range.			

### POTATOES

#### Ground and Aerial Applications

An application of **Metribuzin 27% + Sulfentrazone 18% WG** can be made as a pre-emergence treatment following planting and after drag-off, but before potato emergence. Best results can be obtained if **Metribuzin 27% + Sulfentrazone 18% WG** is applied to the soil surface and either rainfall or overhead irrigation is used to activate the product. If no moisture is received within 7 days after application in areas without irrigation, a shallow incorporation (less than 2") may be needed before weed and potato emergence to activate the product. Select the appropriate use rate based on soil texture and organic matter. For control of weeds that are emerged at the time of application, an appropriate burndown herbicide and adjuvants labeled for potatoes may be tank mixed with to control these weeds. **Metribuzin 27% + Sulfentrazone 18% WG** may be tank mixed with other soil-applied herbicides labeled for use in potatoes to improve weed management and increase weed control spectrum.

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.

Apply **Metribuzin 27% + Sulfentrazone 18% WG** in a minimum of 10 gals. of spray by ground application and 5 gals. of spray by air.

#### Ground and Aerial Application Restriction

- Do not apply **Metribuzin 27% + Sulfentrazone 18% WG** if the potatoes have emerged from the soil as adverse crop response may result.

### Chemigation Applications

An application of **Metribuzin 27% + Sulfentrazone 18% WG** 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 **Metribuzin 27% + Sulfentrazone 18% WG** before potato emergence using sufficient water (0.25 - 0.5" per acre) to provide thorough soil surface coverage, but to avoid runoff of irrigation water. **Metribuzin 27% + Sulfentrazone 18% WG** may be applied with other products labeled for chemigation use in potatoes.

Irrigation with highly alkaline water (high pH) after a **Metribuzin 27% + Sulfentrazone 18% WG** soil application may significantly increase the amount of sulfentrazone available in soil solution. Irrigation with water having a pH greater than 7.5 could result in adverse crop response. This response will ultimately depend on initial **Metribuzin 27% + Sulfentrazone 18% WG** 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 will lessen with advances in the crop growth stage.

### Use Precautions - Potatoes

These crop specific use directions are based upon the active ingredients metribuzin and sulfentrazone, and soil and environmental factors that can affect the product activity on various weeds and tolerance among crops. Observe and follow the instructions in this label. Not all varieties or cultivars of a given crop species have been tested with **Metribuzin 27% + Sulfentrazone 18% WG**. Consult your local University or Extension weed management specialists for additional information on specific local varieties or cultivars and any other applicable information on **Metribuzin 27% + Sulfentrazone 18% WG** under specific local conditions.

Potato varieties may vary in their response to herbicide applications. When using **Metribuzin 27% + Sulfentrazone 18% WG** on an untested variety, always determine the crop tolerance prior to planting. Some potato varieties, including Sangre, Shepody and Snowden, have shown sensitivity to **Metribuzin 27% + Sulfentrazone 18% WG**. Caution must be used when planting these varieties on marginal coarse soils.

### Use Restrictions - Potatoes

- Use of low-pressure, high-volume wand equipment is prohibited.
- Do not use on soils classified as sand that have less than 1% organic matter.
- Do not apply **Metribuzin 27% + Sulfentrazone 18% WG** after potato emergence from the soil as adverse crop response may result.
- Do not apply more than 22.2 oz. (0.37 lb. a.i./A metribuzin and 0.25 lb. a.i./A sulfentrazone) per acre per year.

### Weeds Controlled - Potatoes

When applied according to directions, **Metribuzin 27% + Sulfentrazone 18% WG** will provide control of:

Amaranth, Palmer	Lambsquarters, common	Nightshade, Eastern black	Thistle, Russian
Flaree, redstem	Morningglory, ivyleaf	Pigweed, redroot	Waterhemp, common
Kochia (ALS- and Triazine-Resistant)	Morningglory, tall	Pigweed, smooth	Waterhemp, tall

For information on other weeds not listed above, see the **WEEDS CONTROLLED** section in this label.

### Use Rate Table - Potatoes

Pre-Emergence Applications			
Soil Texture	Metribuzin 27% + Sulfentrazone 18% WG Oz. by Wt. (Lb. A.I.)/Acre		
	Organic Matter		
	Less than 1.5%	1.5 - 3.0%	Over 3.0%
<b>Coarse</b> (sandy loam, loamy sand, sand)	8.3 - 12.5 (0.23 - 0.35)	8.3 - 12.5 (0.23 - 0.35)	12.5 - 16.7 (0.35 - 0.47)
<b>Medium</b> (silt, silty loam, loam, sandy clay, sandy clay loam)	8.3 - 12.5 (0.23 - 0.35)	10.4 - 16.7 (0.29 - 0.47)	14.6 - 18.8 (0.41 - 0.53)
<b>Fine</b> (clay, clay loam, silty clay, silty clay loam)	10.4 - 14.6 (0.29 - 0.41)	12.5 - 16.7 (0.35 - 0.47)	16.7 - 22.2 (0.47 - 0.63)
Use higher rates for soils of pH less than 7.0 and lower rates for pH greater than 7.0 within the rate range.			

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## SOYBEANS (Except California)

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Application of **Metribuzin 27% + Sulfentrazone 18% WG** may be made as a pre-emergence or pre-plant incorporated treatment for the control of weeds in soybeans as described in the following. See the **SOYBEAN TOLERANCE** section for more information.

It is the pesticide user's responsibility to ensure that all products 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.

### Ground Application

Use a boom and nozzle ground sprayer equipped with the appropriate nozzles, spray tips and screens and adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures. Use nozzles that produce minimal number of fine spray droplets to avoid spray drift or inadequate foliar and/or soil coverage. Apply a minimum of 10 gals. of finished spray per acre by ground. Pay attention that overlaps and slower ground speeds while starting, stopping or turning while spraying may result in excessive application and subsequent adverse crop response.

### Ground Application Restriction

- Do not apply when wind speed favors drift beyond the area intended for treatment.

### Aerial Application

Use nozzle types and arrangements that will provide optimum coverage while producing a minimal number of fine droplets. Apply sufficient spray volume to achieve adequate coverage. Apply a minimum of 5 gals. of finished spray per acre.

### Aerial Application Restriction

- Do not apply when wind speed favors drift beyond the area intended for treatment.

### Fall Applications

An application of **Metribuzin 27% + Sulfentrazone 18% WG** may be made as a Fall treatment to the stubble of harvested crops for the burndown of existing vegetation and pre-emergence control of listed weeds the following Spring in no-till and conservation tillage production systems. **Metribuzin 27% + Sulfentrazone 18% WG** can be applied to the stubble of a harvested crop in no-till or to the soil surface of conservation tillage fields after harvest when the sustained soil temperature is 55°F and falling at a soil depth of 4". Make application after September 30th in those areas North of Interstate 90 and after October 15th in those areas North of Interstate 40. To obtain adequate weed control in all areas, soils must have sustained temperature of 55°F or lower. Applications to ridge till production systems must be made after the formation of ridges or beds.

If weeds are emerged at the time of application, use a tank mixture with a suitable burndown herbicide at labeled rates. It is the pesticide user's responsibility to ensure that all products 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. Fall applied burndown treatments must be made with a minimum of 15 gals. per acre to achieve adequate coverage of the weeds being treated. Spray volume must be increased where weed density is high or heavy crop residue levels are present. When making burndown applications to emerged weeds, the addition of adjuvants including crop oil concentrate (COC) or methylated seed oil (MSO) to the spray mixture can be used for burndown activity of the application. If weeds are present at time of **Metribuzin 27% + Sulfentrazone 18% WG** application, apply with appropriate burndown herbicides for improved control of existing weeds. See the product labels for use rates and instructions. For **Metribuzin 27% + Sulfentrazone 18% WG** application rates, refer to **Use Rate Table 1 - Soybeans (Standard Rate Programs)** and **Use Rate Table 2 - Soybeans (Reduced Rate Programs)**.

### Spring Applications

#### Early Pre-Plant

An application of **Metribuzin 27% + Sulfentrazone 18% WG** may be made up to 30-45 days prior to planting (early pre-plant) in no-till or minimum till cropping systems.

For applications earlier than 30 days prior to planting, the high rate in the rate range may be needed for extended residual control. **Metribuzin 27% + Sulfentrazone 18% WG** provides limited burndown of small weeds. Application of **Metribuzin 27% + Sulfentrazone 18% WG** as an early pre-plant treatment must be made in combination with the appropriate burndown herbicide including glyphosate, glufosinate, gramoxone, and/or 2,4-D to achieve acceptable control of existing weeds during application. The addition of crop oil concentrate at 1 quart per acre or non-ionic surfactant at 0.25% will increase the burndown effectiveness of **Metribuzin 27% + Sulfentrazone 18% WG**. For **Metribuzin 27% + Sulfentrazone 18% WG** application rates, see **Use Rate Table 1 - Soybeans (Standard Rate Programs)** and **Use Rate Table 2 - Soybeans (Reduced Rate Programs)**.

### Pre-Plant Incorporated

An application of **Metribuzin 27% + Sulfentrazone 18% WG** may be made pre-plant incorporated prior to planting soybeans. **Metribuzin 27% + Sulfentrazone 18% WG** may be applied alone or in combination with other pre-plant incorporated herbicides labeled for soybeans. Do not incorporate deeper than 2". Improper soil incorporation may result in erratic weed control and/or crop injury. **Metribuzin 27% + Sulfentrazone 18% WG** may be followed by treatment with labeled post-emergence soybean herbicides for increased control of grass and broadleaf weeds. Always follow the most restrictive label when tank mixing. For **Metribuzin 27% + Sulfentrazone 18% WG** application rates, see the **Use Rate Table 1 - Soybeans (Standard Rate Programs)** and **Use Rate Table 2 - Soybeans (Reduced Rate Programs)**.

### Pre-Emergence

An application of **Metribuzin 27% + Sulfentrazone 18% WG** can be made from 30 days prior to planting and up to 3 days after planting, but before the crop seed germinate to prevent injury to emerging crop seedlings. **Metribuzin 27% + Sulfentrazone 18% WG** applied after crop emergence will cause severe injury to the crop.

An application of **Metribuzin 27% + Sulfentrazone 18% WG** can be made alone or in combination with other labeled soybean herbicides for pre-emergence grass control. **Metribuzin 27% + Sulfentrazone 18% WG** can be applied pre-emergence following the use of a pre-plant incorporated grass herbicide labeled for use on soybeans. If weeds are present when applying **Metribuzin 27% + Sulfentrazone 18% WG**, make application with appropriate burndown herbicides for improved control of existing weeds. See the product labels for use rates and instructions. Properly closed planter seed furrows are required prior to the **Metribuzin 27% + Sulfentrazone 18% WG** application to avoid crop injury. For **Metribuzin 27% + Sulfentrazone 18% WG** application rates, see the **Use Rate Table 1 - Soybeans (Standard Rate Programs)** and **Use Rate Table 2 - Soybeans (Reduced Rate Programs)**.

**Metribuzin 27% + Sulfentrazone 18% WG** may be tank mixed with other products containing metribuzin as long as the total seasonal amount of metribuzin is not exceeded. 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.

### Reduced Rate Metribuzin 27% + Sulfentrazone 18% WG Programs Followed By Post-Emergence Herbicide Treatments (Use Rate Table 2)

An application of **Metribuzin 27% + Sulfentrazone 18% WG** 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. **Metribuzin 27% + Sulfentrazone 18% WG** may also be followed by a post-emergence application of a glyphosate product to glyphosate tolerant soybeans. Make application at the specified application rate of **Metribuzin 27% + Sulfentrazone 18% WG** for suppression of weeds in glyphosate tolerant soybeans, maintaining control with sequential applications of registered post-emergence herbicides. See the partner product labels for specific use directions, weed control claims, precautionary statements, and restrictions.

### Replanting Instructions

If initial planting of soybeans fails to produce a stand due to adverse environmental conditions, only soybeans may be replanted in fields treated with **Metribuzin 27% + Sulfentrazone 18% WG** when used according to directions in Soybean section. Do not retreat field with a second application of **Metribuzin 27% + Sulfentrazone 18% WG** or crop injury may result unless specifically allowed in other sections of the label. Do not replant treated fields with any crop at intervals that are inconsistent with the **ROTATIONAL CROP GUIDELINES** found on this label for **Metribuzin 27% + Sulfentrazone 18% WG**. When specified tank mix combinations are used, consult the product label for replanting and recropping instructions and observe the directions that are the most restrictive. 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.

## SOYBEAN TOLERANCE

**Metribuzin 27% + Sulfentrazone 18% WG** has been tested on a number of soybean cultivars, but it has not been tested on all soybean varieties. The vast majority of cultivars tested when used according to label guidelines have demonstrated tolerance to **Metribuzin 27% + Sulfentrazone 18% WG**. A limited number of soybean cultivars have shown some level of injury when used according to label guidelines and must not be planted when a **Metribuzin 27% + Sulfentrazone 18% WG** program is planned.

### Use Restrictions - Soybeans

- DO NOT use **Metribuzin 27% + Sulfentrazone 18% WG** on the following soybean varieties:  
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.

For further information regarding soybean tolerance to a **Metribuzin 27% + Sulfentrazone 18% WG** treatment, consult University or Extension weed management specialists for additional information on specific local varieties or cultivars and any other applicable information on **Metribuzin 27% + Sulfentrazone 18% WG** under specific local conditions before making applications with this product.

### Use Precautions - Soybeans

If cool/cold weather or heavy rainfall occurs immediately after an application of **Metribuzin 27% + Sulfentrazone 18% WG**, soybean stunting or stand loss could occur. Yields have not been affected where early season stunting has occurred. Injury to soybeans can also result under the following conditions:

1. excessive rate for soil type,
2. boom overlap,
3. improper sprayer calibration,
4. error in mixing procedures,
5. when soils have a calcareous surface area or pH greater than 7.5,
6. soil incorporation deeper than specified,
7. when applied with organophosphate pesticides,
8. when heavy rains occur after application, especially in poorly drained areas,
9. when soybeans are planted less than 1 ½ inches deep,
10. on any soil with less than 0.5% organic matter.

### Use Restrictions - Soybeans

- Do not apply **Metribuzin 27% + Sulfentrazone 18% WG** after soybeans have emerged. Severe injury will occur when **Metribuzin 27% + Sulfentrazone 18% WG** applications are made after soybean emergence.
- Do not apply more than 20 oz. (0.34 lb. a.i./A metribuzin and 0.23 lb. a.i./A sulfentrazone) per acre of **Metribuzin 27% + Sulfentrazone 18% WG** per year.
- Do not apply more than 0.375 lb./A per year of sulfentrazone.
- Do not make application of **Metribuzin 27% + Sulfentrazone 18% WG** after soybeans have emerged.
- Do not apply to soils classified as sand that have less than 1% organic matter.
- Do not apply **Metribuzin 27% + Sulfentrazone 18% WG** to frozen soil.
- Do not incorporate deeper than 2 inches.
- Do not graze treated soybean or harvest for forage or hay.

Use Rate Table 1 - Soybeans (Standard Rate Programs)

Broadcast Rates		
Fall, Early Pre-Plant, Pre-Plant Incorporated, Pre-Emergence Conservation or Conventional Tillage		
Soil Texture	Metribuzin 27% + Sulfentrazone 18% WG Oz. by Wt. (Lb. A.I.)/Acre <sup>1</sup>	
	Organic Matter <sup>2</sup>	
	1.0 - 2.0%	2.0 - 4.0%
<b>Coarse Soils</b> (sandy loam, loamy sand, sand)	12.0 - 14.0 (0.34 - 0.39)	14.0 - 16.0 (0.39 - 0.45)
<b>Medium Soils</b> (silt, silty loam, loam, sandy clay, sandy clay loam)	14.0 - 16.0 (0.39 - 0.45)	16.0 - 18.0 (0.45 - 0.51)
<b>Fine Soils</b> (clay, clay loam, silty clay, silty clay loam)	16.0 - 18.0 (0.45 - 0.51)	18.0 - 20.0 (0.51 - 0.56)

<sup>1</sup>Use the higher rate for suppression of grasses and sedges within the rate range.

<sup>2</sup>Do not apply to soils with less than 1% organic matter.

Adverse crop response can occur on soils with pH greater than 7.5. To reduce adverse crop response, use a maximum of 12 oz. of **Metribuzin 27% + Sulfentrazone 18% WG** on soils with pH greater than 7.5.

Use Rate Table 2 - Soybeans (Reduced Rate Programs)

Broadcast Rates		
Fall, Early Pre-Plant, Pre-Plant Incorporated, Pre-Emergence Conservation or Conventional Tillage (Reduced Rates for the Suppression of Weeds Listed to Reduce Early Season Weed Competition in Glyphosate and Glufosinate Tolerant Soybean Systems)		
Soil Texture	Metribuzin 27% + Sulfentrazone 18% WG Oz. by Wt. (Lb. A.I.)/Acre <sup>1</sup>	
	Organic Matter <sup>2</sup>	
	1.0 - 2.0%	2.0 - 4.0%
<b>Coarse Soils</b> (sandy loam, loamy sand, sand)	8.0 (0.23)	8.0 - 10.0 (0.23 - 0.28)
<b>Medium Soils</b> (silt, silty loam, loam, sandy clay, sandy clay loam)	8.0 - 10.0 (0.23 - 0.28)	10.0 - 12.0 (0.28 - 0.34)
<b>Fine Soils</b> (clay, clay loam, silty clay, silty clay loam)	10.0 - 12.0 (0.28 - 0.34)	12.0 - 14.0 (0.34 - 0.39)
<sup>1</sup> 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 within the rate range. <sup>2</sup> Do not apply to soils with less than 1% organic matter.  Adverse crop response can result 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.		

## SUGARCANE

An application of **Metribuzin 27% + Sulfentrazone 18% WG** may be made to sugarcane as a pre-emergence treatment at planting or lay-by timing.

### Planting Time Application

An application of **Metribuzin 27% + Sulfentrazone 18% WG** 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 rate within the listed rate range on clay soils and/or soils with organic matter content higher than 2%. Apply either by air in a minimum of 5 gals. of spray per acre or by ground equipment in a minimum of 10 gals. of spray per acre. An application of **Metribuzin 27% + Sulfentrazone 18% WG** may be made with other herbicides registered for use in sugarcane.

For application made by air, minimize spray drift to sensitive non-target crops, apply **Metribuzin 27% + Sulfentrazone 18% WG** at a minimum upwind distance of 400 ft. from sensitive plants.

### Use Restrictions - Sugarcane

- Do not apply within 120 days before harvest.
- Do not apply more than 33 oz. (0.56 lb. a.i./A metribuzin and 0.37 lb. a.i./A sulfentrazone) per acre of **Metribuzin 27% + Sulfentrazone 18% WG** per year.
- Do not apply more than 0.375 lb./A of sulfentrazone per year.
- Do not apply more than 2 lbs. ai/acre of metribuzin per year.
- Do not graze treated sugarcane or harvest for forage or hay.
- Use of low-pressure and high-volume hand wand equipment is prohibited.



## Use Rate Table - Sugarcane

Broadcast Rates		
Planting Time and Lay-by Applications		
Soil Texture	Metribuzin 27% + Sulfentrazone 18% WG Oz. by Wt. (Lb. A.I.)/Acre	
	Organic Matter	
	1.0 - 2.0%	2.0 - 4.0%
<b>Coarse Soils</b> (sandy loam, loamy sand, sand)	16.0 - 20.0 (0.45 - 0.56)	20.0 - 26.0 (0.56 - 0.73)
<b>Medium Soils</b> (silt, silty loam, loam, sandy clay, sandy clay loam)	20.0 - 26.0 (0.56 - 0.73)	26.0 - 30.0 (0.73 - 0.84)
<b>Fine Soils</b> (clay, clay loam, silty clay, silty clay loam)	26.0 - 30.0 (0.73 - 0.84)	30.0 - 33.0 (0.84 - 0.93)
Use higher rates for soils of pH less than 7.0 and lower rates for pH greater than 7.0 within the rate range.		

## TOMATOES (Transplanted Only)

### Pre-Plant Incorporated (PPI)

An application of **Metribuzin 27% + Sulfentrazone 18% WG** may be made pre-plant incorporated (1" - 2" deep) as a broadcast application. Application must be made prior to transplanting.

### Use Precautions - Tomatoes

These crop specific use directions are based upon the active ingredients metribuzin and sulfentrazone, and soil and environmental factors that can affect the product activity on various weeds and tolerance among crops. Observe and follow the instructions in this label. Not all varieties or cultivars of a given crop species have been tested with **Metribuzin 27% + Sulfentrazone 18% WG**. Consult your local University or Extension weed management specialists for additional information on specific local varieties or cultivars and any other applicable information on **Metribuzin 27% + Sulfentrazone 18% WG** under specific local conditions.

### Use Restrictions - Tomatoes

- Do not apply more than 20 oz. (0.34 lb. a.i./A metribuzin and 0.23 lb. a.i./A sulfentrazone) of **Metribuzin 27% + Sulfentrazone 18% WG** per acre per year.
- 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 post-emergence applications of other herbicides containing metribuzin to transplanted tomatoes within 14 days of applying **Metribuzin 27% + Sulfentrazone 18% WG**.
- Do not use on soils classified as sand that have less than 1% organic matter.
- Do not make application by air.

### Weeds Controlled - Tomatoes

When applied according to directions, **Metribuzin 27% + Sulfentrazone 18% WG** will provide control of:

Galinsoga	Morningglory, Ivyleaf	Nutsedge, Yellow	Waterhemp, Common
Lambsquarters, Common	Nightshade, Eastern Black	Pigweed, Redroot	Waterhemp, Tall

Use Rate Table - Tomatoes

Broadcast Rates			
Pre-Plant Incorporated Applications (PPI)			
Soil Texture	Metribuzin 27% + Sulfentrazone 18% WG Oz. (Lb. A.I.)/Acre		
	Organic Matter		
	Less than 1.5%	1.5 - 3.0%	Over 3.0%
<b>Coarse Soils</b> (sandy loam, loamy sand, sand)	6.0 - 8.0 (0.17 - 0.23)	8.0 - 16.0 (0.23 - 0.45)	16.0 - 20.0 (0.45 - 0.56)
<b>Medium Soils</b> (silt, silty loam, loam, sandy clay, sandy clay loam)	8.0 - 12.0 (0.23 - 0.34)	16.0 (0.45)	20.0 (0.56)
<b>Fine Soils</b> (clay, clay loam, silty clay, silty clay loam)	8.0 - 16.0 (0.23 - 0.45)	16.0 - 20.0 (0.45 - 0.56)	20.0 (0.56)
Use higher rates for soils of pH less than 7.0 and lower rates for pH greater than 7.0 within the rate range.			

## NON-CROP - USE DIRECTIONS

### MIXING & LOADING INSTRUCTIONS – NON-CROP AREAS

Spray equipment must be clean and free of existing pesticide residue before **Metribuzin 27% + Sulfentrazone 18% WG** is applied. Follow the spray tank cleanout procedures listed on the label of product previously applied before adding **Metribuzin 27% + Sulfentrazone 18% WG** to the tank.

#### Metribuzin 27% + Sulfentrazone 18% WG - Applied Alone

- Select the application rate from the appropriate section.
- Fill the spray tank with ¼ the volume of water required for the treatment area.
- While agitating, open the container and add the specified amount of **Metribuzin 27% + Sulfentrazone 18% WG** for area being treated, measuring directly into the spray tank.
- Allow product to fully disperse, and then add the remaining spray water.
- Maintain agitation during filling, mixing and application.
- Apply the **Metribuzin 27% + Sulfentrazone 18% WG** spray mixture immediately after mixing.

#### Surfactants or Adjuvants

The use of surfactants is NOT advised. The use of surfactants or adjuvants with **Metribuzin 27% + Sulfentrazone 18% WG** may cause temporary discoloration of some turf types. High temperatures or high relative humidity may increase this risk.

#### Tank Mix Combinations with Metribuzin 27% + Sulfentrazone 18% WG

- Select the application rate for **Metribuzin 27% + Sulfentrazone 18% WG** 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.

#### Tank Mix Compatibility

**Metribuzin 27% + Sulfentrazone 18% WG** is compatible for use with most fungicides, herbicides, insecticides, growth regulators, liquid fertilizers and spray adjuvants that are commonly used in turf management. Conduct a compatibility test for new combination mixtures by mixing the appropriate amount of all tank mix ingredients in a jar before mixing in the spray tank. Shake the mixture in the jar vigorously and then allow to stand for 5 to 10 minutes. If the mixture fails to re-suspend when shaken or exhibits rapid precipitation, this indicates poor compatibility and the ingredients must not be applied together in tank mixture.

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

- Fill the spray tank with approximately  $\frac{1}{4}$  the volume of water required for the treatment area.
- While agitating, open the bottle and add the specified amount of **Metribuzin 27% + Sulfentrazone 18% WG** 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 water-soluble products, adjuvants and/or carrier
- Add water as necessary.
- Maintain agitation during filling, mixing and application.
- Apply **Metribuzin 27% + Sulfentrazone 18% WG** spray mixture immediately after mixing.
- Do not store the spray tank overnight or for any extended period of time with **Metribuzin 27% + Sulfentrazone 18% WG** 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. 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. Tank mixture recommendations are only for use in states where the tank mixture product and application site are registered. Certain states or geographical regions may have established dose rate limitations. Consult your State Pesticide Control Agency for additional information regarding the maximum use rates.

#### **Application Equipment - Ground**

**Power Sprayers:** properly calibrate equipment before spraying and make application following labeled use directions. The use of marker dyes and foams can improve accuracy in application. For broadcast applications, boom sprayers that are equipped with flat fan nozzles, tips and screens are ideal. Powers sprayers that are fitted with spray wand/gun may be used for broadcast application. The equipment must be properly calibrated and care must be used in application. Power sprayers with spray wand/gun may be used for spot treatments.

**Hand-Operated Sprayers:** Backpack and compression sprayers may be used for small turfgrass areas and spot treatments. Wands that are fitted with flat fan nozzle tips must be held stationary and at the proper height during application. Side-to-side motion may result in uneven coverage.

Make application of this product in a sufficient spray volume of carrier solution that provides uniform spray distribution – typically 20 to 175 gals. per acre (0.5 – 4.0 gals./1,000 ft.2) and spray pressure adjusted to 20 to 40 PSI.

#### **SPRAY EQUIPMENT CLEAN-OUT – NON-CROP AREAS**

**As soon as possible after applying Metribuzin 27% + Sulfentrazone 18% WG and before using sprayer equipment for any other applications, thoroughly clean sprayer equipment following the procedure below:**

1. Thoroughly drain spray tank, hoses, and spray boom.
2. Rinse the inside of the spray tank with clean water to remove sediment and residues.
3. Flush sprayer hoses, boom and nozzles with clean water.
4. Fill the tank  $\frac{1}{2}$  full with clean water, and add tank mix cleaner or ammonia (follow manufacturer's directions for use). Fill the tank to capacity and operate the sprayer for 15 minutes to flush hoses, boom, and nozzles.
5. To ensure thorough cleaning of the spray tank, leave the cleaning solution in the tank, hoses, spray booms and spray nozzles overnight or during storage.
6. Before using the sprayer, drain the spray equipment. Rinse the tank with clean water and flush through the hoses, boom, and nozzles. Clean spray tips and screens separately with the tank mix cleaner or ammonia solution.
7. Dispose of all cleaning solution and rinsate in accordance with Federal, State, and local regulations and guidelines.

#### **Use Restrictions:**

- Do not drain or flush spray equipment or rinsate on or near desirable trees or plants.
- Do not contaminate any body of water, including irrigation water that may be used on other crops.

#### Use Precautions:

- If the sprayer has been stored or left idle, purge the spray boom and nozzles with clean water before starting any application.
- If equipment is not cleaned properly, residue of **Metribuzin 27% + Sulfentrazone 18% WG** can remain in spray equipment, and may be released during subsequent applications potentially causing adverse crop response to certain crops and other vegetation.

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## INDUSTRIAL VEGETATION MANAGEMENT

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### RIGHTS-OF-WAY

#### Railroad

**Metribuzin 27% + Sulfentrazone 18% WG** may be used for vegetation management to control weeds and maintain bare ground on railroad rights-of-way, railroad yards, railroad crossings, and railroad bridge abutments.

#### Highway, Roadside, Pipeline, and Utilities

**Metribuzin 27% + Sulfentrazone 18% WG** may be used to control weeds and maintain bare ground on highway, roadside, pipeline, and utilities rights-of-way. These areas include, guard rails; road shoulders, electric utility substations, pipeline pumping stations, areas around electric transmission towers, and areas around distribution line poles.

#### Fence Rows, Industrial Areas and other Non-Crop Sites

**Metribuzin 27% + Sulfentrazone 18% WG** may be used to control weeds and maintain bare ground along fence rows, in industrial areas including production facilities, tank farms, storage areas, parking areas, lumber yards, airports and military installations.

#### Application Information

**Metribuzin 27% + Sulfentrazone 18% WG** may be used for residual control of germinating weeds in listed non-crop areas as a broadcast spray application of 9.5 to 14.4 oz. (0.16 – 0.24 lb. a.i./A metribuzin and 0.11 – 0.16 lb. a.i./A sulfentrazone) per acre in a minimum of 10 gals. of spray volume. Applications by helicopter are permitted on railroad rights-of-way only.

A burndown herbicide including glyphosate, glyphosate-trimesium, diquat, 2,4-D, or dicamba may be used in tank mix with **Metribuzin 27% + Sulfentrazone 18% WG**. 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.

#### Application Restriction

- Do not make application of **Metribuzin 27% + Sulfentrazone 18% WG** to sandy soils with less than 1% organic matter.

#### Application Timing

For best product performance, apply **Metribuzin 27% + Sulfentrazone 18% WG** alone or in tank mix with other herbicides for residual control of weeds in later Summer, Fall or early Spring to allow for sufficient moisture to activate product in the soil. 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.

#### Weeds Controlled - IVM

When applied at 10 to 30 oz./A (0.17 – 0.51 lb. a.i./A metribuzin and 0.11 – 0.34 lb. a.i./A sulfentrazone), **Metribuzin 27% + Sulfentrazone 18% WG** will control the following weeds in non-crop areas. To extend the length of control, use the higher labeled use rate. For soils that are fine-texture and for soils that have greater than 2% organic matter, use the higher use rate. Do not exceed the maximum use rate.

Common Name	Scientific Name
Beggarweed, Florida	<i>Desmodium tortuosum</i>
Carpetweed	<i>Mollugo verticillata</i>
Chickweed, Common	<i>Stellaria media</i>
Copperleaf, Hophornbeam	<i>Acalypha ostryifolia</i>
Crabgrass Species	<i>Digitaria spp.</i>
Croton, Tropic	<i>Croton glandulosus</i>
Daisy, American	<i>Coreopsis grandiflora</i>
Dayflower, Virginia	<i>Commelina virginica</i>
Dock, Curl	<i>Rumex crispus</i>
Fixweed	<i>Descurainia Sophia</i>
Galinsoya, Hairy	<i>Galinsoya ciliate</i>
Groundcherry, Clammy (Seedling)	<i>Physalis heterophylla</i>
Groundcherry, Cutleaf	<i>Physalis angulate</i>
Jimsonweed	<i>Datura stramonium</i>
Kochia	<i>Kochia scoparia</i>
ALS-/Triazine-Resistant Kochia	<i>Kochia scoparia</i>
Lambsquarters, Common	<i>Chenopodium album</i>
Lettuce, Wild	<i>Lactuca virosa</i>
Mallow, Common	<i>Malva neglecta</i>
Milkweed, Honeyvine	<i>Ampelamus albidus</i>
Mexicanweed	<i>Caperonia castanifolia</i>
Morningglory Species	<i>Ipomoea spp.</i>
Mustard Species	<i>Brassica spp.</i>
Nightshade Species	<i>Solanum spp.</i>
Nutsedge Species	<i>Cyperus spp.</i>
Palmer Amaranth	<i>Amaranthus palmeri</i>
Pigweed, Smooth	<i>Amaranthus hybridus</i>
Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Texasweed	<i>Caperonia palustris</i>
Thistle, Russian	<i>Salsola iberica</i>
Waterhemp, Tall	<i>Amaranthus tuberculatus</i>
Waterhemp, Common	<i>Amaranthus rudis</i>

## TURF

**Metribuzin 27% + Sulfentrazone 18% WG** is a dry flowable product that contains 0.45 lb. active ingredient per pound (0.27 lb. a.i. metribuzin and 0.18 lb. a.i. sulfentrazone) and works by weed roots and shoot uptake. **Metribuzin 27% + Sulfentrazone 18% WG** may be used in turf as a selective herbicide to control annual grass weeds and broadleaf weeds in established turf areas, including residential and institutional lawns, athletic fields, golf course roughs, and fairways.

### Application Information

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. Dispose of excess pesticide, spray mixtures or rinsates properly.

Application Restriction

- 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.

WEED CONTROL IN TURFGRASS

Use Directions - Turf

**Metribuzin 27% + Sulfentrazone 18% WG** may be used on bermudagrass, centipedegrass, and zoysiagrass that are well established.

Use Precautions - Turf

- Temporary discoloration of turfgrass has been observed when the active ingredient trinexapac-ethyl is used in tank mixture or application is made within 7 days of **Metribuzin 27% + Sulfentrazone 18% WG**. Application of the active ingredient trinexapac-ethyl must be made 7 days before or 7 days after application of **Metribuzin 27% + Sulfentrazone 18% WG** to reduce the risk of discoloration.
- Turfgrass injury may result from treatment of this product on stands of grass that have not been well established or are otherwise under some form of stress (caused by weather, disease, chemical, mechanical or other factors).

Use Restrictions - Turf

- Do not make application to golf course putting greens or tees or turf areas of closely mowed turf.
- Do not make application to turfgrasses that are not listed on this label.
- Do not make application under conditions that would allow spray to drift onto desirable plants in adjacent areas.
- Do not make application with surfactants, unless there is previous experience and demonstrated compatibility, safety and tolerance with the chosen combination.
- Do not graze or feed livestock forage that is cut from treated areas.
- Do not make application directly to or within root zones of trees, landscape ornamental plants or ornamental beds.

Applied as directed and under the timing and conditions described, established turfgrasses are tolerant to **Metribuzin 27% + Sulfentrazone 18% WG** at the use rate range of 6 to 30 oz. per acre (0.10 – 0.51 lb. a.i./A metribuzin and 0.07 – 0.34 lb. a.i./A sulfentrazone) or 0.138 to 0.689 oz. per 1,000 ft.<sup>2</sup>.

Use Rate in Tolerant Grasses

Grass Type*	Single Application		
	Lb. A.i./Acre	Oz./1,000 ft. <sup>2</sup>	Oz./Acre
Warm Season Grasses			
Bermudagrass (Cynodon dactylon) and hybrids Centipedegrass (Eremochloa ophiuroides)** Zoysiagrass (Zoysia japonica)**	0.10 - 0.51 lb. a.i./A metribuzin and 0.07 - 0.34 lb. a.i./A sulfentrazone	0.138 - 0.689	6 - 30

\***Metribuzin 27% + Sulfentrazone 18% WG** has shown tolerance for the turfgrasses listed; however, it is impossible to test all varieties and cultivars, therefore it is advised that for newly released cultivars or varieties a small area is tested before treatment of the larger area to be treated.

\*\*Applications made with **Metribuzin 27% + Sulfentrazone 18% WG** may cause temporary discoloration to exposed leaf surfaces on certain cultivars or varieties of centipede or zoysiagrass. The treated turfgrass will start new growth and recover. Leaf tissue that is discolored will be removed by mowing. To decrease the potential for discoloration, do not make application of **Metribuzin 27% + Sulfentrazone 18% WG** on turfgrass that is under conditions of stress (caused by weather, disease, chemical, mechanical means or other related factors). Implement proper cultural practices including proper mowing height, sufficient moisture, and fertility to promote healthy turfgrass growth.

## POST-EMERGENCE CONTROL

### Broadleaf Weeds: Annual, Biennial, and Perennial

**Metribuzin 27% + Sulfentrazone 18% WG** will provide control or suppression of the weeds listed below when application is made to newly emerged weeds. Make application at 6 to 30 oz. per acre (0.10 – 0.51 lb. a.i./A metribuzin and 0.07 – 0.34 lb. a.i./A sulfentrazone) or 0.138 – 0.689 oz. per 1,000 ft.2. Do not exceed the maximum use rate.

**Metribuzin 27% + Sulfentrazone 18% WG** may be tank mixed with other herbicide products labeled for post-emergence use to broaden weed spectrum and increase performance on certain weed species.

The control of emerged annual grass weeds may be increased by mixing **Metribuzin 27% + Sulfentrazone 18% WG** with MSMA or quinclorac. 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. Follow all label restrictions, use directions, precautions and restrictions before using this product in tank mixture. Refer to the **Tank Mix Compatibility** section of this label for additional information.

### Weeds Controlled or Suppressed – Turf

Common Name	Scientific Name
Bedstraw, Catchweed	<i>Galium aparine</i>
Beggarweed, Florida	<i>Desmodium tortuosum</i>
Bittercress	<i>Cardamine</i> spp.
Black Medic	<i>Medicago lupulina</i>
Buttercups	<i>Ranunculus</i> spp.
Carolina Geranium	<i>Geranium carolinianum</i>
Carpetweed	<i>Mollugo verticillata</i>
Chickweed, Common	<i>Stellaria media</i>
Chickweed, Mouse Ear	<i>Cerastium vulgatum</i>
Cinquefoil	<i>Potentilla</i> spp.
Clover	<i>Trifolium</i> spp.
Copperleaf	<i>Acalypha</i> spp.
Cudweed	<i>Gnaphalium</i> spp.
Dandelion	<i>Taraxacum officinale</i>
Dock, Curly	<i>Rumex crispus</i>
Dollarweed	<i>Hydrocotyle umbellata</i>
Eclipta	<i>Eclipta prostrata</i>
Evening Primrose	<i>Oenothera biennis</i>
Fiddleneck	<i>Amsinckia</i> spp.
Filaree	<i>Erodium</i> spp.
Galinsoja	<i>Galinsoja ciliata</i>
Goldenrod	<i>Solidago</i> spp.
Ground Ivy	<i>Glechoma hederacea</i>
Groundsel, Common	<i>Senecio vulgaris</i>
Henbit	<i>Lamium amplexicaule</i>
Knawel	<i>Scleranthus annuus</i>
Knotweed, Prostrate	<i>Polygonum aviculare</i>
Kochia	<i>Kochia scoparia</i>
Lambsquarters, Common	<i>Chenopodium album</i>
Lawn Burweed (Spurweed)	<i>Soliva pterosperma</i>
Lespedeza, Common	<i>Lespedeza striata</i>
Mallow, Common	<i>Malva neglecta</i>
Parsley Piert	<i>Alchemilla arvensis</i>
Pigweed, Smooth	<i>Amaranthus hybridus</i>

Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Pigweed, Tumble	<i>Amaranthus albus</i>
Pineapple Weed	<i>Matricaria matricarioides</i>
Plantain, Buckhorn	<i>Plantago lanceolata</i>
Puncture Weed	<i>Tribulus terrestris</i>
Purslane, Common	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Redweed	<i>Melochia corchorifolia</i>
Rocket, London	<i>Sisymbrium irio</i>
Shepherd's Purse	<i>Capsella bursa-pastoris</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Sorrel, Red	<i>Rumex acetosella</i>
Speedwell	<i>Veronica spp.</i>
Spurge (Annuals)	<i>Euphorbia spp.</i>
Spurge, Prostrate	<i>Euphorbia humistrata</i>
Spurge, Spotted	<i>Euphorbia maculata</i>
Star Of Bethlehem	<i>Ornithogalum umbellatum</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Violet, Wild	<i>Viola pratensis</i>
Violet, Johnny-Jump-Up	<i>Viola rafinesquii</i>
Wild Garlic	<i>Allium vineale</i>
Wild Onion	<i>Allium canadense</i>
Woodsorrel, Creeping	<i>Oxalis corniculata</i>
Woodsorrel, Yellow	<i>Oxalis stricta</i>

## POST-EMERGENCE CONTROL

### Annual and Perennial Sedges

**Metribuzin 27% + Sulfentrazone 18% WG** will provide control or suppression of the sedges listed in the table below when application is made at 6 to 30 oz. per acre (0.10 – 0.51 lb. a.i./A metribuzin and 0.07 – 0.34 lb. a.i./A sulfentrazone) or 0.138 to 0.689 oz. per 1,000 ft.2. Make application at the highest labeled use rate appropriate for the turfgrass. Consult the **Tolerant Grasses** table for plant safety information. Do not exceed the maximum use rate. Rates that are below 16 oz. per acre (0.27 lb. a.i./A metribuzin and 0.18 lb. a.i./A sulfentrazone) or 0.367 oz. per 1,000 ft.2 will typically provide control of sedges for up to 60 days. A rate of 16 oz. per acre (0.27 lb. a.i./A metribuzin and 0.18 lb. a.i./A sulfentrazone) or 0.367 oz. per 1,000 ft.2 will provide approximately 70% control for up to 60 days. Yellow nutsedge (*Cyperus esculentus*) is the most susceptible species.

For optimum product performance, good spray coverage is essential. Temporary discoloration of some turfgrass species may result from use of a surfactant. Use of surfactants is not advised.

### Sedges – Control or Suppression

Common Name	Scientific Name
Kyllinga, Green	<i>Kyllinga brevifolia</i>
Kyllinga, False Green	<i>Kyllinga gracillima</i>
Nutsedge, Purple*	<i>Cyperus rotundus</i>
Nutsedge, Yellow	<i>Cyperus esculentus</i>
Sedge, Globe	<i>Cyperus globulosus</i>
Sedge, Cyllindric	<i>Cyperus retrorsus</i>
Sedge, Surinam	<i>Cyperus surinamensis</i>
Sedge, Texas	<i>Cyperus polystachyos</i>

\*Nutsedge, purple – to provide optimum control, split applications are advised (see **SPLIT APPLICATIONS** table below). Make initial application at 8 to 11 oz. per acre followed by a second application when active growth of purple nutsedge is visible. Do not exceed maximum use rate per acre (see **Tolerant Grasses** table).



SPLIT APPLICATIONS		
Grass Type*	Treatment Option 1 (Oz./Acre)	Treatment Option 2 (Oz./Acre)
Warm Season Grasses (see <b>Tolerant Grasses</b> table)	<b>Initial Application:</b> 8 oz. (0.14 lb. a.i./A metribuzin and 0.09 lb. a.i./A sulfentrazone)  <b>Follow-up application 35 days after initial treatment:</b> 8 oz.	<b>Initial Application:</b> 11 oz. (0.19 lb. a.i./A metribuzin and 0.12 lb. a.i./A sulfentrazone)  <b>Follow-up application 35 days after initial treatment:</b> 8 to 11 oz.

#### Grass Weeds – Control or Suppression

Common Name	Scientific Name
Annual Bluegrass	<i>Poa annua</i>
Crabgrass	<i>Digitaria spp.</i>
Dallisgrass	<i>Paspalum dilatatum</i>
Goosegrass	<i>Eleusine indica</i>
Sandbur	<i>Cenchrus spp.</i>

#### STORAGE AND DISPOSAL

**DO NOT** contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Store product in original container only, away from fertilizer, food or feed. Store in a cool, dry place and avoid excess heat.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. 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:

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill or by other procedures approved by State and local authorities. For Metal Containers, 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.

**IN CASE OF SPILL:** Avoid contact, isolate area and keep out animals and unprotected persons. Confine spills.

**TO CONFINE SPILL:** If liquid, dike surrounding area or absorb with sand, cat litter, or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

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