METRIBUZIN	GROUP	5	HERBICIDE
SULFENTRAZONE	GROUP	14	HERBICIDE

Metsul

For Use on Asparagus, Field Corn (Grain, Seed Corn, Forage and Silage), Potato, Soybeans, Sugarcane, Tomato, Turf, and IVM

ACTIVE INGREDIENTS:	**WT. BY %**
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-1H-1,2,4-triazol-1-yl]phenyl]methanesulfonamide	18.0%
OTHER INGREDIENTS:	55.0%
TOTAL:	**100.0%**

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

KEEP OUT OF REACH OF CHILDREN

CAUTION

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

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for further treatment advice.
IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF INHALED:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for further treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at **1-800-222-1222**.	

See label booklet for complete Precautionary Statements, Directions For Use, and Storage and Disposal.

The Registrant Intends That This Product Be Used Only By Individuals/Firms Certified as Licensed Pesticide Applicators.

Manufactured For:

Sharda USA LLC
7217 Lancaster Pike, Suite A
Hockessin, Delaware 19707

EPA Reg. No.: 83529-112
EPA Est. No.: 11773-IA-001

Net Contents: 12 Lbs.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Wear long-sleeved shirt, long pants, socks, and shoes.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- 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:

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

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.

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: Metsul can contaminate surface water through spray drift. Under some conditions, **Metsul** 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

Metsul 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 triazolinone 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 **Metsul** 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 **Metsul** 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 should 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 should 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 two applications of this or 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 Sharda USA 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

Metsul is a dry flowable formulation to be mixed with water and sprayed for selective pre-emergence or pre-plant incorporated weed control in asparagus, field corn (grain, seed corn, forage and silage), potato, soybeans, sugarcane, and transplanted tomatoes. When applied according to the instructions on this label, **Metsul** will control listed broadleaf, and sedge weeds, and provide grass suppression.

The mode of action of **Metsul** involves uptake by weed roots and shoots. Pre-emergence and pre-plant incorporated applications of **Metsul** require rainfall or irrigation to activate the herbicide. The amount of rainfall or irrigation required for activation following application depends on existing soil moisture, organic matter content and soil texture. If adequate moisture (½" to 1") is not received within 7 to 10 days after the **Metsul** treatment, a shallow cultivation may be needed to obtain desired weed control. When sufficient moisture is received after dry conditions, **Metsul** will provide control of susceptible germinating weeds.

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

Metsul is labeled for use on asparagus, field corn (grain, seed corn, forage, and silage), potato, soybeans, sugarcane, and transplanted tomatoes. DO NOT use on any other crops.

Utilize a boom and nozzle sprayers equipped with the appropriate nozzles, and screens, and adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures. Utilize nozzles that produce minimal amounts of fine spray droplets to avoid spray drift or inadequate foliar and soil coverage. Apply a minimum of 10 gallons of finished spray per acre. Be aware that overlaps and slower ground speeds while starting, stopping, or turning while spraying may result in excessive application and subsequent response.

Sprayer must be accurately calibrated before application. Check sprayer when applying to be sure it is working properly.

Water or liquid fertilizer must be used as the carrier for **Metsul**, when applied alone, or when tank mixed with other soybean or sugarcane herbicides. A jar test for compatibility of liquid fertilizer and **Metsul** tank mix is advised if the compatibility of the liquid fertilizer and **Metsul** 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.

Continuous agitation when applying is required. Do not overlap. Shut off spray booms while turning, slowing, or stopping, as over application may result. Do not store the sprayer overnight or for any extended period of time with the **Metsul** spray mixture remaining in the tank.

SOYBEAN TOLERANCE

Metsul 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 **Metsul**. 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 **Metsul** program is planned.

Do not use **Metsul** 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 **Metsul** treatment, consult University or Extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on **Metsul** under specific local conditions before applying product.

If cool/cold weather or heavy rainfall occurs immediately following an application of **Metsul**, soybean stunting or stand loss could occur. Yields have not been affected where early season stunting has occurred. Injury to soybeans can also occur 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.

SPRAY DRIFT MANAGEMENT

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

Avoid spraying in windy conditions with sustained winds above 10 mph which is conducive to spray drift. Do not exceed spray pressures of 40 PSI unless specified by the manufacturer of drift reducing spray tips and nozzles.

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

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

1. The distance of the outermost nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45°.
3. Observe the regulations of the State where applications are made if they are more stringent requirements than on this label.
4. Applicators must observe and abide by the requirements of the **SPRAY DRIFT MANAGEMENT**.

Droplet Size Information

Reduce drift potential by applying droplets of size >150 - 200 microns. The optimum drift management strategy is to apply the largest droplets that will provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. Applying larger droplets reduces drift potential, but will not prevent drift when applications are made improperly, or under unfavorable environmental conditions (see **Wind**, **Temperature and Humidity**, and **Temperature Inversions**).

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

Off-Target Movement of Metsul

Drift of spray mixtures containing **Metsul** 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. **Metsul** can cause significant symptomology by drift onto sensitive crops and other plants. This symptomology may manifest initially as discreet, localized spots where contacted by **Metsul** 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 **Metsul** onto unintended crops or plants, irrespective of severity, constitutes misapplication of this product. Sharda USA LLC accepts no responsibility or liability for potential crop effects that may result from such misapplication of **Metsul**.

BAND TREATMENT APPLICATIONS

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

$\frac{\text{Band Width (Inches)}}{\text{Row Width (Inches)}}$	X	Broadcast Rate Per Acre	=	Band Rate
$\frac{\text{Band Width (Inches)}}{\text{Row Width (Inches)}}$	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. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

It is important that spray equipment is clean and free of existing pesticide deposits before **Metsul** is applied. Follow the spray tank cleanout procedures specified on the label of product previously applied before adding **Metsul** to the tank.

For best 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 **Metsul** in a spray tank with anything other than clean water (fertilizer, previous herbicide mixtures, etc.), **Metsul** must be slurried in a separate container with clean water before being added to the spray tank.

Slowly add the slurry to the spray tank. Carefully rinse the slurry container, adding the rinsate to the spray tank. Complete filling the spray tank to the desired level. Continuous spray tank agitation is required at all times to maintain a uniform spray solution. Refer to the **Use Rate Table 1 - Soybeans (Standard Rate Programs)** or **Use Rate Table 2 - Soybeans (Reduced Rate Programs)** for the proper application rate. Make sure **Metsul** is thoroughly mixed before 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. Provided the jar test indicates the mixture 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.

Apply **Metsul** spray mixtures immediately after mixing. Do not store mixture. Do not store the sprayer overnight or for any extended period for time with **Metsul** spray mixture remaining in the tank. If **Metsul** 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 **Metsul** and before using sprayer equipment for any other applications, the sprayer must be thoroughly cleaned to avoid potential crop effects using the following procedure. Residues left in mixing equipment, spray tanks, hoses, spray booms and nozzles can cause 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 **Metsul** as required on the other product labels.

1. Drain sprayer tank, hoses, spray boom and spray nozzles. Use a high-pressure detergent wash to remove physical sediment and residues from the inside of the sprayer tank and thoroughly rinse. Then, thoroughly flush sprayer hoses, spray boom and spray nozzles with a clean water rinse. Remove and clean spray nozzles and all filters and screens (tank, spray hose and spray tips) separately in the ammonia solution of 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 sufficient cleaning solution to allow the operation of the spray system for a minimum of 15 minutes to thoroughly flush hoses, spray boom and spray 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, spray booms and spray nozzles overnight or during storage.
4. Before using the sprayer, completely drain the sprayer system. Rinse the tank with clean water and flush through the hoses, spray boom, and spray 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 rinsate in accordance with Federal, State, and local regulations and guidelines.

Do not apply sprayer cleaning solutions or rinsate to sensitive crops.

Do not store the sprayer overnight or for any extended period of time with **Metsul** spray solution remaining in the tank, spray lines, spray boom plumbing, spray nozzles, or strainers.

If the sprayer has been stored or idle, purge the spray boom and nozzles with clean water before beginning any application.

Should small quantities of **Metsul** remain in inadequately cleaned mixing, loading and/or spray equipment, they may be released during subsequent applications potentially causing effects to certain crops and other vegetation. Sharda USA LLC accepts no liability for any effects due to inadequately cleaned equipment.

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.

WEEDS CONTROLLED

When applied in accordance with the product application information and the specific crop use directions, **Metsul** applied alone or in specified tank mixtures will provide control of the following weeds. Refer to the specific crop section.

BROADLEAVES			
Common Name	**Scientific Name**	**Common Name**	**Scientific Name**
Amaranth, Palmer	*Amaranthus Palmeri*	Morningglory, Red	*Ipomoea coccinea*
Amaranth, Spiny	*Amaranthus spinosus*	Morningglory, Smallflower	*Jacquemontia tamnifolia*
Anoda, Spurred	*Anoda cristata*	Morningglory, Tall	*Ipomoea purpurea*
Beggarweed, Florida	*Desmodium tortuosum*	Nightshade, Eastern Black	*Solanum ptycanthum*
Carpetweed	*Mollugo verticillata*	Nightshade, Hairy	*Solanum sarrachoides*
Copperleaf, Hophornbeam	*Acalypha ostryifolia*	Nightshade, Silverleaf	*Solanum elaeagnifolium*
Croton, Tropic	*Croton glandulosus*	Pigweed, Redroot	*Amaranthus retroflexus*
Daisy, American	*Eclipta alba*	Pigweed, Smooth	*Amaranthus hybridus*
Galinsoga, Hairy	*Galinsoga ciliata*	Poorjoe	*Diodia teres*
Groundcherry, Clammy	*Physalis heterophylla*	Purslane, Common	*Portulaca oleracea*
Groundcherry, Cutleaf	*Physalis angulata*	Senna, Coffee	*Cassia occidentalis*
Jimsonweed	*Datura stramonium*	Sida, Prickly (Teaweed)	*Sida spinosa*
Kochia	*Kochia scoparia*	Smartweed, Pennsylvania	*Polygonum pensylvanicum*
Ladysthumb	*Polygonum persicaria*	Smell Melon	*Cucumis melo*
Lambsquarters, Common	*Chenopodium album*	Spurge, Spotted	*Euphorbia maculata*
Morningglory, Entireleaf	*Ipomoea integriuscula*	Starbur, Bristly	*Acanthospermum hispidum*
Morningglory, Ivyleaf	*Ipomoea hederacea*	Velvetleaf	*Abutilon theophrasti*
Morningglory, Palmleaf	*Ipomoea wrightii*	Waterhemp, Common	*Amaranthus rudis*
Morningglory, Purple	*Ipomoea turbinata*	Waterhemp, Tall	*Amaranthus tuberculatus*
GRASSES (Suppression Only)			
Common Name	**Scientific Name**	**Common Name**	**Scientific Name**
Broadleaf Signalgrass	*Brachiaria platyphylla*	Johnsongrass, Seedling	*Sorghum halepense*
Crabgrass, Large	*Digitaria sanguinalis*	Orchardgrass	*Dactylis glomerata*
Crabgrass, Smooth	*Digitaria ischaemum*	Panicum, Fall	*Panicum dichotomiflorum*
Goosegrass	*Eleusine indica*	Panicum, Texas	*Panicum texanum*
SEDGES*			
Common Name	**Scientific Name**	**Common Name**	**Scientific Name**
Nutsedge, Purple	*Cyperus rotundus*	Sedge, Annual	*Cyperus compressus*
Nutsedge, Yellow	*Cyperus esculentus*		
*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 Metsul applications.			
Common Name	**Scientific Name**	**Common Name**	**Scientific Name**
Chickweed, Common	*Stellaria media*	Mustard spp.	*Brassica* spp.
Deadnettle, Purple	*Lamium purpureum*	Prickly Lettuce	*Lactuca serriola*
Field Pennycress	*Thlaspi arvense*	Shepherd's Purse	*Capsella bursa pastoris*
Henbit	*Lamium amplexicaule*	Speedwell spp.	*Veronica* spp.
Marestail	*Hippuris vulgaris*	Virginia Pepperweed	*Lepidium virginicum*

ROTATIONAL CROP GUIDELINES

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

[1]Field Corn includes corn grown for grain, forage or silage, and seed corn.
[2]Sorghum may be planted after 12 months where **Metsul** was applied at 20 oz./acre or less in the previous cropping season.
[3]Crops that have rotational intervals greater than 12 months after a **Metsul** application are the result of crop injury concerns.
[4]A rotation interval of 24 months is allowed with a successful Bioassay.
[5]Cotton may be planted after 12 months where **Metsul** 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 **Metsul** to rotate to cotton.

CROP - USE DIRECTIONS

ASPARAGUS

Metsul is applied as a broadcast treatment to crowns established for one or more years.

Make treatment in the spring before the crop and weeds emerge. Apply **Metsul** at 12.5 - 33.3 oz. by weight per acre in 10 - 40 gallons of finished spray per acre. **Metsul** may be applied with other pesticides registered for use with asparagus.

Use Precautions - Asparagus
These crop specific use directions are based upon the interactive effects of **Metsul** (metribuzin and sulfentrazone) and the primary soil and environmental factors, which affect its activity on various weed species and tolerance among crops. The user is required to observe the instructions and guidance previously presented under any section of this label pertinent to the anticipated crop use. It is important to note that not all varieties or cultivars of a given crop species have been evaluated under treatment with **Metsul**. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on **Metsul** under specific local conditions.

Use Restrictions - Asparagus

- Do not apply within 14 days before harvest.
- Aerial application is prohibited.
- Do not apply more than 33.3 oz. (0.53 lb. a.i./A metribuzin and 0.37 lb. a.i./A sulfentrazone) by weight per acre per 12-month period.
- Do not make more than one **Metsul** application per acre per 12-month period. The 12-month period is considered to begin upon the initial **Metsul** application.
- Do not apply more than 0.375 lb./A per year of sulfentrazone from all sources.
- Do not use on soils classified as sand that have less than 1% organic matter.

Weeds Controlled - Asparagus
When applied according to directions, **Metsul** will provide control of:

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

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

Use Rate Table - Asparagus

Broadcast Rates			
Spring Pre-Emergence Applications			
Soil Texture	**Metsul Oz./Acre (Wt.)**		
	Organic Matter		
	Less than 1.5%	**1.5 - 3.0%**	**Over 3.0%**
Coarse Soils (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)
Medium Soils (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)
Fine Soils (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.			

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

Pre-Plant (Fall Applications)

An application of **Metsul** may be made in the fall as a residual treatment before corn planting the following spring.

Metsul can be used alone or in a tank mixture with other herbicides to control susceptible broadleaves, sedges and grasses in corn. Apply **Metsul** in conventional tillage or conservation tillage (reduced tillage or no-tillage) cropping systems using rates specified. **Metsul** must be applied to the stubble or soil surface and allow moisture from rainfall or snow to move the product into the soil. **Metsul** 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 correct **Metsul** use rate for corn for your soil type and organic matter. Due to the extended period of time between the fall application and corn planting, the use rate of **Metsul** must be the mid to high rate within the 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. 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 **Metsul** at 5 - 22.2 oz./A as a pre-plant or pre-emergence treatment 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 shall be made with ground equipment in a minimum of 10 gallons of finished spray per acre or by aerial application in a minimum of 5 gallons of finished spray per acre.

If weeds are present, **Metsul** 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 proper labeled rate. Refer to 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. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

After an application of **Metsul** is made, a post-emergence application of atrazine, glyphosate, glufosinate, or other suitable herbicides is advised for season-long weed control. Refer to 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. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

An application of **Metsul** may be applied more than once pre-emergence 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

An application of **Metsul** may be made as a pre-plant incorporated treatment in the spring before planting in reduced and conventional tillage corn. **Metsul** must be shallowly incorporated or mixed thoroughly into the soil to a maximum depth of 2" using a correctly adjusted implement including a field cultivator, field finisher or disk harrow. Incorporating **Metsul** deeper than 2" may result in inconsistent weed control. Use the appropriate rate for the soil texture, organic matter, and pH level of the soil. **Metsul** 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 amount of fine droplets. Apply sufficient spray volume to achieve adequate coverage. Apply a minimum of 5 gallons of finished spray per acre.

Use Precautions - Field Corn

These crop specific use directions are based upon the interactive effects of **Metsul** (metribuzin and sulfentrazone) and the primary soil and environmental factors, which affect its activity on various weed species and tolerance among crops. The user is required to observe the instructions and guidance previously presented under all sections of this label. It is important to note that not all varieties or cultivars of a given crop species have been evaluated under treatment with **Metsul**. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on **Metsul** 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) by weight per acre of **Metsul** per 12-month period. The 12-month period is considered to begin upon the initial **Metsul** application.
- Do not apply more than 0.375 lb./A per year of sulfentrazone from all sources.
- 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 **Metsul** runoff from rain or snowmelt that may occur following application.
- Do not use low-pressure and high volume hand wand equipment to apply **Metsul**.
- 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	**Metsul Oz. by Wt. (Lb. A.I.)/Acre**		
	Organic Matter		
	Less than 1.5%	**1.5 - 3.0%**	**Over 3.0%**
Coarse Soils (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)
Medium Soils (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)
Fine Soils (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 aerial application of **Metsul** can be made as a pre-emergence treatment following planting and after drag-off, but before potato emergence. Optimum performance can be achieved if **Metsul** 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 following 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 emerged weeds at the time of the **Metsul** application, an appropriate burndown herbicide and adjuvants labeled for potatoes may be tank mixed with to control these weeds. **Metsul** 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. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Apply **Metsul** in a minimum of 10 gallons of spray by ground application and 5 gallons of spray by air.

Ground and Aerial Application Restriction

- Do not apply **Metsul** if the potatoes have emerged from the soil as undesirable crop response may occur.

Chemigation Applications

An application of **Metsul** may be made to potatoes through sprinkler irrigation systems including center pivot, lateral move, end tow, solid set or hand move irrigation systems. Apply **Metsul** 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. **Metsul** may be applied with other products labeled for chemigation use in potatoes.

Irrigation with highly alkaline water (high pH) following a **Metsul** 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 **Metsul** 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 interactive effects of **Metsul** (sulfentrazone) and the primary soil and environmental factors, which affect its activity on various weed species and tolerance among crops. The user is required to observe the instructions and guidance previously presented under any other section of this label pertinent to the anticipated crop use. It is important to note that not all varieties or cultivars of a given crop species have been evaluated under treatment with **Metsul**. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on **Metsul** under specific local conditions.

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

Use Restrictions - Potatoes

- Use of low-pressure and high volume wand equipment is prohibited.
- Do not use on soils classified as sand that have less than 1% organic matter.
- Do not apply **Metsul** after potato emergence from the soil as undesirable crop response may occur.
- Do not apply more than 22.2 oz. (0.37 lb. a.i./A metribuzin and 0.25 lb. a.i./A sulfentrazone) by weight per acre per 12-month period. The 12-month period is considered to begin upon the initial **Metsul** application.

Weeds Controlled - Potatoes

When applied according to directions, **Metsul** will provide control of:

Amaranth, Palmer	Lambsquarters, Common	Nightshade, Eastern Black	Thistle, Russian
Filaree, 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, refer to **WEEDS CONTROLLED** section in this label.

Use Rate Table - Potatoes

Pre-Emergence Applications			
Soil Texture	**Metsul Oz. by Wt. (Lb. A.I.)/Acre**		
	Organic Matter		
	Less than 1.5%	**1.5 - 3.0%**	**Over 3.0%**
Coarse (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)
Medium (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)
Fine (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.			

SOYBEANS
(Except California)

Metsul may be applied as a pre-emergence or pre-plant incorporated treatment for the control of weeds in soybeans as described in the following. Refer to 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

Utilize 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. Utilize nozzles that produce minimal amounts 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. Be aware that overlaps and slower ground speeds while starting, stopping or turning while spraying may result in excessive application and subsequent 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 amount 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 **Metsul** may be made as a fall treatment to the stubble of harvested crops for the burndown of existing vegetation and pre-emergence control of labeled weeds the following spring in no-till and conservation tillage production systems. **Metsul** 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". Apply 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, utilize 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 gallons per acre to achieve adequate coverage of the weeds being treated. Gallonage 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 **Metsul** application, apply with appropriate burndown herbicides for improved control of existing weeds. Refer to product labels for use rates and instructions. For **Metsul** 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 **Metsul** may be made up to 30-45 days before planting (early pre-plant) in no-till or minimum till cropping systems.

For applications earlier than 30 days before planting, the high rate in the rate range may be needed for extended residual control. **Metsul** provides limited burndown of small weeds. Applying **Metsul** to early pre-plant must be applied 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 **Metsul**. For **Metsul** application rates, refer to **Use Rate Table 1 - Soybeans (Standard Rate Programs)** and **Use Rate Table 2 - Soybeans (Reduced Rate Programs)**.

Pre-Plant Incorporated

An application of **Metsul** may be made pre-plant incorporated before planting soybeans. **Metsul** 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. **Metsul** may be followed by labeled post-emergence soybean herbicides for increased control of grass and broadleaf weeds. Always follow the most restrictive label when tank mixing. For **Metsul** application rates, refer to **Use Rate Table 1 - Soybeans (Standard Rate Programs)** and **Use Rate Table 2 - Soybeans (Reduced Rate Programs)**.

Pre-Emergence

An application of **Metsul** can be made from 30 days before planting and up to 3 days after planting, but before the crop seed germinate to prevent injury to emerging crop seedlings. **Metsul** applied after crop emergence will cause severe injury to the crop.

An application of **Metsul** can be made alone or in combination with other labeled soybean herbicides for pre-emergence grass control. **Metsul** 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 **Metsul**, make application with appropriate burndown herbicides for improved control of existing weeds. Refer to product labels for use rates and instructions. Properly closed planter seed furrows are required before the **Metsul** application to avoid crop injury. For **Metsul** application rates, refer to **Use Rate Table 1 - Soybeans (Standard Rate Programs)** and **Use Rate Table 2 - Soybeans (Reduced Rate Programs)**.

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

Reduced Rate Metsul Programs Followed By Post-Emergence Herbicide Treatments (Use Rate Table 2)

An application of **Metsul** 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. **Metsul** may also be followed by a post-emergence application of a glyphosate product to glyphosate tolerant soybeans. Make application to the specified application rate of **Metsul** for suppression of weeds in glyphosate tolerant soybeans, maintaining control with sequential applications of registered post-emergence herbicides. Refer to 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 **Metsul** when used according to directions in **SOYBEANS** section. Do not retreat field with a second application of **Metsul** or crop injury may occur 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 **Metsul**. 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. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Use Restrictions - Soybeans

- Do not apply **Metsul** after soybeans have emerged. Severe injury will occur when **Metsul** 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) by weight per acre of **Metsul** per 12-month season. The 12-month period is considered to begin upon the initial **Metsul** application.
- Do not apply more than 0.375 lb./A per year of sulfentrazone from all sources.
- Do not make application of **Metsul** after soybeans have emerged.
- Do not apply to soils classified as sand that have less than 1% organic matter.
- Do not apply **Metsul** to frozen soil.
- Do not incorporate deeper than 2 in.
- 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	**Metsul Oz. by Wt. (Lb. A.I.)/Acre[1]**	
	Organic Matter[2]	
	1.0 - 2.0%	**2.0 - 4.0%**
Coarse Soils (sandy loam, loamy sand, sand)	12.0 - 14.0 (0.34 - 0.39)	14.0 - 16.0 (0.39 - 0.45)
Medium Soils (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)
Fine Soils (clay, clay loam, silty clay, silty clay loam)	16.0 - 18.0 (0.45 - 0.51)	18.0 - 20.0 (0.51 - 0.56)

[1]Use the higher rate for suppression of grasses and sedges within the rate range.
[2]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 **Metsul** 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	**Metsul Oz. by Wt. (Lb. A.I.)/Acre[1]**	
	Organic Matter[2]	
	1.0 - 2.0%	**2.0 - 4.0%**
Coarse Soils (sandy loam, loamy sand, sand)	8.0 (0.23)	8.0 - 10.0 (0.23 - 0.28)
Medium Soils (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)
Fine Soils (clay, clay loam, silty clay, silty clay loam)	10.0 - 12.0 (0.28 - 0.34)	12.0 - 14.0 (0.34 - 0.39)

[1]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.
[2]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 the minimum rate for the appropriate % organic matter and soil texture on soils with pH greater than 7.5.

SUGARCANE

An application of **Metsul** may be made to sugarcane as a pre-emergence treatment at planting or lay-by timing.

Planting Time Application
An application of **Metsul** 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 rate range on clay soils and/or soils with organic matter content higher than 2%. Apply either by air in a minimum of 5 gallons of spray per acre or by ground equipment in a minimum of 10 gallons of spray per acre. An application of **Metsul** may be made with other herbicides registered for use in sugarcane.

For aerial application, and to assure that spray does not adversely affect adjacent sensitive non-target crops, apply **Metsul** 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 **Metsul** per 12-month season. The 12-month period is considered to begin upon the initial **Metsul** application.
- Do not apply more than 0.375 lb./A per year of sulfentrazone from all sources
- 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	**Metsul Oz. by Wt. (Lb. A.I.)/Acre**	
	Organic Matter	
	1.0 - 2.0%	**2.0 - 4.0%**
Coarse Soils (sandy loam, loamy sand, sand)	16.0 - 20.0 (0.45 - 0.56)	20.0 - 26.0 (0.56 - 0.73)
Medium Soils (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)
Fine Soils (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 **Metsul** may be made pre-plant incorporated (1" - 2" deep) as a broadcast application. Applications must be made before transplanting.

Use Precautions - Tomatoes
These crop specific use directions are based upon the interactive effects of **Metsul** (metribuzin and sulfentrazone) and the primary soil and environmental factors, which affect its activity on various weed species and tolerance among crops. The user is required to observe the instructions and guidance previously presented under all sections of this label. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on **Metsul**.

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 **Metsul** per acre per 12-month period. The 12-month period is considered to begin upon the initial **Metsul** application.
- Do not make application of more than 0.375 lb. a.i. of sulfentrazone or 1.0 lb. a.i. of metribuzin per cropping year.
- Do not make post-emergence applications of other herbicides containing metribuzin to transplanted tomatoes within 14 days of applying **Metsul**.
- Do not use on soils classified as sand that have less than 1% organic matter.
- Aerial application is prohibited.

Weeds Controlled - Tomatoes
When applied according to directions, **Metsul** 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	**Metsul Oz.(Lb.A.I.)/Acre**		
	Organic Matter		
	Less than 1.5%	**1.5 - 3.0%**	**Over 3.0%**
Coarse Soils (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)
Medium Soils (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)
Fine Soils (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.			

INDUSTRIAL VEGETATION MANAGEMENT RIGHTS-OF-WAY

Railroad

Metsul 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

Metsul may be used to control weeds and maintain bare ground on highway, roadside, pipeline, and utilities rights-of-way. These areas include, but are not limited to: guard rails, road shoulders, electric utility substations, pipeline pumping stations, areas around electric transmission towers, areas around distribution line poles and in other areas where complete vegetation control is needed.

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

Metsul 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, military installations, and in similar non-crop sites where complete vegetation control is needed.

Application Information

Metsul may be used for residual control of germinating weeds in non-crop areas as a broadcast 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 gallons of spray solution. 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 mixture with **Metsul**. 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.

Application Restriction

- Do not apply **Metsul** to sandy soils with less than 1% organic matter.

Application Timing

For optimum product performance, make application of **Metsul** 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. 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 – 30 oz. per acre (0.17 – 0.51 lb. a.i./A metribuzin and 0.11 – 0.34 lb. a.i./A sulfentrazone), **Metsul** 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	*Desmodium tortuosum*
Carpetweed	*Mollugo verticillata*
Chickweed, Common	*Stellaria media*
Copperleaf, Hophornbeam	*Acalypha ostryifolia*
Crabgrass Species	*Digitaria* spp.
Croton, Tropic	*Croton glandulosus*
Daisy, American	*Coreopsis grandiflora*
Dayflower, Virginia	*Commelina virginica*
Dock, Curly	*Rumex crispus*
Fixweed	*Descurainia Sophia*
Galinsoga, Hairy	*Galinsoga ciliate*
Groundcherry, Clammy (Seedling)	*Physalis heterophylla*
Groundcherry, Cutleaf	*Physalis angulate*
Jimsonweed	*Datura stramonium*
Kochia	*Kochia scoparia*
ALS-/Triazine-Resistant Kochia	*Kochia scoparia*
Lambsquarters, Common	*Chenopodium album*
Lettuce, Wild	*Lactuca virosa*
Mallow, Common	*Malva neglecta*
Milkweed, Honeyvine	*Ampelamus albidus*
Mexicanweed	*Caperonia castanifolia*
Morningglory Species	*Ipomoea* spp.
Mustard Species	*Brassica* spp.
Nightshade Species	*Solanum* spp.
Nutsedge Species	*Cyperus* spp.
Palmer Amaranth	*Amaranthus palmeri*
Pigweed, Smooth	*Amaranthus hybridus*
Pigweed, Redroot	*Amaranthus retroflexus*
Texasweed	*Caperonia palustris*
Thistle, Russian	*Salsola iberica*
Waterhemp, Tall	*Amaranthus tuberculatus*
Waterhemp, Common	*Amaranthus rudis*

TURF

Metsul is a dry flowable formulation 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 uptake of the product through the weed roots and shoots. **Metsul** may be used in turf as a selective herbicide to control annual grass weeds and broadleaf weeds in established turf areas, including but not limited to: 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 wells or wells that are properly capped and does not apply to impervious pads or mixing/loading areas that are properly diked.

MIXING & LOADING INSTRUCTIONS – Non-Crop Areas

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

Metsul - 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 **Metsul** 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 **Metsul** spray mixture immediately after mixing.

Surfactants or Adjuvants

The use of surfactants is NOT advised. The use of surfactants or adjuvants with Metsul may cause temporary discoloration of some turf types. High temperatures or high relative humidity may increase this risk.

Tank Mix Combinations with Metsul

- Select the application rate for **Metsul** 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. 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

Metsul is compatible with most fungicides, herbicides, insecticides, growth regulators, liquid fertilizers and spray adjuvants that are commonly used in turf management. When preparing a new tank mixture combination, conduct a compatibility test 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 ¼ the volume of water required for the treatment area.
- While agitating, open the bottle and add the specified amount of **Metsul** 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 **Metsul** spray mixture immediately after mixing.
- Do not store the spray tank overnight or for any extended period for time with **Metsul** spray mixture remaining in the tank.

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. 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: For uniform and accurate coverage of spray, 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 gallons per acre (0.5 to 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 Metsul 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 ½ 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.

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.

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 **Metsul** can remain in spray equipment, and may be released during subsequent applications potentially causing adverse crop response to certain crops and other vegetation. Sharda USA LLC accepts no liability for any effects due to equipment that is not cleaned properly.

WEED CONTROL IN TURFGRASS

Use Directions - Turf

Metsul may be used on bermudagrass, centipedegrass, and zoysiagrass that are well established.

Use Precautions - Turf

- Temporary discoloration of turfgrass has been observed when Primo is used in tank mixture or application is made within 7 days of **Metsul.** Application of Primo must be made 7 days before or 7 days after application of **Metsul** 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 which would allow spray to drift on to 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 **Metsul** 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.^{2}.

Use Rate in Tolerant Grasses

Grass Type*	Single Application		
	Lb. A.I./Acre	Oz./1,000 ft.^{2}	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

*__Metsul__ 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 **Metsul 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 **Metsul** 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

The application of **Metsul** 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 to 0.689 oz. per 1,000 ft.^{2}). Do not exceed the maximum use rate.

Metsul 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 **Metsul** with MSMA or Drive®. 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. Read and follow the **Tank Mix Compatibility** section of this label for additional information.

Weeds Controlled or Suppressed – Turf

Common Name	Scientific Name
Bedstraw, Catchweed	*Galium aparine*
Beggarweed, Florida	*Desmodium tortuosum*
Bittercress	*Cardamine* spp.
Black Medic	*Medicago lupulina*
Buttercups	*Ranunculus* spp.
Carolina Geranium	*Geranium carolinianum*
Carpetweed	*Mollugo verticillata*
Chickweed, Common	*Stellaria media*
Chickweed, Mouse Ear	*Cerastium vulgatum*
Cinquefoil	*Potentilla* spp.
Clover	*Trifolium* spp.
Copperleaf	*Acalypha* spp.
Cudweed	*Gnaphalium* spp.
Dandelion	*Taraxacum officinale*
Dock, Curly	*Rumex crispus*
Dollarweed	*Hydrocotyle umbellata*
Eclipta	*Eclipta prostrate*
Evening Primrose	*Oenothera biennis*
Fiddleneck	*Amsinckia* spp.
Filaree	*Erodium* spp.
Galinsoga	*Galinsoga ciliate*
Goldenrod	*Solidago* spp.
Ground Ivy	*Glechoma hederacea*
Groundsel, Common	*Senecio vulgaris*
Henbit	*Lamium amplexicaule*
Knawel	*Scleranthus annuus*
Knotweed, Prostrate	*Polygonum aviculare*
Kochia	*Kochia scoparia*
Lambsquarters, Common	*Chenopodium album*
Lawn Burweed (Spurweed)	*Soliva pterosperma*
Lespedeza, Common	*Lespedeza striata*
Mallow, Common	*Malva neglecta*
Parsley Piert	*Alchemilla arvensis*
Pigweed, Smooth	*Amaranthus hybridus*
Pigweed, Redroot	*Amaranthus retroflexus*
Pigweed, Tumble	*Amaranthus albus*
Pineapple Weed	*Matricaria matricarioides*
Plantain, Buckhorn	*Plantago lanceolate*
Puncture Weed	*Tribulus terrestris*
Purslane, Common	*Portulaca oleracea*
Pusley, Florida	*Richardia scabra*
Redweed	*Melochia corchorifolia*
Rocket, London	*Sisymbrium irio*
Shepherd's Purse	*Capsella bursa-pastoris*
Smartweed, Pennsylvania	*Polygonum pensylvanicum*
Sorrel, Red	*Rumex acetosella*

Continued

Weeds Controlled or Suppressed – Turf (*cont.*)

Speedwell	*Veronica* spp.
Spurge (Annuals)	*Euphorbia* spp.
Spurge, Prostrate	*Euphorbia humistrata*
Spurge, Spotted	*Euphorbia maculate*
Star Of Bethlehem	*Ornithogalum umbellatum*
Velvetleaf	*Abutilon theophrasti*
Violet, Wild	*Viola pratincola*
Violet, Johnny-Jump-Up	*Viola rafinesquii*
Wild Garlic	*Allium vineale*
Wild Onion	*Allium canadense*
Woodsorrel, Creeping	*Oxalis corniculata*
Woodsorrel, Yellow	*Oxalis stricta*

POST-EMERGENCE CONTROL

Annual and Perennial Sedges

Metsul will provide control or suppression of the sedges listed in the table below when applied 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 rate appropriate for the turfgrass listed. 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 occur from use of a surfactant. Use of surfactants is not advised.

Sedges – Control or Suppression

Common Name	Scientific Name
Kyllinga, Green	*Kyllinga brevifolia*
Kyllinga, False Green	*Kyllinga gracillima*
Nutsedge, Purple*	*Cyperus rotundus*
Nutsedge, Yellow	*Cyperus esculentus*
Sedge, Globe	*Cyperus globulosus*
Sedge, Cylindric	*Cyperus retrorsus*
Sedge, Surinam	*Cyperus surinamensis*
Sedge, Texas	*Cyperus polystachyos*
*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 **Tolerant Grasses** table)	**Initial application:** 8 oz. (0.14 lb. a.i./A metribuzin and 0.09 lb. a.i./A sulfentrazone) **Follow-up application 35 days after initial treatment:** 8 oz.	**Initial application:** 11 oz. (0.19 lb. a.i./A metribuzin and 0.12 lb. a.i./A sulfentrazone) **Follow-up application 35 days after initial treatment:** 8 to 11 oz.

POST-EMERGENCE CONTROL

Grassy Weeds

Metsul will provide control or suppression of annual grass species listed in the table below at rate 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.^{2}). Make application at the highest rate appropriate for the turfgrass listed. 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 grass weeds for up to 60 days. For optimum performance, make application of **Metsul** when annual grass weeds are small and actively growing (pre-tiller stage).

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

Grass Weeds – Control or Suppression

Common Name	Scientific Name
Annual Bluegrass	*Poa annua*
Crabgrass	*Digitaria* spp.
Dallisgrass	*Paspalum dilatatum*
Goosegrass	*Eleusine indica*
Sandbur	*Cenchrus* spp.

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 Plastic and Metal Containers (Capacity Equal to or Less Than 50 Pounds): 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.

Non-Refillable Plastic and Metal Containers (Capacity Greater Than 50 Pounds): 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. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, 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.

All Other Refillable Containers: Refillable container. Refilling Container: Refill this container with this herbicide only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transporting. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing 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.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

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

Sharda USA LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or Sharda USA LLC and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, SHARDA USA LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither Sharda USA LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SHARDA USA LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SHARDA USA LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

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

Metsul

METRIBUZIN	GROUP	5	HERBICIDE
SULFENTRAZONE	GROUP	14	HERBICIDE

For Use on Asparagus, Field Corn (Grain, Seed Corn, Forage and Silage), Potato, Soybeans, Sugarcane, Tomato, Turf, and IVM

ACTIVE INGREDIENTS:	**WT. BY %**
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-1H-1,2,4-triazol-1-yl]phenyl]methanesulfonamide	18.0%
OTHER INGREDIENTS:	55.0%
TOTAL:	**100.0%**

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

KEEP OUT OF REACH OF CHILDREN

CAUTION

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

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for further treatment advice.
IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF INHALED:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for further treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at **1-800-222-1222**.	

See label booklet for complete Precautionary Statements and Directions For Use.

The Registrant Intends That This Product Be Used Only By Individuals/Firms Certified as Licensed Pesticide Applicators.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Wear long-sleeved shirt, long pants, socks, and shoes.

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 Plastic and Metal Containers (Capacity Equal to or Less Than 50 Pounds): 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.

Non-Refillable Plastic and Metal Containers (Capacity Greater Than 50 Pounds): 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. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, 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.

All Other Refillable Containers: Refillable container. Refilling Container: Refill this container with this herbicide only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transporting. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing 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.

Manufactured For: Sharda USA LLC, 7217 Lancaster Pike, Suite A, Hockessin, Delaware 19707

EPA Reg. No.: 83529-112 EPA Est. No.: 11773-IA-001 Net Contents: 12 Lbs.

PEEL BACK BOOK HERE