



HERBICIDE

GROUP 5 HERBICIDE

METRIBUZIN 4L

Metribuzin 4L is a flowable herbicide for control of certain grasses and broadleaf weeds on alfalfa, asparagus, barley (spring and winter), carrots, field corn, garbanzo beans (chick peas), lentils, peas, potatoes, sainfoin, soybeans, sugarcane, tomatoes, winter wheat.

ACTIVE INGREDIENT:

Metribuzin: 4-Amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4H)-one	41%
OTHER INGREDIENTS:	59%
TOTAL	100%

Contains 4 lbs. of metribuzin per gallon.

STOP - Read the label before use.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FOR A MEDICAL EMERGENCY OR HELP WITH ANY SPILL, LEAK, FIRE OR EXPOSURE INVOLVING THIS MATERIAL,
CALL DAY OR NIGHT, CHEMTREC 1-800-424-9300.

See inside booklet for complete First Aid, Precautionary Statements and Directions for Use.

EPA REG. NO. 34704-990

L042214-121225

MANUFACTURED FOR
LOVELAND PRODUCTS, INC.®, P.O. BOX 1286, GREELEY, COLORADO 80632-1286



FIRST AID

If swallowed:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
If on skin or clothing:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15 to 20 minutes.• Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor.
Note To Physician: Treat the patient symptomatically. Symptoms of Poisoning. The compound does not cause any definite symptoms that would be diagnostic. Poisoning is accompanied by breathing difficulties and sedation.

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PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed or absorbed through skin. Avoid contact with eyes, skin or clothing.

Personal Protective Equipment:

Applicators and other handlers must wear:

- Long sleeved shirt and long pants,
- Chemical-resistant gloves made of any waterproof material, and
- Socks plus footwear.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

USER SAFETY RECOMMENDATIONS

User should:

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

Do not contaminate feed or food. Keep out of reach of children. Obtain prompt medical aid if poisoning should occur.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

GROUND WATER ADVISORY: Metribuzin is a chemical which can travel (seep or leach) through soil and can contaminate ground water which may be used as drinking water. Metribuzin has been found in ground water as a result of agricultural use. Users are advised not to apply Metribuzin where the water table (ground water) is close to the

surface, and where the soils are very permeable, i.e., well drained soils such as loamy sands. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

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.

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

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

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

- Coveralls,
- Chemical-resistant gloves, and
- Shoes plus socks.

PRODUCT INFORMATION

Metribuzin 4L cannot be applied with low pressure or high volume hand wand equipment.

MIXING

When using Metribuzin 4L, make sure the sprayer is completely clean, free of rust or corrosion which occurs from Winter storage. Examine strainers and screens to be sure the sprayer is clean from previously used pesticides.

Any tank mix containing Metribuzin 4L should be kept agitated and sprayed out immediately. Do not allow tank mixes to stand for prolonged periods of time.

The proper mixing procedure for Metribuzin 4L alone or in tank mix combinations with other herbicides is:

1. Fill the spray tank 1/4 to 1/3 full with clean water.
2. Add specified rate of Metribuzin 4L while recirculating and with agitator running.
3. Follow the triple rinse procedure described under STORAGE AND DISPOSAL to insure that all product is removed from the container.
4. Mix thoroughly and add clean water to fill spray tank to desired level.
5. Add the other herbicide to tank last and agitate thoroughly.
6. Continue agitation during application and until sprayer tank is empty.

SOIL TEXTURE: As used on this label, "Coarse soils" are loamy sand or sandy loam soils. "Medium soils" are loam, silt loam, silt, sandy clay, or sandy clay loam. "Fine soils" are silty clay, silty clay loam, clay, or clay loam. Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

PRODUCT RESTRICTIONS

- Do not use on other crops grown for food or forage.
- Apply this product only as specified on this label.

- Do not rotate any crop not listed on this label for 18 months following application of Metribuzin 4L.
- Do not allow sprays to drift on to adjacent desirable plants.
- Observe all cautions and limitations on labeling of all products used in mixtures.
- For all uses: Low pressure and high volume hand wand equipment is prohibited.

CHEMIGATION

Metribuzin 4L is may be applied through sprinkler irrigation equipment to potatoes, soybeans, tomatoes, and asparagus as directed on this label. Refer to the crop sections of this label for rates, weeds controlled or suppressed, restrictions, and special precautions.

Apply this product only through sprinkler (including center pivot, lateral move, or solid set) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

Calibration: (Center Pivot and Self-Propelled Lateral Move Systems):

Sprinkler irrigation systems must be accurately calibrated for application of Metribuzin 4L. Greater accuracy in calibration (and distribution) will be achieved by injecting a larger volume of a more dilute mixture of product and water per hour. Follow the steps below to calibrate center pivot and lateral move systems:

1. Determine number of minutes required to make one complete revolution while applying 1/4 to 3/4 inch of water per acre.
2. With the system at operating pressure determine the exact number of minutes required to inject one gallon of water.
3. Divide the time required for one revolution (step 1) by the time required to inject one gallon (step 2). This gives total gallons of product-water mixture to be added to nurse tank.
4. Add required amount of water to nurse tank and start the agitation system. Then add sufficient Metribuzin 4L at the specified rate (See *BROADCAST APPLICATION INSTRUCTIONS*) to the nurse tank.

EXAMPLE: If 20 hours (1200 minutes) were required for one revolution and if 2 minutes were required to inject one gallon, then a total of 600 gallons of product-water mixture are required ($1200/2 = 600$); to treat 135 acres at 1 pint/acre, 135 pints (16 gallons and 7 pints) of Metribuzin 4L are required.

If you have questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment. Maintain continuous agitation in the injection nurse tanks during the herbicide application, sufficient to keep herbicide in suspension.

Apply specified dosage in 1/4 to 3/4 inch of water (1/4 to 1/2 inch of water on sandy soils) per acre as a continuous injection in center pivot and lateral move systems or in the last 15 to 30 minutes of set in permanent solid set sprinkler systems. Application of more than the quantity of irrigation water directed on this label may result in decreased product performance by removing the chemical from the zone of effectiveness. Where sprinkler distribution patterns do not overlap sufficiently unacceptable weed control may result. Where sprinkler distribution patterns overlap excessively crop injury may result. Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. To insure that lines are flushed and free of remaining pesticide, an indicator dye may be injected into the lines to mark the end of the application period.

Use a minimum of 1 part water to 1 part herbicide for injection. The use of a larger volume of water will insure greater accuracy and more uniform distribution.

AERIAL DRIFT REDUCTION ADVISORY INFORMATION

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

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

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
3. Where states have more stringent regulations, they must be observed.
4. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

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

CONTROLLING DROPLET SIZE:

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

nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

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

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

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

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

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

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

SENSITIVE AREAS: Metribuzin 4L should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

APPLICATION OF METRIBUZIN 4L WITH HERBICIDE SPRAY EQUIPMENT

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

GROUND APPLICATION: Apply the proper rate of Metribuzin 4L in a minimum of 10 to 40 gallons of spray mixture per acre broadcast.

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

EXAMPLES: (1) To treat a 15-inch band on rows 30 inches apart, use one-half of the broadcast rate of Metribuzin 4L. (2) To treat a 14-inch band on rows 42 inches apart, use one-third of the broadcast rate of Metribuzin 4L.

AERIAL APPLICATION: Where permitted, apply specified rate in a minimum of 2 to 10 gallons of spray mixture per acre. Do not apply aerially when wind speed is greater than 10 mph.

NOTE: Do not apply aerially when Metribuzin 4L is tank mixed with Lasso®.

For All Applications of Metribuzin 4L: Sprayer must be accurately calibrated before applying Metribuzin 4L. Check sprayer during application to be sure it is working properly and delivering a uniform spray pattern. As the volume of spray mixture decreases per acre, the importance of accurate calibration and uniform application increases. Avoid over application, misapplication, and boom and spray swath overlapping that will increase spray dosage. (Crop injury may occur as a result). Avoid spray skips and gaps which allow weeds to grow in untreated soil. Do not apply when weather conditions favor spray drift and/or when sensitive or cool season crops, such as cole crops, onions, peas, or strawberries are present in adjacent fields or in areas where wheat is growing in coarse textured soils.

SPRAYER CLEANUP: Spray equipment must be thoroughly cleaned to remove remaining traces of herbicide that might injure other crops to be sprayed. Drain any remaining spray solution of Metribuzin 4L from the spray tank and dispose of according to label disposal instructions. Rinse the spray tank and refill with water, adding a heavy-duty detergent at the rate of one cup per 20 gallons of water. Recycle this mixture through the equipment for 5 minutes and spray out. Repeat this procedure twice. Fill the spray tank with clean water, recycle for 5 minutes, and spray out. Clean pump and nozzle screens thoroughly. Wash away any spray mixture from the outside of spray tank, nozzles or spray rig. All rinse water must be disposed of in compliance with local, state, and Federal guidelines.

APPLICATION OF METRIBUZIN 4L IN FLUID FERTILIZERS

Metribuzin 4L may be applied in fluid fertilizer solutions to alfalfa and soybeans by following the appropriate mixing procedures and compatibility check. When using tank mix combinations, be sure all components are compatible.

Compatibility checks of Metribuzin 4L and tank mix combinations which include Metribuzin 4L should be made for each batch of fluid fertilizer because of the variability of these fertilizers.

Compatibility Check:

1. Pre-mix 2 teaspoonsfuls of Metribuzin 4L with 8 teaspoonsfuls of water (1:4 ratio) in a quart jar by adding the water first and followed with Metribuzin 4L. Mix thoroughly. If a second herbicide is to be used, double the amount of water (1:8 ratio) and add the second herbicide after mixing Metribuzin 4L first.
2. Then pour 1 pint of fluid fertilizer into the quart jar and shake well.
3. Allow to stand for 5 minutes.

THIS COMPATIBILITY CHECK SHOULD ONLY BE USED WHEN MIXING WITH FLUID FERTILIZERS.

Interpretation of Results: If the solution in the jar appears to be uniform, without signs of agglomeration, or without a separation of an oily film on top of the fertilizer, the mixture may be used. If not, repeat the compatibility check using twice the amount of water or add a compatibility agent to the water. If separation occurs, but the mixture can be resuspended by shaking, then application is possible with good agitation in the spray tank.

Tank Mixing Guidelines:

1. Add the required amount of water and compatibility agent (if required) to the tank. Start agitation system while adding Metribuzin 4L and follow by adding the fluid fertilizer and agitate.
2. If a second herbicide is to be used, follow as above in 1, but use twice the amount of water. Start agitation and add Metribuzin 4L and follow by adding the second herbicide, and then continue filling the tank with fluid fertilizer.
3. Maintain continuous agitation to assure uniform spray mixture until the tank is emptied.

COMMERCIAL IMPREGNATION AND APPLICATION OF METRIBUZIN 4L ON DRY BULK FERTILIZER

Dry bulk fertilizer may be impregnated or coated with Metribuzin 4L for application to established alfalfa and to soybeans. All instructions, cautions, and special precautions and restrictions on this label must be followed along with state regulations relating to dry bulk fertilizer blending, impregnating and labeling.

Impregnation: To impregnate, use a system consisting of a belt, conveyor, or closed drum which is used for dry bulk fertilizer blending. Any commonly used fertilizer can be impregnated with Metribuzin 4L except ammonium nitrate, or fertilizers containing ammonium nitrate, potassium nitrate, or sodium nitrate. Do not use on powder limestone.

Apply using a minimum of 200 lbs dry bulk fertilizer per acre and up to a maximum of 450 lbs per acre. To impregnate or coat dry bulk fertilizer, mix Metribuzin 4L with sufficient water to form a sprayable slurry. The delivery nozzles must be directed to deliver a fine spray toward the fertilizer for thorough coverage while avoiding spray contact with mixing equipment. Uniform impregnation of Metribuzin 4L to dry bulk fertilizer will vary and if the absorptivity is not adequate, an absorbent powder may be added to produce a dry, free-flowing mixture. Micro-Cel E is the recommended absorbent powder. When another herbicide is used with Metribuzin 4L, mix and impregnate immediately.

Apply immediately after impregnation unless experience has shown that impregnated fertilizer can be stored without becoming lumpy and difficult to spread.

Rates: Select the specified rate of Metribuzin 4L per acre from the appropriate section of this label and refer to the formula below to determine the amount of Metribuzin 4L which is to be impregnated on a ton of dry bulk fertilizer based on the amount of fertilizer which will be distributed on one acre.

$$\frac{\text{Pt Metribuzin 4L}}{\text{Per Acre}} \times \frac{2000 \text{ lb Fertilizer}}{\text{Acre}} = \frac{\text{Pt Metribuzin 4L}}{\text{Ton of Fertilizer}}$$

APPLICATION: Uniform application is essential for satisfactory weed control. Accurate calibration of fertilizer application equipment is essential for uniform distribution to the soil surface. The recommended method of application is to apply 1/2 the specified rate and overlap 50 percent or to double apply by splitting the middles to obtain the best distribution pattern.

If fertilizer materials are excessively dusty, use diesel oil or other suitable additive to reduce dust prior to impregnation as dusty fertilizer will result in poor distribution during application. Crop injury and/or poor weed control may occur where the impregnated fertilizer is not uniformly applied.

INCORPORATION AND COMBINATION USES: When Metribuzin 4L is to be used in combination with another herbicide, follow directions on this label for combinations, rates, crops, incorporation, and special precautions and use restrictions.

SOYBEANS (Except California)

Metribuzin 4L herbicide tank mix combinations may be used for preplant incorporated applications, preemergence surface applications, split-shot application and extended split-shot application. Metribuzin 4L may also be used as an overlay application following a preplant incorporated application of a grass herbicide and alone as a preemergence surface application. All these applications can be applied with ground equipment, and some can be applied with aerial spray equipment. In addition, Metribuzin 4L can be applied as a post emergence directed spray to soybeans in certain states.

SPECIAL PRECAUTIONS (Soybeans): Injury to soybeans may occur when Metribuzin 4L is used under the following conditions:

- When soils have a calcareous surface area or a pH of 7.5 or higher.
- Due to the sensitivity of certain soybean varieties, do not use Metribuzin 4L on Altona, AP 55, AP 71, Asgrow 6520, Burlington, Coker 102, Coker 156, Dassel, GL 3202, Govan, Maple Amber, NB 3665, NKS 1884, Paloma 350, Portage, Regal, Semmes, Terra-Vig 505, Terra-Vig 606, Tracy, Vansoy, and Vinton 81. Consult your Loveland Products representative or your seed supplier for information on the tolerance of newly released soybean varieties, prior to use of Metribuzin 4L.
- When applied in conjunction with soil-applied organic phosphate pesticides.
- Over application or boom overlapping may result in stand loss and soil residues.
- Uneven application or improper incorporation can decrease the level of weed control and/or increase the level of injury.

- When applied to any soil with less than 1/2% organic matter.
- Soil incorporation deeper than directed.
- When sprayers are not calibrated accurately.
- When heavy rains occur soon after application, especially in poorly drained areas where water may stand for several days.
- When soybeans are planted less than 1-1/2 inches deep, particularly in pre-emergence application.

Activation: A minimum amount of soil moisture is required to activate Metribuzin 4L. In areas of low rainfall, preemergence applications to dry soil should be followed with light irrigation of 1/4 acre inch of water. Do not apply heavy irrigation immediately after application. As with many surface applied herbicides, weed control and crop tolerance may vary with rainfall and/or soil texture.

Grazing and Feeding Treated Vines: Treated vines may be grazed or fed to livestock 40 days after application when Metribuzin 4L is applied alone or with Treflan®, Dual®, Prowl® or Lasso®.

Do not use treated vines for feed or forage when Metribuzin 4L is applied with Sonalan®, linuron plus Lasso or linuron plus Dual.

Rate Ranges: Where a rate range is shown, use a lower rate on soils that are coarse textured or low in organic matter. Use a higher rate on soils that are relatively fine textured or high in organic matter.

Replanting: If replanting is necessary in fields treated with Metribuzin 4L as directed on this label, the field may be replanted to soybeans. When replanting a minimum of tillage is necessary. Do not apply a second treatment as injury to soybeans may occur.

WEEDS CONTROLLED BY METRIBUZIN 4L AND METRIBUZIN 4L HERBICIDE TANK-MIX COMBINATIONS

- | | |
|--------------------------------|--|
| C = Control | S = Suppression or Erratic Control |
| P = Poor or No Control | O = No Information (Control may range from poor to excellent) |
| 1 = Metribuzin 4L Alone | 6 = Metribuzin 4L plus Lasso |
| 2 = Metribuzin 4L Split-Shot | 7 = Extended Split-Shot |
| 3 = Metribuzin 4L plus Treflan | 8 = Metribuzin 4L plus Sonalan |
| 4 = Metribuzin 4L plus Dual | 9 = Metribuzin 4L plus Linuron plus Lasso or Dual |
| 5 = Metribuzin 4L plus Prowl | |

ANNUAL BROADLEAF WEEDS	1	2	3	4	5	6	7	8	9
Black Nightshade (<i>Solanum nigrum</i>)	P	P	P	C	P	C	C	P	S
Bristly Starbur (<i>Acanthospermum hispidum</i>)	C	C	C	C	C	C	C	C	C
Buffalobur (<i>Solanum rostratum</i>)	C	C	P	P	P	P	C	P	O
Carpetweed (<i>Mollugo verticillata</i>)	C	C	C	C	C	C	C	C	C
Cocklebur (<i>Xanthium pensylvanicum</i>)	S	C	S	S	S	S	C	S	S
Copperleaf, Hophornbeam (<i>Acalypha ostryaefolia</i>)	C	C	C	C	C	C	C	C	C
Florida Beggarweed (<i>Desmodium tortuosum</i>)	C	C	C	C	C	C	C	C	C
Florida Pusley (<i>Richardia scabra</i>)	C	C	C	C	C	C	C	C	C

Cont'd

ANNUAL BROADLEAF WEEDS	1	2	3	4	5	6	7	8	9
Galinsoga (<i>Galinsoga</i> spp.)	C	C	C	C	C	C	C	C	C
Horseweed, Marestail (<i>Conyza canadensis</i>)	O	O	O	O	O	O	C	O	O
Jimsonweed (<i>Datura stramonium</i>)	C	C	C	C	C	C	C	C	S
Knotweed (<i>Polygonum</i> spp.)	C	C	C	C	C	C	C	C	C
Kochia (<i>Polygonum</i> spp.)	C	C	C	C	C	C	C	C	C
Lambsquarters (<i>Chenopodium</i> spp.)	C	C	C	C	C	C	C	C	C
Morningglory, Ivyleaf (<i>Ipomoea hederacea</i>)	P	P	S	P	P	P	P	P	P
Morningglory, Pitted (<i>Ipomoea lacunosa</i>)	P	P	S	P	P	P	P	P	P
Morningglory, Smallflower (<i>Jacquemontia taminifolia</i>)	P	P	C	P	P	P	P	P	P
Morningglory, Tall (<i>Ipomoea purpurea</i>)	P	P	S	P	P	P	P	P	P
Pigweeds (<i>Amaranthus</i> spp.)	C	C	C	C	C	C	C	C	C
Prickly Sida/ Teaweed (<i>Sida spinosa</i>)	C	C	C	C	C	C	C	C	C
Purslane (<i>Portulaca oleracea</i>)	C	C	C	C	C	C	C	C	C
Ragweed, Common (<i>Ambrosia artemisiifolia</i>)	C	C	C	C	C	C	C	C	C
Redweed (<i>Melochia corchorifolia</i>)	C	C	C	C	C	C	C	C	C
Russian Thistle (<i>Salsola kali</i>)	C	C	C	C	C	C	C	C	C
Sesbania (<i>Sesbania</i> spp.)	C	C	C	C	C	C	C	C	C
Shepherdspurse (<i>Capsella bursa-pastoris</i>)	C	C	C	C	C	C	C	C	C
Sicklepod (<i>Cassia obtusifolia</i>)	C	C	S	C	S	C	C	S	S
Smartweeds (<i>Polygonum</i> spp.)	C	C	C	C	C	C	C	C	S
Spotted Spurge (<i>Euphorbia maculata</i>)	C	C	P	C	P	C	C	P	O
Spurred Anoda (<i>Anoda cristata</i>)	C	C	C	C	C	C	C	C	C
Sunflower (<i>Helianthus</i> spp.)	C	C	S	S	S	S	C	S	P
Velvetleaf (<i>Abutilon theophrasti</i>)	C	C	C	C	C	C	C	C	C
Venice Mallow (<i>Hibiscus trionum</i>)	C	C	C	C	C	C	C	C	C
Wild Mustards (<i>Brassica</i> spp.)	C	C	C	C	C	C	C	C	C

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2 = Metribuzin 4L Split-Shot

3 = Metribuzin 4L plus Treflan

4 = Metribuzin 4L plus Dual

5 = Metribuzin 4L plus Prowl

6 = Metribuzin 4L plus Lasso

7 = Extended Split-Shot

8 = Metribuzin 4L plus Sonalan

9 = Metribuzin 4L plus Linuron plus (Lasso or Dual)

ANNUAL GRASSES	1	2	3	4	5	6	7	8	9
Barnyardgrass (<i>Echinochloa crus-galli</i>)	S	C	C	C	C	C	C	C	C
Bluegrass (<i>Poa annua</i>)	C	C	C	C	C	C	C	C	C
Broadleaf Signalgrass (<i>Brachiaria platyphylla</i>)	C	C	C	C	C	C	C	C	O
Browntop Millet (<i>Panicum ramosum</i>)	C	C	C	P	C	S	C	O	O
Crabgrass (<i>Digitaria</i> spp.)	C	C	C	C	C	C	C	C	C
Crowfootgrass (<i>Dactyloctenium aegyptium</i>)	C	C	C	C	C	C	C	O	O
Cupgrass (<i>Eriochloa gracilis</i>)	P	C	P	P	P	P	C	O	O
Foxtails (<i>Setaria</i> spp.)	S	C	C	C	C	C	C	C	C
Goosegrass (<i>Elysius indica</i>)	C	C	C	C	C	C	C	C	C
Johnsongrass, Seedling (<i>Sorghum halepense</i>)	C	C	C	C	C	C	C	C	O
Junglerice (<i>Echinochloa colonum</i>)	C	C	C	C	C	C	C	C	O
Nutsedge, Yellow (<i>Cyperus esculentus</i>)	P	P	C	P	C	C	P	O	P
Panicum, Fall (<i>Panicum dichotomiflorum</i>)	P	C	C	C	C	C	C	C	C
Panicum, Texas (<i>Panicum texanum</i>)	P	C	C	P	C	S	S	C	O
Red Rice (<i>Oryza sativa</i>)	P	C	C	C	P	C	C	O	O
Sandbur (<i>Cenchrus</i> spp.)	P	C	C	P	C	S	S	O	O
Shattercane (<i>Sorghum bicolor</i>)	P	C	C	P	P	P	P	C	O
Sorghum, Volunteer (<i>Sorghum</i> spp.)	P	C	C	P	P	P	P	O	P
Sprangletop (<i>Leptochloa</i> spp.)	P	C	C	P	P	P	P	O	P
Stinkgrass (<i>Eragrostis</i> spp.)	P	C	C	P	P	P	P	O	P
Wheat, Volunteer (<i>Triticum</i> spp.)	P	P	P	P	P	P	P	O	P
Witchgrass (<i>Panicum capillare</i>)	P	C	C	C	C	C	C	O	O

METRIBUZIN 4L ALONE

Metribuzin 4L (Alone) Preemergence Application: The following rates of Metribuzin 4L may be applied preemergence to soybeans through center pivot or lateral move sprinkler irrigation systems that apply water in a uniform manner. Refer to the Chemigation section of this label for directions.

Metribuzin 4L can be applied broadcast or banded. This application may be made during planting or as a separate operation after planting but before crop emergence. See the PRODUCT INFORMATION section in the front of this label.

Do not apply to sand soils, or to sandy loam or loamy sand soils containing less than 2% organic matter. Do not incorporate into soil or apply more than once per season.

PINTS OF METRIBUZIN 4L PER ACRE

SOIL TEXTURE	ORGANIC MATTER		
	Less than 2%	2 to 4%	Over 4%
COARSE SOILS (Sandy loam, loamy sand)	DO NOT USE ³	3/4	1
MEDIUM SOILS¹ (Loam, silt loam, silt, sandy clay, sandy clay loam)	3/4 to 1	1 to 1-1/4	1-1/4 to 1-1/2
FINE SOILS¹ (Silty clay, silty clay loam, clay, clay loam)	1 to 1-1/4	1-1/4 to 1-1/2	1-1/2 to 1-3/4
Mississippi Delta Only	1-1/2	1-3/4	2

¹ For control of lambsquarters, redroot pigweed and wild mustard, and for suppression of green, yellow and giant foxtails on alkaline (calcareous) soils in Nebraska, Minnesota, South Dakota and North Dakota only, apply Metribuzin 4L at rates of 1/2 pt/acre on medium soils and 1/2 to 3/4 pt/acre on fine soils regardless of soil organic matter percentage (use 3/4 pt only where soil pH is less than 7.5 and weed pressure is heavy). The 1/2 pt/acre rate of Metribuzin 4L alone can be applied regardless of soil pH. For control of other weeds listed on this label use Metribuzin 4L at full rates specified in the table above, **but note that crop injury may occur on soils having a calcareous surface area or a pH of 7.5 or higher.**

² Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

³ Refer to the appropriate section of this label for use of Metribuzin 4L on soybeans in coarse soils with 0.5% or more organic matter in certain states.

USES OF METRIBUZIN 4L HERBICIDE IN COMBINATION WITH OTHER HERBICIDES

SEQUENTIAL APPLICATION OF SCEPTER FOLLOWING METRIBUZIN 4L

If needed, application of Metribuzin 4L alone or in a registered tank mix according to directions on this label, may be followed by an early postemergence application of Scepter herbicide (1.5 lb/gal liquid or 70 DG) for control of cocklebur. Apply 1/6 to 1/3 pint of Scepter (0.7 to 1.4 ounces of Scepter 70 DG) in a minimum of 20 gallons of water per acre. Use 1/6 pint of Scepter (0.7 ounce of Scepter 70 DG) if cocklebur are less than 3 inches tall or have fewer than 3 leaves and are actively growing. For cockleburs less than 6 inches tall and actively growing use 1/3 pint of Scepter (1.4 ounces of Scepter 70 DG) per acre. Do not use Scepter when soybeans or cockleburs have been subjected to stress conditions such as temperature or moisture extremes. Do not exceed a total of 2/3 pint of Scepter (2.8 ounces of Scepter 70 DG) per acre in one season. Wait at least 10 days after application of Scepter before cultivating.

When preparing the spray mixture with Scepter, add 2 pints of nonionic surfactant approved for use on growing crops and containing at least 80% active ingredient per 100 gallons of mixture. Apply crop oil concentrate (COC) at the rate specified on the COC label.

Use Scepter only in the states where it is registered as listed on the product label.

Apply Scepter at least 90 days before harvest of soybeans. Do not graze or feed soybean forage, hay, or straw to livestock.

Refer to the Scepter label for additional cautions and precautions, restrictions, directions, limitations, and information on environmental hazards and planting of rotational crops.

SPLIT-SHOT APPLICATION

A preplant incorporated application of Metribuzin 4L tank mixed with either Treflan, Lasso, Dual, Prowl or Sonalan and followed by a preemergence surface application of Metribuzin 4L alone after planting but prior to soybean emergence, will control more broadleaf and grass weeds in soybeans than when either herbicide is used alone.

Refer to the Treflan, Lasso, Dual, Prowl or Sonalan labels, and to appropriate sections of this label for directions on soil preparation, herbicide application, incorporation techniques, herbicide rates, weed species controlled, and restrictions for using tank mix combinations of Metribuzin 4L. Carefully observe the Special Precautions section concerning the use of Metribuzin 4L in tank mix combinations on soybeans.

When a Split-Shot application of Metribuzin 4L with Prowl, Treflan, or Sonalan is used, the preplant incorporated tank mix may be applied up to 21 days prior to planting soybeans; with Dual or Lasso, the preplant incorporated tank mix may be applied up to 14 days prior to planting.

On medium and fine textured soils with greater than 2% organic matter, a rate range is specified for the Metribuzin 4L preemergence overlay application. The higher rate should be used (a) in fields with a history of severe broadleaf weed pressure, (b) when the time between preplant incorporated tank mix and preemergence overlay applications approaches the maximum stated above, and/or (c) when the organic matter content of the soil is at the upper end of the indicated range.

For black nightshade control, refer to the appropriate sections of the Lasso, Dual, or Sonalan labels for specific instructions.

SPLIT-SHOT APPLICATION

Preplant Incorporated Tank-Mix Application - FOLLOWED BY - Preemergence Overlay Application						
SOIL TEXTURE ¹	Rate of Combination Product/Acre	Plus	Rate of Metribuzin 4L Pt/Acre	Rate of Metribuzin 4L Pt/Acre ORGANIC MATTER		
				Less than 2%	2 to 4%	Over 4%
COARSE (Light) sand, loamy sand, sandy loam	Treflan 1 pt OR Lasso 2 to 2-1/2 qt OR Dual 1-1/4 to 1-1/2 pt OR Prowl 1-1/2 pt OR Sonalan 1-1/4 to 2 pt	plus	1/2 - FOLLOWED BY	1/4	1/4	1/4 to 1/2
MEDIUM loam, silt loam, sandy clay loam, silt, sandy clay	Treflan 1-1/2 pt OR Lasso 2-1/2 to 3 qt OR Dual 1-1/2 pt OR Prowl 1-1/2 pt OR Sonalan 1-3/4 to 2-1/2 pt	plus	3/4 - FOLLOWED BY or 1/2 ² - FOLLOWED BY	1/4 1/2	1/4 to 1/2 1/2 to 3/4	1/2 to 3/4 (3/4 to 1) ³
FINE (Heavy) silty clay loam [*] , clay loam, silty clay, clay	Treflan 2 pt OR Lasso 2-1/2 to 3 qt OR Dual 2 to 2-1/2 pt OR Prowl 1-1/2 to 2 pt OR Sonalan 2-1/4 to 3 pt	plus	1.0 - FOLLOWED BY or 3/4 ² - FOLLOWED BY	1/4 1/2	1/4 to 1/2 1/2 to 3/4	1/2 to 3/4 (3/4 to 1) ³

* Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

¹ On **coarse textured soils**, do not use on sand soils with less than 1% organic matter, or on loamy sand or sandy loam soils with less than 0.5% organic matter. However, on coarse textured soils with a **calcareous surface area or a pH of 7.5 or higher**, do not use on sand soils with less than 2% organic matter, or on loamy sand or sandy loam soils with less than 1% organic matter.

² Use this lower rate of Metribuzin 4L in the preplant incorporated tank mix on **soils having a calcareous surface area or a pH of 7.5 or higher**, and in those situations where soils within a field vary extremely in texture or organic matter content.

³ Reduce this preemergence overlay rate of Metribuzin 4L by 1/4 pt/acre when using SPLIT-SHOT application on **soils with over 4% organic matter and which have a calcareous surface area or a pH of 7.5 or higher**.

EXTENDED SPLIT-SHOT APPLICATION

(Includes No-Till, Reduced-Till, Ridge-Till, Strip-Till, Mulch-Till)

An early preplant (surface-applied or shallow incorporated) application of Metribuzin 4L tank mixed with either Dual or Lasso, followed by a preemergence surface application of Metribuzin 4L tank mixed with Dual or Lasso after planting but prior to soybean emergence, will control more broadleaf and grass weeds in soybeans than either herbicide used alone.

An Extended Split-Shot application will decrease the need for tillage and/or contact herbicides for the control of existing vegetation prior to planting, while providing residual control of weeds after planting.

When an Extended Split-Shot application of Metribuzin 4L with Dual or Lasso is used, the preplant tank mix combination may be applied 15 to 30 days prior to planting soybeans. Follow directions on the label accompanying the product for Split-Shot applications from 0 to 14 days before planting.

Where a rate range is specified, the higher rates should be used (a) in fields with a history of severe weed pressure, (b) when the time between early preplant tank mix and preemergence overlay applications approaches the maximum 30 days, (c) when the organic matter content of the soil is at the upper end of the indicated range, (d) when heavy crop residues are present on the soil surface, and/or (e) when the early preplant tank mix application is shallow incorporated (e.g. use 2 to 2-1/2 qt Lasso in the early preplant tank mix when surface applied and use 2-1/2 to 3 qt Lasso when the tank mix is to be lightly incorporated).

When weeds exceed 1 to 1-1/2 inches in height or diameter at application, use a contact herbicide, such as Round-Up® or Gramoxone.

Refer to the Dual or Lasso label, and to appropriate sections of this label for additional information on soil preparation, herbicide application, weeds controlled, precautions, restrictions, limitations and sprayer clean up.

EXTENDED SPLIT-SHOT APPLICATION

Early Preplant Tank Mix Application (Surface-Applied or Shallow Incorporated)				Followed By	Preemergence Overlay Application				
SOIL TEXTURE ¹	Rate of Combination Product/Acre	Plus	Rate of Metribuzin 4L Pt/Acre		Rate of Combination Product/Acre	Plus	Rate of Metribuzin 4L Pt/Acre ORGANIC MATTER		
							1/2 to 2%	2 to 4%	Over 4%
COARSE (Light) (Sand, loamy sand, sandy loam)	Dual 1-1/3 pt or Lasso 1-1/2 to 2 qt	plus	1/2 to 3/4	Dual or Lasso	2/3 pt 1-1/2 qt	plus	1/4	1/4 to 1/2	1/2
MEDIUM (Loam, silt loam, sandy clay loam, silt, sandy clay)	Dual 1-3/4 pt or Lasso 2 to 3 qt	plus	2/3 to 1	Dual or Lasso	3/4 pt 1 to 2 qt	plus	1/2	1/2 to 3/4	3/4 to 1
FINE (Heavy) (Silty clay loam*, clay loam, silty clay, clay)	Dual 2 pt or Lasso 2 to 3 qt	plus	2 to 1-1/4	Dual or Lasso	1 pt 1 to 2 qt	plus	1/2	1/2 to 3/4	3/4 to 1

* Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

¹ On **coarse textured soils**, do not use on sand soil with less than 1% organic matter. However, on coarse textured soils with a **calcareous surface area** or a **pH of 7.5 or higher**, do not use on sand soils with less than 2% organic matter, or on loamy sand or sandy loam soils with less than 1% organic matter.

² Use the lower rate of Metribuzin 4L in the early preplant tank mix on **soils having a calcareous surface area or a pH of 7.5 or higher**, and in those rare situations where soils **within a field vary extremely in texture or organic matter content**.

METRIBUZIN 4L PLUS SONALAN

Metribuzin 4L plus Sonalan Overlay Application: Metribuzin 4L may be applied as a preemergence overlay application following a preplant incorporated application of Sonalan 3 EC. Consult the Sonalan label for specific directions on use, instructions, restrictions and any additional weeds not specified on this label.

Metribuzin 4L plus Sonalan Tank Mix Application: Incorporate the tank mixture into the top 1 to 2 inches of soil within 21 days before planting according to label directions for Sonalan.

Apply Metribuzin 4L plus Sonalan preplant incorporated if furrow irrigation is used or when a period of dry weather after application is expected. If soybeans are planted on beds, apply and incorporate the tank mixture after bed formation.

Mixing: Refer to the *Product Information* section in the front of this label.

Application: Sonalan should be uniformly applied and thoroughly mixed into the soil within 2 days after application. For specific application information, refer to the *Product Information* section in the front of this label.

BROADCAST RATES

SOIL TEXTURE	Metribuzin 4L Pt/Acre	Sonalan 3EC Pt/Acre
COARSE¹ (Sandy loam, loamy sand)	1/2	1-1/4 to 2
MEDIUM² (Loam, silt loam, silt, sandy clay, sandy clay loam)	3/4	1-3/4 to 2-1/2
FINE³ (Silty clay, silty clay loam*, clay, clay loam)	1	2-1/4 to 3

¹ Do not use on coarse soils with less than 1% organic matter.

² Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

³ For control of lambsquarters, redroot pigweed, wild mustard, and green and yellow foxtails on alkaline (calcareous) soils in Minnesota, Nebraska, South Dakota, and North Dakota only, apply Metribuzin 4L at rates of 1/2 pt/acre on medium soils and 1/2 to 3/4 pt/acre on fine soils regardless of soil organic matter percentage (use 3/4 pt only where soil pH is less than 7.5 and weed pressure is heavy). The 1/2 pt rate of Metribuzin 4L in tank mix combination with Sonalan can be applied regardless of soil pH. For control of other weeds not listed on the label, use Metribuzin 4L at full rates specified in the table above, **but note that crop injury may occur on soils having a calcareous surface area or a pH of 7.5 or higher**.

SPECIAL PRECAUTIONS (Metribuzin 4L plus Sonalan):

- For additional precautions, restrictions, limitations, incorporation, and sprayer clean-up information, refer to the appropriate sections of this label and the Sonalan label.
- For black nightshade control, refer to the Sonalan label for specific rates and application instructions.

METRIBUZIN 4L PLUS TREFLAN**SPECIAL PRECAUTIONS (Metribuzin 4L plus Treflan):****Use Restrictions**

- Do not plant soybeans deeper than 2 inches.
- Do not rotate any crop not listed on this label for 18 months after the tank-mix application.
- Do not use this tank mix combination on soils containing charcoal in Arkansas, Louisiana and Mississippi.

Use Precautions

- Seeding disease, cold weather, excessive moisture, high salt concentration or drought may weaken soybean seedlings and increase possibility of damage from the tank mix.
- For additional precautions, restrictions, limitations and sprayer clean-up information refer to the appropriate section of this label.

Metribuzin 4L and Treflan Overlay Application: Metribuzin 4L may be applied as a preemergence broadcast or band overlay application following a pre-plant incorporated treatment of Treflan. Consult the Treflan label for specific directions for use, instructions, restrictions and any additional weeds not specified on this label.

Metribuzin 4L plus Treflan Tank Mix Application: A single application of a tank mix combination of Metribuzin 4L and Treflan EC will control more broadleaf and grass weeds in soybeans than when either herbicide is used alone.

Prepare the soil surface by deep plowing, offset disking or tandem disking prior to the application of the herbicide combination. The soil surface should be well prepared and free of clods and trash.

This Metribuzin 4L plus Treflan tank mix combination may be applied and incorporated into the soil up to 10 days before planting.

Mixing: Refer to the Product Information section in the front of this label.

Application: For specific application information refer to the Product Information section in the front of this label.

Apply Metribuzin 4L plus Treflan to the soil surface and incorporate in the same operation, if possible. Variable weed control may result from delayed incorporation if Metribuzin 4L plus Treflan are applied to a wet, warm soil surface or if the wind velocity is 10 miles per hour or higher. Use machinery that mixes Metribuzin 4L plus Treflan thoroughly with the soil. Incorporation may be delayed up to 24 hours after application. Shallow incorporation with implements set to cut less than 2 inches deep may result in erratic weed control. Do not use spike or spring-tooth harrows alone for incorporation.

BROADCAST RATES

SOIL TEXTURE	Metribuzin 4L Pt/Acre	Treflan EC Pt/Acre
COARSE ¹ (Sandy loam, loamy sand)	1/2	1
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	3/4	1-1/2
FINE (Silty, clay, silty clay loam) ^{2,3}	1	2

¹ Do not use on coarse soils with less than 1% organic matter.

² Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

³ For control of lambsquarters, redroot pigweed, wild mustard, and green and yellow foxtails on alkaline (calcareous) soils in Minnesota, Nebraska, South Dakota, and North Dakota only, apply Metribuzin 4L at rates of 1/2 pt/acre on medium soils and 1/2 to 3/4 pt/acre on fine soils regardless of soil organic matter percentage (use 3/4 pt only where soil pH is less than 7.5 and weed pressure is heavy). The 1/2 pt rate of Metribuzin 4L in tank mix combination with Treflan can be applied regardless of soil pH. For control of other weeds not listed on the label, use Metribuzin 4L at full rates specified in the table above, **but note that crop injury may occur on soils having a calcareous surface area or a pH of 7.5 or higher.**

Incorporation Equipment:

Set PTO driven equipment (tillers, cultivators, hoes) to cut 2 to 3 inches deep and space rotors to provide a clean sweep of the soil. PTO equipment should not be operated at a speed greater than 4 miles per hour.

Set disk to cut 4 to 6 inches deep and operate twice in different directions at 4 to 6 miles per hour.

Set mulch treader and other similar disk-type implements to cut 3 to 4 inches deep and operate twice in different directions at 5 to 8 miles per hour.

For Coarse and Medium Textured Soils Only:

Set rolling cultivator to cut 2 to 4 inches deep and operate twice at 6 to 8 miles per hour. Set bed conditioner (Do-All) to cut 2 to 4 inches deep and operate at 4 to 6 miles per hour.

METRIBUZIN 4L PLUS DUAL

Metribuzin 4L plus Dual Overlay Application: Apply a preplant incorporated treatment of Dual 8E as directed on that product label for use on soybeans. Follow with a preemergence treatment of Metribuzin 4L as directed on this label for use on soybeans.

METRIBUZIN 4L PLUS DUAL TANK MIX APPLICATIONS

Preplant Incorporated Application: Incorporate the tank mixture into the top 2 inches of soil within 14 days before planting using a disk, harrow, rolling cultivator, or similar implement.

Apply Metribuzin 4L plus Dual preplant incorporated if furrow irrigation is used or when a period of dry weather after application is expected. If soybeans are planted on beds, apply and incorporate the tank mixture after bed formation.

Preemergence Application: Dry weather following preemergence application of Metribuzin 4L plus DUAL tank mixture may reduce effectiveness. If weeds develop, cultivate uniformly with shallow tillage equipment such as a rotary hoe that will not damage soybeans.

Mixing Instructions: Refer to the *Product Information* section in the front of this label.

For information on applying Metribuzin 4L in fluid or dry fertilizer refer to the *Application of Metribuzin 4L in Fluid Fertilizers or Commercial Impregnation and Application of Metribuzin 4L on Dry Bulk Fertilizer* under the *Product Information* section in the front of this label.

**BROADCAST RATES
Metribuzin 4L Plus DUAL
Tank Mix Preemergence Applications**

0.5% to 3% ORGANIC MATTER		
SOIL TEXTURE	Metribuzin 4L Pt/Acre	DUAL 8E Pt/Acre
COARSE¹ (Loamy sand, sandy loam)	1/2	1-1/4
MEDIUM (Loam, silt loam, silt)	3/4	1-1/2
FINE (Silty clay loam ² , sandy clay loam, silty clay, sandy clay, clay loam, clay)	1	2
MISSISSIPPI DELTA ONLY (Silty clay, clay)	1-1/2	2
Over 3% ORGANIC MATTER		
COARSE¹ (Loamy sand, sandy loam)	3/4	1-1/2
MEDIUM (Loam, silt loam, silt)	1	2
FINE (Silty clay loam ² , sandy clay loam, silty clay, sandy clay, clay loam, clay)	1 to 1-1/4	2 to 2-1/2
MISSISSIPPI DELTA ONLY (Silty clay, clay)	1-1/2	2 to 2-1/2

¹ Do not use on sand soils. Do not apply Metribuzin 4L and Dual overlay or tank mix preemergence on loamy sand with less than 2% organic matter.

² Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

**BROADCAST RATES
Metribuzin 4L Plus DUAL
Tank Mix Preplant Incorporated Applications**

0.5% to Less Than 3% ORGANIC MATTER		
SOIL TEXTURE	Metribuzin 4L Pt/Acre	DUAL 8E Pt/Acre
COARSE¹ (Loamy sand, sandy loam)	1/2	1-1/4
MEDIUM (Loam, silt loam, silt)	3/4	1-1/2
FINE (Silty clay loam ² , sandy clay loam, silty clay, sandy clay, clay loam, clay)	1	2
MISSISSIPPI DELTA ONLY (Silty clay, clay)	1 to 1-1/4	2
3% or Greater ORGANIC MATTER		
COARSE¹ (Loamy sand, sandy loam)	1/2	1-1/2
MEDIUM (Loam, silt loam, silt)	3/4	2
FINE (Silty clay loam ² , sandy clay loam, silty clay, sandy clay, clay loam, clay)	1	2 to 2-1/2
MISSISSIPPI DELTA ONLY (Silty clay, clay)	1 to 1-1/4	2 to 2-1/2

¹ Do not use on sand soils. Do not apply Metribuzin 4L plus Dual tank mix preplant incorporated on sand or loamy sand with less 2% organic matter or crop injury may occur.

² Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

SPECIAL PRECAUTIONS (Metribuzin 4L and Dual):

- For additional precautions, restrictions, limitations, and sprayer clean up information refer to the appropriate sections of this label and the Dual label.

METRIBUZIN 4L PLUS PROWL

Metribuzin 4L plus Prowl Overlay Application: Apply a preplant incorporated treatment of Prowl as directed on that product label for use on soybeans. Follow with a preemergence treatment of Metribuzin 4L as directed on this label for use on soybeans.

Metribuzin 4L plus Prowl Tank Mix Application

Preplant Incorporated Application: Prepare the soil by plowing or disking to mix previous crop residues into the soil to a depth of 4 to 6 inches.

For specific application information refer to the *Product Information* section in the front of this label.

Incorporate the tank mixture into the top 1 or 2 inches of soil within 7 days after application according to label directions for Prowl. Mechanical incorporation is not required if a rain of one-quarter inch or more occurs within 7 days after application. Soybeans must be planted no later than 7 days after application of the tank mixture.

Preemergence Application: Except for minimum and no-tillage systems, the seed bed should be firm and free of trash and clods.

For specific application information refer to the *Product Information* section in the front of this label. Do not apply Prowl preemergence north of Interstate 80.

This application must be made after planting and before crop emergence. Do not incorporate.

If cultivation is necessary because of soil crusting, soil compaction or weed germination before rain or irrigation, use shallow tilling equipment such as a rotary hoe that does not damage soybeans.

Mixing Instructions: Refer to the *Product Information* section in the front of this label.

For information on applying Metribuzin 4L in fluid or dry fertilizer refer to the *Application Of Metribuzin 4L In Fluid Fertilizers or Commercial Impregnation And Application Of Metribuzin 4L On Dry Bulk Fertilizer* under the *Product Information* section in the front of this label.

SOUTHERN STATES AND EASTERN COASTAL PLAINS

For use only in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, Southeastern Missouri "Bootheel" Region and Coastal Plains of Delaware*, Maryland*, New Jersey* and Virginia*.

* Do not use Metribuzin 4L/Prowl on soils with less than 2% organic matter in the coastal plain of New Jersey or the Delmarva Peninsula.

BROADCAST RATES**Metribuzin 4L Plus Prowl Tank Mix Applications**

SOIL TEXTURE	Metribuzin 4L Pt/Acre	Prowl Pt/Acre
COARSE¹ (Sandy loam, loamy sand)	1/2	1-1/2
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	3/4	1-1/2
FINE (Silty clay, silty clay loam ² , clay, clay loam)	1	1-1/2 to 2

¹ Do not use on sand soils. Do not use on loamy sand or sandy loam containing less than 1% organic matter.

² Silty clay loam soils are transitional soils and may be classified as medium textured soils in certain regions of the U.S.

Do not use on muck or peat soils.

NORTHEASTERN AND NORTH CENTRAL STATES

For use only in Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Nebraska, New York, North Dakota, Ohio, Pennsylvania, South Dakota, Wisconsin and Missouri (except the "Bootheel" Region).

BROADCAST RATES**Metribuzin 4L Plus Prowl Tank Mix Applications****1/2 to 3% ORGANIC MATTER**

SOIL TEXTURE	Metribuzin 4L Pt/Acre	Prowl Pt/Acre
COARSE¹ (Sandy loam, loamy sand)	1/2	1
MEDIUM (Loam, silt loam, sandy clay, sandy clay loam)	3/4	1-1/2 to 2
FINE (Silty clay, silty clay loam ² , clay, clay loam)	3/4 to 1	1-1/2 to 2

Over 3% ORGANIC MATTER

COARSE¹ (Sandy loam, loamy sand)	3/4	1-1/2
MEDIUM (Loam, silt loam, sandy clay, sandy clay loam)	3/4 to 1	1-1/2 to 2
FINE (Silty clay, silty clay loam ² , clay, clay loam)	1 to 1-1/4	2 to 2-1/2

¹ Do not use on sand soils. Do not use on loamy sand or sandy loam containing less than 1% organic matter. Where a range of rates is shown for medium and fine soils, use the higher rate if heavy weed infestations are anticipated.

² Silty clay loam soils are transitional soils and may be classified as medium textured soils in certain areas of the U.S.

Do not use on muck or peat soils.

SPECIAL PRECAUTIONS (Metribuzin 4L plus Prowl):

- Soil incorporation deeper than directed will reduce weed control and can result in crop injury.
- For additional precautions, restrictions, limitations, and sprayer clean-up information, refer to the appropriate sections of this label and the Prowl label.

METRIBUZIN 4L PLUS LASSO
Metribuzin 4L Plus Lasso Tank Mix Application:
PREEMERGENCE

Metribuzin 4L may be used in a tank mix combination with Lasso as a preemergence band or broadcast application to soybeans in accordance with the specified soil types and dosages.

For specific information regarding spray equipment, dilution rates, mixing, directions for use, methods of application, limitations and restrictions refer to the appropriate section of this label.

Refer to the Lasso label for pertinent instructions, directions for use, restrictions and any additional weeds not specified on this label.

APPLICATION INSTRUCTIONS

Metribuzin 4L Plus Lasso Tank Mix Preemergence Application (Broadcast Rates)

1/2 to 3% Organic Matter

SOIL TEXTURE	Metribuzin 4L Pt/Acre	Plus	Lasso Qt/Acre
COARSE¹ (Sandy loam)	1/2	plus	1-1/2 to 2
MEDIUM² (Loam, silt loam, silt, sandy clay, sandy clay loam)	3/4	plus	1-1/2 to 2
FINE² (Silty clay, silty clay loam ³ , clay, clay loam)	1	plus	2
MISSISSIPPI DELTA ONLY (Silty clay to heavy clay)	2	plus	2 to 2-1/2

Greater than 3% Organic Matter

COARSE¹ (Sandy loam)	3/4	plus	1-1/2 to 2
MEDIUM² (Loam, silt loam, silt, sandy clay, sandy clay loam)	1	plus	1-1/2 to 2
FINE² (Silty clay, silty clay loam ³ , clay, clay loam)	1 to 1-1/4	plus	2 to 2-1/2
MISSISSIPPI DELTA ONLY (Silty clay to heavy clay)	2	plus	2 to 2-1/2

¹ Do not use Metribuzin 4L plus Lasso on sand or loamy sand soils with less than 2% organic matter.

² For control of lambsquarters, redroot pigweed, wild mustard, green and yellow foxtails on alkaline (calcareous) soils in Minnesota, Nebraska, South Dakota, and North Dakota only, apply Metribuzin 4L at rates of 1/2 pt/acre on medium soils and 1/2 to 3/4 pt/acre on fine soils regardless of soil organic matter percentage (use 3/4 pt only where soil pH is less than 7.5 and weed pressure is heavy). The 1/2 pt/acre rate of Metribuzin 4L in tank mix combination with Lasso can be applied regardless of soil pH. For control of other weeds use Metribuzin 4L at full rates specified in the table above, **but note that crop injury may occur on soils having a calcareous surface area or a pH of 7.5 or higher.**

³ Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

PREPLANT INCORPORATED: For specific application information refer to the *Product Information* section in the front of this label.

Apply Metribuzin 4L plus Lasso preplant incorporated if furrow irrigation is used or when a period of dry weather after application is expected. If soybeans are planted on beds, apply and incorporate the tank mixture after bed formation. Apply within 7 days prior to planting and shallowly incorporate into the upper 1 to 2 inches of soil.

APPLICATION INSTRUCTIONS

Metribuzin 4L Plus Lasso Tank Mix Preplant Incorporated Applications (Broadcast Rates)

SOIL TEXTURE	Metribuzin 4L Pt/Acre	Lasso Qt/Acre
COARSE¹ (Loamy sand [over 2% organic matter], sandy loam)	1/2	2 to 2-1/2
MEDIUM (Loam, silt loam, silt)	3/4	2-1/2 to 3
FINE (Silty clay loam ² , sandy clay loam, silty clay, sandy clay, clay loam, clay)	1	2-1/2 to 3
MISSISSIPPI DELTA ONLY (Silty clay, clay)	1 to 1-1/4	2-1/2 to 3

¹ Do not use Metribuzin 4L plus Lasso on sand or loamy sand soils with less than 2% organic matter.

² Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

Do not use on muck soils.

SPECIAL PRECAUTIONS (Metribuzin 4L Plus Lasso):

- For additional precautions, restrictions, limitations and sprayer clean up information, refer to the appropriate sections of this label and the Lasso label.

METRIBUZIN 4L PLUS COMMAND®

Metribuzin 4L may be applied in combination with Command 4EC as a preplant or shallow incorporated application for the control of certain weeds in soybeans. Consult the Command label for specific directions on use, instructions, restrictions and any additional weeds not specified on this label.

Mixing: Refer to the "Product Information" section in the front of this label.

Use Restrictions (Metribuzin 4L plus Command):

- Do not rotate to wheat, barley, alfalfa or seed corn in the fall of the year of application or in the spring of the following year as crop injury may occur.
- Do not rotate any crop not listed on this label for 18 months following application of Metribuzin 4L.
- Do not apply when weather conditions favor drift.
- Do not use treated vines for feed or forage.
- Do not apply aerially or through irrigation equipment.

Application: Metribuzin 4L plus Command may only be applied with ground equipment as a preplant or shallow incorporated application. Metribuzin 4L plus Command should be immediately incorporated into the top 1 to 3 inches after application unless surface is dry. On dry soils, incorporate into the top 1 to 3 inches within 3 hours of tank mix application.

Do not apply this tank mix within 1000 feet of towns and subdivisions, commercial vegetable, fruit, nurseries or greenhouse operations.

A minimum of 15 gallons spray volume per acre is required with appropriate nozzle types and sizes to produce a coarse spray droplet. The use of an approved agricultural drift reducing additive is recommended for application volumes of 15 to 40 gallons per acre. The use of an approved agricultural drift reducing additive is required at spray volumes of 10 to 15 gallons per acre.

NOTE: Off-site movement of Command spray drift or vapors can cause foliar whitening or yellowing of some vegetation. Prior to application of Command, read and strictly follow all precautions, restrictions and application instructions as set forth in that label.

For additional information on application, refer to the "Product Information" section in the front of this label and the Command label.

Weeds Controlled: Bristly Starbur, Carpetweed, Copperleaf, Florida Beggarweed, Florida Pusley, Galinsoga, Jimsonweed, Knotweed, Lambsquarters, Pigweeds, Prickly Sida/Teaweed, Purslane, Common Ragweed, Redweed, Sesbania, Smartweeds, Spurred Anoda, Velvetleaf, Venice Mallow, Wild Mustards, Barnyardgrass, Bluegrass, Broadleaf Signalgrass, Crabgrass*, Foxtails (Green, Giant, Yellow*, Robust Purple), Goosegrass, Johnsongrass (seedling)*, Fall Panicum*, Texas Panicum, and witchgrass.

* Use 2 pt/A Command 4EC on coarse and medium textured soils with high populations of these weeds.

APPLICATION INSTRUCTIONS		
Metribuzin 4L Plus COMMAND 4EC Tank Mix Preplant Incorporated Application (Broadcast Rates)		
0.5% to 3% ORGANIC MATTER		
SOIL TEXTURE ¹	Metribuzin 4L Pt/Acre	COMMAND 4EC Pt/Acre
COARSE² (Sandy loam, loamy sand)	1/2	1-1/2 to 2
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1/2 to 3/4	1-1/2 to 2
FINE (Silty clay, silty clay loam ³ , clay, clay loam)	1/2 to 3/4	1-1/2 to 2
Over 3% ORGANIC MATTER		
COARSE² (Sandy loam, loamy sand)	1/2	1-1/2 to 2
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1/2 to 3/4	1-1/2 to 2
FINE (Silty clay, silty clay loam ³ , clay, clay loam)	3/4 to 1	1-1/2 to 2

¹ Crop injury may occur on soils having a calcareous surface area or a pH of 7.1 or higher.

² Do not use on coarse soils with less than 1% organic matter.

³ Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

METRIBUZIN 4L PLUS CANOPY® PLUS A GRASS HERBICIDE

A tank mix combination of Metribuzin 4L plus Canopy 75 DF plus a registered grass herbicide (Dual, Lasso, Prowl, Sonalan or Treflan) may be used for control of the following weeds in soybeans:

Use Restriction

- Do not use treated vines for feed or forage.

Use Precaution:

- For additional precautions, restrictions, limitations and sprayer clean-up information, refer to the appropriate sections of the labels for Metribuzin 4L and Canopy 75 DF.

WEEDS CONTROLLED

Annual Grasses

Barnyardgrass	Crowfootgrass	Panicum, Fall
Bluegrass	Foxtails	Panicum, Texas
Broadleaf signalgrass	Goosegrass	Sandbur
Browntop Millet	Johnsongrass (seedling)	Sprangletop
Crabgrass	Junglerice	Sinkgrass

Annual Broadleaves

Bristly Starbur	Knotweed	Sesbania
Carpetweed	Kochia	Shepherdspurse
Cocklebur	Lambsquarters	Smartweed
Copperleaf	Pigweed	Spurred Anoda
Hophornbeam	Prickly Sida/Teaweed	Velvetleaf
Florida Beggarweed	Purslane	Venice mallow
Florida Pusley	Ragweed, Common	Wild mustard
Galinsoga	Redweed	
Jimsonweed	Russian Thistle	

Tank mix combinations which include Dual, Lasso or Prowl can be applied preemergence broadcast or preplant incorporated broadcast. When Sonalan or Treflan are used in the tank mix, apply preplant incorporated broadcast. Refer to the table below for rates of each product to be used in tank mix combinations:

APPLICATION INSTRUCTIONS Metribuzin 4L Plus Canopy 75 DF Plus A Grass Herbicide (Broadcast Rates)

PRODUCT	SOIL TEXTURE ¹		
	COARSE ²	MEDIUM	FINE
Metribuzin 4L (Pt/Acre)	1/2	1/2 to 3/4 ³	3/4 to 1 ³
Canopy DF (Oz/Acre)	3	3	3 to 4
Treflan (Pt/Acre)	1	1-1/2	2
Dual (Pt/Acre)	1-1/4 to 1-1/2	1-1/2 to 2	2 to 2-1/2
Prowl (Pt/Acre)	1-1/2	1-1/2 to 2	1-1/2 to 2-1/2
Lasso (Qt/Acre)	2 to 2-1/2	2-1/2 to 3	2-1/2 to 3
Sonalan (Pt/Acre)	1-1/4 to 2	1-1/4 to 2-1/2	2-1/4 to 3

¹ Do not use on soils with a pH greater than 7.0.

² Refer to "Soil Texture" paragraph on this label for specific soil classification.

³ Use the lower rate of Metribuzin 4L in preplant incorporated tank-mix as in those situations where soils within a field vary extremely in texture or organic matter content.

Refer to the *Product Information* section of this label for mixing and application directions.

IMPORTANT: If weeds escape in fields treated with these tank mix combinations, postemergence application of a registered herbicide will be needed for control.

METRIBUZIN 4L PLUS COMMAND PLUS A GRASS HERBICIDE

Metribuzin 4L may be applied with Command 4EC and a grass herbicide (Treflan, Lasso, Dual, Prowl or Sonalan) for the control of certain broadleaf weeds and grasses in soybeans. This combination will provide improved control of heavy infestations of velvetleaf, jimsonweed and common ragweed. Metribuzin 4L and Command 4EC plus a grass herbicide may be applied preplant incorporated broadcast. Consult the Command, Treflan, Lasso, Dual Prowl or Sonalan labels for specific directions for use, instructions, restrictions and additional weeds controlled not specified on this label.

Mixing: Refer to the *Product Information* section in the front of this label.

Application: For specific application information, refer to the *Product Information* section in the front of this label.

WEEDS CONTROLLED

Annual Grasses

Barnyardgrass	Crabgrass	Johnsongrass (seedling)
Bluegrass	Crowfootgrass	Panicum, Fall
Broadleaf signalgrass	Foxtails	Witchgrass
Browntop millet	Goosegrass	

Annual Broadleaves

Bristly Starbur	Kochia	Shepherdspurse
Carpetweed	Lambsquarters	Sicklepod
Copperleaf	Pigweeds	Smartweeds
Hophornbeam	Prickly Sida/Teaweed	Spotted spurge
Florida Beggarweed	Purslane	Spurred Anoda
Florida Pusley	Ragweed, Common	Velvetleaf
Galinsoga	Redweed	Venice mallow
Jimsonweed	Russian Thistle	Wild Mustards
Knotweed	Sesbania	

Metribuzin 4L and Command plus Treflan, Lasso, Dual, Prowl or Sonalan will provide suppression (reduce the competition) of cocklebur and sunflower.

APPLICATION INSTRUCTIONS Metribuzin 4L plus Command plus a Grass Herbicide (Broadcast Rates)

PRODUCT	SOIL TEXTURE ¹		
	COARSE	MEDIUM	FINE
Metribuzin 4L (Pt/Acre)	1/2	1/2 to 3/4 ²	3/4 to 1 ²
Command 4EC ³ (Pt/Acre)	1/2 to 3/4	1/2 to 3/4	1/2 to 3/4
Treflan (Pt/Acre)	1	1-1/2	2
Dual (Pt/Acre)	1-1/4 to 1-1/2	1-1/2 to 2	2 to 2-1/2
Prowl (Pt/Acre)	1-1/2	1-1/2 to 2	1-1/2 to 2-1/2
Lasso (Qt/Acre)	2 to 2-1/2	2-1/2 to 3	2-1/2 to 3
Sonalan (Pt/Acre)	1-1/4 to 2	1-3/4 to 2-1/2	2-1/4 to 3

¹ Refer to "Soil Texture" paragraph on this label for specific soil classification. On coarse textured soils with a calcareous surface area or a pH of 7.5 or higher, do not use on loamy sand or sandy loam soils with less than 1% organic matter.

² The higher rate of Metribuzin 4L should be used for the control of sicklepod and hemp sesbania. Use the lower rate of Metribuzin 4L in the preplant incorporated tank mix on soils having a calcareous surface area or a pH of 7.5 or higher, and in those situations where soils within a field vary extremely in texture or organic matter content.

³ Higher rate should be used under moderate to heavy weed infestations.

METRIBUZIN 4L PLUS SCEPTER PLUS A GRASS HERBICIDE

Metribuzin 4L may be applied with Scepter herbicide and a grass herbicide (Treflan, Lasso, Dual, Prowl or Sonalan) for the control of certain broadleaf weeds and grasses in soybeans. Metribuzin 4L and Scepter plus Treflan or Sonalan may be applied preplant incorporated broadcast. Metribuzin 4L and Scepter plus Lasso, Dual or Prowl may be applied preplant incorporated, preemergence broadcast or in a band application.

Consult the Scepter, Treflan, Lasso, Dual, Prowl or Sonalan labels for specific directions for use, instructions, restrictions and additional weeds controlled not specified on this label.

Mixing: Refer to the *Product Information* section in the front of this label.

Application: For specific application information, refer to the *Product Information* section in the front of this label.

Weeds Controlled: Metribuzin 4L plus Scepter plus Treflan, Lasso, Dual, Prowl or Sonalan will control the following broadleaf weeds and grasses:

WEEDS CONTROLLED**Annual Grasse**

Barnyardgrass	Crabgrass	Johnsongrass (seedling)
Bluegrass	Crowfootgrass	Panicum, Fall
Broadleaf signalgrass	Foxtails	Witchgrass
Browntop Millet	Goosegrass	

Annual Broadleaves

Bristly Starbur	Knotweed	Sesbania
Buffalobur	Kochia	Shepherdspurse
Carpetweed	Lambsquarters	Sicklepod Smartweeds
Cocklebur	Morningglory, pitted	Spotted spurge
Coffee Senna	Morningglory, smallflower	Spurred Anoda
Copperleaf	Pigweeds Prickly	Sunflower
Hophornbeam	Sida/Teaweed	Velvetleaf
Florida Beggarweed	Purslane	Venice mallow
Florida Pusley	Ragweed, Common	Wild mustards
Galinsoga	Redweed	
Jimsonweed	Russian Thistle	

Metribuzin 4L and Scepter plus Treflan, Lasso, Dual, Prowl or Sonalan will suppress (reduce the competition of) ivyleaf and tall morningglory, and red rice.

**METRIBUZIN 4L PLUS SCEPTER PLUS A GRASS HERBICIDE
(BROADCAST RATES)**

PRODUCT	SOIL TEXTURE ¹		
	COARSE	MEDIUM	FINE
Metribuzin 4L (Pt/A)	1/2	1/2 to 3/4 ²	3/4 to 1 ²
Scepter (1.5 lb/Gal liquid³ Pt/A)	1/3 to 1/2	1/3 to 1/2	1/3 to 1/2
-or-			
Scepter 70DG3 (Oz/A)	1.4 to 2.1	1.4 to 2.1	1.4 to 2.1
Treflan (Pt/A)	1	1-1/2	2
Dual (Pt/A)	1-1/4 to 1-1/2	1-1/2 to 2	2 to 2-1/2
Prowl (Pt/A)	1-1/2	1-1/2 to 2	1-1/2 to 2-1/2
Lasso (Qt/A)	2 to 2-1/2	2-1/2 to 3	2-1/2 to 3
Sonalan (Pt/A)	1-1/4 to 2	1-3/4 to 2-1/2	2-1/4 to 3

¹ Refer to "Soil Texture" paragraph on this label for specific soil classification. On coarse textured soils with a **calcareous surface area or a pH of 7.5 or higher**, do not use on loamy sand or sandy loam soils with less than 1% organic matter.

² The higher rate of Metribuzin 4L should be used for preemergence tank mix application and for the control of sicklepod and hemp sesbania. Use the lower rate of Metribuzin 4L in the preplant incorporated tank mix **on soils having a calcareous surface area or a pH of 7.5 or higher**, and in those situations where soils within a field vary extremely in texture or organic matter content.

³ Higher rate should be used under moderate to heavy weed infestations.

METRIBUZIN 4L PLUS PURSUIT® AND A GRASS HERBICIDE

Metribuzin 4L may be tank mixed with Pursuit herbicide and a registered grass herbicide (Dual, Lasso, Prowl, Sonalan or Treflan) for control of certain broadleaf and grass weeds in soybeans. Refer to the product labels for Pursuit, Dual, Lasso, Prowl, Sonalan or Treflan for additional directions for use, instructions, restrictions and limitations not included on this label.

Tank mix combinations of Metribuzin 4L, Pursuit and Dual, Lasso or Prowl can be applied broadcast preemergence or preplant incorporated. When the grass herbicide used is Sonalan or Treflan, apply the tank mix broadcast preplant incorporated.

Mixing and Application: Refer to the *Product Information* section of this label for directions on mixing and application of Metribuzin 4L.

APPLICATION INSTRUCTIONS Metribuzin 4L Plus Pursuit and a Grass Herbicide*		
Soil Texture	Metribuzin 4L (Pt/Acre)	Pursuit (Oz/Acre)
COARSE	1/2	4
MEDIUM	3/5 to 3/4	4
FINE	3/4 to 1	4

* For control of grass weeds, include Dual, Lasso, Prowl, Sonalan or Treflan at label rates in the tank mix with Metribuzin 4L and Pursuit herbicides.

Restrictions and Limitations: Do not apply this tank mix with aerial or irrigation equipment. Do not apply when weather conditions favor drift, or allow sprays to drift on to adjacent desirable plants. Do not use treated vines for feed or forage. Refer to appropriate sections of the Pursuit herbicide label for restrictions on use area and rotational crops.

METRIBUZIN 4L PLUS PURSUIT PLUS HERBICIDE

Metribuzin 4L may be tank mixed with Pursuit Plus herbicide for broadcast preemergence or preplant incorporated application to soybeans for control of certain broadleaf and grass weeds. Refer to the Pursuit Plus herbicide label for additional directions for use, instructions, restrictions and limitations not included on this label.

Mixing and Application: Refer to the *Product Information* section of this label for directions on mixing and application of Metribuzin 4L.

APPLICATION INSTRUCTIONS Metribuzin 4L Plus Pursuit Plus Herbicide (Broadcast Rates)		
Soil Texture	Metribuzin 4L (Pt/Acre)	Pursuit Plus (Pt/Acre)
COARSE	1/2	2-1/2
MEDIUM	3/5 to 3/4	2-1/2
FINE	3/4 to 1	2-1/2

Restrictions and Limitations:

- Do not apply this tank mix with aerial or irrigation equipment. Do not apply when weather conditions favor drift, or allow sprays to drift on to desirable plants.
- Do not use treated vines for feed or forage.
- Refer to appropriate sections of the Pursuit Plus herbicide label for restrictions on use area and rotational crops.

METRIBUZIN 4L PLUS LINURON PLUS (LASSO OR DUAL)

Metribuzin 4L plus linuron plus (Lasso or Dual) Tank Mix Application: Metribuzin 4L may be applied in combination with linuron 50 DF or 4L and Lasso 4 or Dual 8 EC as a preemergence application for the control of certain weeds in soybeans. Consult the linuron, Lasso, or Dual labels for specific directions for use, instructions, restrictions and any additional weeds not specified on this label.

Mixing: Refer to the "Product Information" section in the front of this label.

Application: Applications can be made only with ground spray equipment in accordance with specified soil types and dosage rates. For specific application information, refer to the "Product Information" section in the front of this label.

PRODUCT	Metribuzin 4L Plus Linuron Plus (Lasso or Dual) Broadcast Rates (0.5 to 3% Organic Matter Only)		
	SOIL TEXTURE		
	COARSE ¹ (Sandy, loamy sand, sandy loam)	MEDIUM (Loam, silt loam, silt, sandy)	FINE (Silty clay, sandy clay loam) clay, silty clay loam ² , clay, clay loam)
Metribuzin 4L (pt/acre)	1/4 to 3/8	3/8 to 1/2	1/2 to 3/4
Linuron 50 DF (lb/acre) or Linuron 4L (pt/acre)	1/3 to 1/2	1/2 to 3/4	3/4 to 1-1/2
Lasso 4 (qt/acre) or Dual 8 EC (pt/acre)	3/4 to 1	1 to 1-1/2	1-1/4 to 2

¹ Do not use Metribuzin 4L plus linuron plus (Lasso or Dual) on sand soils with less than 1% organic matter.

² Silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions of the U.S.

SPECIAL PRECAUTIONS (Metribuzin 4L plus Linuron plus (Lasso or Dual)): For additional precautions, restrictions, limitations, and sprayer clean-up information, refer to the appropriate sections of this label and the linuron label and the Lasso or Dual labels.

FOR USE IN COARSE (LIGHT) SOILS IN Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia.

Metribuzin 4L herbicide may be used alone or in combination with Treflan, Lasso or Dual for use in coarse-textured, low organic matter soils in the states listed above for the control of certain weeds in soybeans. Refer to the appropriate sections of this label and the Treflan, Lasso or Dual labels for specific directions for use, instructions, restrictions and any additional weeds not specified on this label.

Mixing: Refer to the "Product Information" section in the front of this label.

Application: For specific application information, refer to the Product Information section in the front of this label.

Metribuzin 4L (Alone) Preemergence Application (Broadcast Rates)		
SOIL TEXTURE	ORGANIC MATTER	Metribuzin 4L Pt/ACRE
COARSE (LIGHT) SOILS Sand ¹ , Loamy Sand, Sandy Loam	0.5% or Above	1/2 to 3/4 ²

¹ Do not use on sand with less than 1% organic matter.

² Use the higher rate under heavy weed pressures and/or on soils higher in organic matter.

Metribuzin 4L in Combination with Other Herbicides: Metribuzin 4L may be used in a tank mix combination with Treflan as a preplant incorporated application or as a preemergence overlay application following a preplant incorporated application of Treflan. Metribuzin 4L may also be used as a preemergence application in combination with Lasso or Dual.

FOR USE IN COARSE (LIGHT) SOILS 0.5% or Above ORGANIC MATTER (Broadcast Rates)			
SOIL TEXTURE	COMBINATION PRODUCT/ACRE	Plus	Metribuzin 4L Pt/ACRE
COARSE (LIGHT) SOILS Sand ¹ , Loamy Sand, Sandy Loam	Preplant Incorporated Treflan 4EC 1 pt	Plus	1/2 to 3/4 ²
	Preemergence Lasso 4E 1-1/2 to 2 qt Dual 8E 1-1/4 to 1-1/2 pt	Plus	1/2 to 3/4 ²

¹ Do not use on sand with less than 1% organic matter.

² Use the higher rate under heavy weed pressures and/or on soils higher in organic matter.

Use Restrictions:

- Do not use on sand soils with less than 1% organic matter, or on sandy loam or loamy sand soils with less than 0.5% organic matter.
- For additional precautions, restrictions, limitations and sprayer clean-up information, refer to the appropriate sections of this label and the Treflan, Lasso or Dual labels.

BURNDOWN WEED CONTROL - FIELD CORN AND SOYBEANS

Metribuzin 4L can be used as part of a herbicide program for burndown of existing vegetation prior to crop emergence in conservation tillage systems. Metribuzin 4L may be tank mixed with 2,4-D low volatile ester (LVE), Gramoxone Extra, or Roundup / Roundup Ultra / Touchdown for control of emerged weeds prior to field corn or soybean emergence.

Metribuzin 4L tank mixes with 2,4-DB, Fusion, Poast Plus or Select may also be used in soybeans for control of emerged weeds prior to crop emergence. Metribuzin 4L burndown tank mixes can be applied before planting or prior to crop emergence in the following areas:

Field Corn:

Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, Ohio, South Dakota, and Wisconsin

Soybeans:

All areas for all products except Fusion tank mixes - see Fusion section of this label for specified states.

Application: Metribuzin 4L may be applied up to 30 days prior to planting or preemergence. Apply only by ground equipment when Metribuzin 4L is used for burndown of existing vegetation in conservation tillage systems. Metribuzin 4L and tank mix partner burndown rates are listed in the following three tables.

METRIBUZIN 4L BURNDOWN RATES - FIELD CORN AND SOYBEANS		
CROPS	APPLICATION TIMING	METRIBUZIN 4L RATE (Pt/A)
Field corn Iowa Kansas Missouri Nebraska South Dakota	Preplant (0 to 30 days) Preemergence	3 to 8
Field corn Illinois Indiana Kentucky Michigan Minnesota Ohio Wisconsin	Preplant (10 to 30 days) Preplant (0 to 9 days) Preemergence	3 to 8 3 to 6
Soybeans	Preplant (0 to 30 days) Preemergence	3 to 8

**METRIBUZIN 4L PLUS TANK MIX PARTNER BURNDOWN RATES -
FIELD CORN OR SOYBEANS**

PRODUCT	RATE	DIRECTIONS AND REMARKS
Metribuzin 4L + 2,4-D LVE	3 to 8 fl oz/A* + 1/4 to 1 lb ai/A	In soybeans, apply at least 7 days preplant when using 2,4-D LVE at 1/4 to 1/2 lb ai/A and at least 30 days preplant with rates greater than 1/2 lb ai/A. Include crop oil concentrate (COC) at the rate of 1 gal/100 gal of spray solution (1% v/v). In corn, apply at least 7 days preplant or at least 3 days after planting but before corn emergence.
Metribuzin 4L + Gramoxone Extra	3 to 8 fl oz/A* + 24 to 48 fl oz/A	Must be applied prior to crop emergence. Use 24 to 32 fluid ounces of Gramoxone Extra for weeds less than 4 inches in height and 32 to 48 fluid ounces when weeds are 4 to 6 inches in height. Apply in 20 to 60 gallons of water per acre. Include either nonionic surfactant at 1 quart per 100 gallons (0.25% v/v) or crop oil concentrate at 1 gallon per 100 gallons (1% v/v) of spray solution.
Metribuzin 4L + Gramoxone Extra + 2,4-D LVE	3 to 8 fl oz/A* + 24 to 48 fl oz/A + 1/4 to 1 lb ai/A	For this tank mix follow the Directions and Remarks Sections above for Metribuzin 4L + 2,4-D LVE and Metribuzin 4L + Gramoxone Extra, paying special attention to crop planting restrictions with 2,4-D LVE. Include either nonionic surfactant or crop oil concentrate in this tank mix.
Metribuzin 4L + Roundup/ Roundup Ultra or Touchdown	3 to 8 fl oz/A* + 12 to 24 fl oz/A or 8 to 16 fl oz/A	Must be applied prior to crop emergence. Use the higher rates as weeds approach the maximum weed heights listed in the <i>Weeds Controlled</i> section below. Apply in 10 to 20 gallons of water per acre. With Roundup and Touchdown, include nonionic surfactant at 2 quarts per 100 gallons (0.5% v/v) and ammonium sulfate (spray grade) at 17 pounds per 100 gallons of spray solution. With Roundup Ultra, include ammonium sulfate (spray grade) at 17 pounds per 100 gallons of spray solution. Any glyphosate formulation registered and labeled for use in field corn or soybeans may be tank mixed with Metribuzin 4L.
Metribuzin 4L + Roundup/ Roundup Ultra or Touchdown + 2,4-D LVE	3 to 8 fl oz/A* + 12 to 24 fl oz/A or 8 to 16 fl oz/A + 1/4 to 1 lb ai/A	For this tank mix follow the Directions and Remarks Sections above for Metribuzin 4L + 2,4-D LVE and Metribuzin 4L + Roundup / Roundup Ultra / Touchdown, paying special attention to planting restrictions with 2,4-D LVE. Use the adjacent recommendations under the Metribuzin 4L + Roundup / Roundup Ultra / Touchdown tank mix. Do not use crop oil concentrate.

* If applied to field corn grown in Illinois, Indiana, Kentucky, Michigan, Minnesota, Ohio and Wisconsin, refer to Table 1 for correct Metribuzin 4L rate based on application timing.

**METRIBUZIN 4L PLUS TANK MIX PARTNER BURNDOWN RATES -
SOYBEANS ONLY**

PRODUCT	RATE	DIRECTIONS AND REMARKS
Metribuzin 4L + 2,4-DB	3 to 8 fl oz/A + 1/8 to 7/32 lb ai/A	Apply preplant or before soybean emergence. Include nonionic surfactant at 2 quarts per 100 gallons (0.5% v/v) of spray solution.
Metribuzin 4L + Fusion + 2,4-D LVE	3 to 8 fl oz/A + 4 to 8 fl oz/A + 1/4 to 1 lb ai/A	For use only in Delaware, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Pennsylvania, South Dakota, Virginia, West Virginia, and Wisconsin. For this tank mix follow the planting restrictions under the Directions and Remarks Section above for Metribuzin 4L + 2,4-D LVE. Fusion rates of 4, 6 and 8 fl. ounces will control certain grasses up to 2, 4 and 6 inches in height, respectively. Include either crop oil concentrate at 1 gallon per 100 gallons (1.0% v/v) or nonionic surfactant at 1 to 2 quarts per 100 gallons (0.25 - 0.5% v/v) of spray solution. Refer to the Fusion label for additional information.
Metribuzin 4L + Poast Plus + 2,4-D LVE	3 to 8 fl oz/A + 8 to 12 fl oz/A + 1/4 to 1 lb ai/A	For this tank mix follow the planting restrictions under the Directions and Remarks Section above for Metribuzin 4L + 2,4-D LVE. The 8 and 12 fl oz rate of Poast Plus will control certain grasses up to 2 and 3 inches in height, respectively. Include either crop oil concentrate at the rate of 1 gallon per 100 gallons of spray solution (1% v/v) or Dash HC at 1 pint per acre. Refer to the Poast Plus label for additional information.
Metribuzin 4L + Select + 2,4-D LVE	3 to 8 fl oz/A + 3 to 4 fl oz/A + 1/4 to 1 lb ai/A	For this tank mix follow the planting restrictions under the Directions and Remarks Section above for Metribuzin 4L + 2,4-D LVE. The 3 and 4 fluid ounce rates of Select will control certain grasses up to 3 and 4 inches in height, respectively. Include crop oil concentrate at the rate of 1 quart per acre and 28% UAN (urea ammonium nitrate) at a rate of 1-2 quarts per acre. Refer to the Select label for additional information.

Use Restrictions: Do not apply these treatments after crop emergence. Observe all precautions and limitations on the labeling of all products used in tank mixtures. Refer to the Product Information section of this label for additional information, restrictions, and limitations.

Field Corn:

- Do not apply on coarse textured soils with less than 1.5% organic matter.
- Do not apply more than 6 fl oz of Metribuzin 4L per acre on soils with less than 2% organic matter.
- Do not apply on soils having pH 7.0 or greater.
- Do not apply more than 8 fl oz Metribuzin 4L (0.25 pound active ingredient) per acre per growing season.
- Corn seed should be planted a minimum of 1-1/2 inches deep.
- Metribuzin 4L may only be used in hybrid seed corn production fields if both inbred parents are known to be tolerant to Metribuzin 4L.

Soybeans:

- Apply only 2,4-D low volatile ester formulations which are registered for preplant or burndown use in soybeans.
- Do not apply tank mixtures containing 2,4-D LVE if wind is blowing toward desired susceptible plants (i.e. cotton, tobacco, tomato, etc.) or when wind speeds exceed 6 miles per hour.

Feeding restrictions. Corn treated with Metribuzin 4L may be harvested for silage or grain 60 days after treatment. Soybean vines or hay treated with Metribuzin 4L may be

grazed or fed to livestock 40 days after application. Do not feed hay, forage, fodder or graze 2,4-D, Select, or Fusion treated vegetation. Follow the most restrictive preharvest interval of all products used in a tank mixture.

Weeds controlled: Metribuzin 4L in tank mixtures with the above herbicides will provide burndown control of the weeds listed below.

WEEDS CONTROLLED BY BURNDOWN RATES OF METRIBUZIN 4L									
METRIBUZIN 4L PLUS									
WEEDS CONTROLLED	2,4-D LVE	Poast Plus + 2,4-D LVE	Select + 2,4-D LVE	Fusion + 2,4-D LVE	Roundup/ Roundup Ultra/ Touchdown	Roundup Ultra/ Touchdown + 2,4-D LVE	Gramoxone Extra	Gramoxone Extra + 2,4-D LVE	2,4-DB
BROADLEAVES									
MAXIMUM BURNDOWN HEIGHT (INCHES)									
Buffalobur		-			6	6	4 to 6	4 to 6	-
Chickweed, common		6			6	8	4 to 6	4 to 6	2
Cocklebur, common		6			6	8	4 to 6	4 to 6	6
Dandelion, common		6 dia ^a			2 dia ^b	6 dia ^a	4 dia ^d	6 dia ^a	2 dia
Henbit		4			4	4	4 to 6	4 to 6	-
Horseweed/marestail		6 ^{ac}			4 ^b	6	3	6 ^a	2 ^c
Jimsonweed		6			6	6	4 to 6	4 to 6	2
Kochia*		4 ^{ac}			4	4	4	4	-
Ladysthumb		6			6	8	4 to 6	4 to 6	3
Lambsquarters, common		6			6	8	4 to 6	4 to 6	2
Lettuce, prickly		6			4	6	4 to 6	4 to 6	2
Mallow, Venice		6			6	6	4 to 6	4 to 6	-
Morningglory spp.		6			2	4	2	4	4
Mustard spp.		6			6	8	4 to 6	4 to 6	2
Pennycress, field		6			6	6	4 to 6	4 to 6	2
Pigweed, spp. (annual)		6			6	8	4 to 6	4 to 6	3
Ragweed, common		6			6 ^b	8	4 to 6	4 to 6	2
Ragweed, giant		6 ^{ac}			4 ^b	6	4	6	2
Shepherdspurse		6			6	6	4 to 6	4 to 6	-
Sida, prickly		6			4	4	4	4	1
Smartweed, Pennsylvania		6			6	8	4 to 6	4 to 6	3
Sunflower, common		6			6	6	4 to 6	4 to 6	4
Thistle, Russian		4 ^{ac}			2 to 4 ^{bc}	6	4	4 to 6	3 ^c
Velvetleaf		6			6	8	4 to 6	4 to 6	3
Waterhemp spp.		6			6	8	4 to 6	4 to 6	3

^a Use 2,4-D LVE at 0.5 pound active ingredient per acre.
^b Use a minimum Roundup/ Roundup Ultra rate of 16 fl oz/A and a minimum Touchdown rate of 10.6 fl oz/A.
^c Use Metribuzin 4L at 6 fl oz/A for optimum control.
^d Suppression only.
* Does not control triazine resistant biotypes.

WEEDS CONTROLLED BY BURNDOWN RATES OF METRIBUZIN 4L

WEEDS CONTROLLED	2,4-D LVE	METRIBUZIN 4L PLUS						2,4-DB
		Poast Plus + 2,4-D LVE	Select + 2,4-D LVE	Fusion + 2,4-D LVE	Roundup/ Roundup/ Roundup Ultra/ Touchdown	Roundup Ultra/ Touchdown + 2,4-D LVE	Gramoxone Extra + 2,4-D LVE	
ANNUAL GRASSES		MAXIMUM BURNDOWN HEIGHT (INCHES)						
Barley		-	-	-	-	8	4 to 6	
Barnyardgrass		2 to 3	3 to 4	-	-	6	4 to 6	
Crabgrass spp.		2 to 3	-	-	-	6	4 to 6	
Foxtail spp.	Does not control these species	2 to 3	3 to 4	2 to 6	-	8	4 to 6	Does not control these species
Johnsongrass, seedling		2 to 3	-	-	-	8	4 to 6	
Panicum, fall		2 to 3	3	2 to 6	-	6	4 to 6	
Sandbur, field		-	-	-	-	8	4 to 6	
Shattercane		2 to 3	-	-	-	8	4 to 6	
Wheat, volunteer		-	-	-	-	6	4 to 6	
Witchgrass		2 to 3	-	-	-	6	4 to 6	

RESIDUAL WEED CONTROL

Metrribuzin 4L burndown programs can be used as part of a full season weed control program in both field corn and soybeans when, 1) applied as a tank mixture with residual herbicides, or 2) followed with a postemergence weed control program, which is registered for use on that crop.

For residual control, Metribuzin 4L burndown programs may include tank mixes with the following herbicides or combination of herbicides:

Field Corn

Alachlor	Dual	Pentagon
Atrazine	Dual II	Prowl
Banvel	Extrazine II	Pursuit ^a
Bicep	Frontier	Pursuit Plus ^a
Bicep II	Guardsman	Ramrod
Bicep Lite	Harness	Ramrod/Atrazine
Bladex	Harness Xtra	Simazine
Broadstrike + Dual	Lariat	Surpass
Broadstrike Plus	Linex	Surpass 100
Bullet	Linuron	Topnotch
Clarity	Lorox	
Cycle	Marksman	

^a Use only Pursuit resistant/tolerant corn hybrids.

Soybeans

Alachlor	Frontier	Pursuit
Broadstrike + Dual	Gemini	Pursuit Plus
Canopy	Linuron	Scepter
Command	New Lorox Plus	Metrribuzin 4 L ^b
Dual	Pentagon	Squadron
Dual II	Previum	Turbo
	Prowl	

^b Metribuzin 4L used (alone and in tank-mixes) on soybeans at higher labeled rates than those listed for burndown weed control will also provide residual control of those weeds listed in the *Weeds Controlled by Metribuzin 4L and Metribuzin 4L Tank Mix Combinations* section of the Metribuzin 4L label.

Refer to the individual product labels for additional information, restrictions, and limitations.

SOUTHERN AND SOUTHEASTERN STATES ONLY POSTEMERGENCE DIRECTED SPRAY APPLICATIONS

Metrribuzin 4L can be applied in postemergence directed sprays to soybeans for control of certain weeds which escape preplant or preemergence herbicide applications and for control of additional flushes of weeds that may occur after soybeans have emerged. Postemergence directed sprays of Metribuzin 4L can be applied to soybeans in addition to a preemergence or preplant application of Metribuzin 4L herbicide according to label directions.

Weeds Controlled: Metribuzin 4L, applied postemergence to soybeans as a directed spray according to directions on this label, will control the following at rates shown (broadcast basis) when grasses and common ragweed are less than 1-inch tall and other broadleaves are less than 3-inches tall:

1/2 Pt/Acre	Florida beggarweed (<i>Desmodium tortuosum</i>)	Mexicanweed (<i>Caperonia castaniifolia</i>)
	Pigweeds (<i>Amaranthus</i> spp.)	Purslane (<i>Portulaca oleracea</i>)
1/2 to 1 Pt/Acre	Carpetweed (<i>Mollugo verticillata</i>)	Sicklepod (<i>Cassia obtusifolia</i>)
	Cocklebur (<i>Xanthium pensylvanicum</i>)	Velvetleaf (<i>Abutilon theophrasti</i>)
1 Pt/Acre	Dayflower (<i>Commelina</i> spp.)	Crabgrass (<i>Digitaria</i> spp.)
	Sesbania (<i>Sesbania</i> spp.)	Prickly sida/Teaweed (<i>Sida spinosa</i>)
1 Pt/Acre	Ragweed, common (<i>Ambrosia artemisiifolia</i>)	

At the rate of 1/2 pt/acre morningglory species, (*Ipomoea* spp.) horsenettle, (*Solanum* spp.) Florida pusley, (*Richardia scabra*) spotted spurge (*Euphorbia maculata*) and wild poinsettia (*Euphorbia heterophylla*) are suppressed when Metribuzin 4L is applied before these weeds are 3 inches tall. The 1 pt/acre rate will suppress broadleaf signalgrass (*Brachiaria platyphylla*) up to 1 inch tall.

METRIBUZIN 4L POSTEMERGENCE DIRECTED SPRAY**APPLICATION INSTRUCTIONS**

CROP	Metribuzin 4L Pt/Acre
Soybeans (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee and Texas)	1/2 to 1 (Broadcast Basis)

Apply proper dosage using 10 to 40 gallons of water per acre as a directed spray in a 6 to 8 inch band on each side of the row after soybeans are 8 inches tall and before broadleaf weeds are 3 inches tall and before grasses and common ragweed are 1 inch tall. For best results the spray must cover weed foliage with minimum or no contact with soybean foliage. Add a nonionic surfactant such as Ortho X-77 to the spray mixture to obtain better wetting of weed leaf surfaces. To determine the correct dosage of Metribuzin 4L for a band application see "Banded Application" under the Product Information section in the front of this label.

If necessary, a second postemergence directed spray application can be made after 7 days.

Do not feed or graze green soybean vines. Do not harvest soybeans or use dry soybean vines for feed or forage within 70 days of last application.

Use Restrictions (Directed Postemergence): Do not apply directly to soybeans or serious crop injury will occur. Do not allow spray to contact more than the lower 1/4 to 1/3 of soybean plants. Soybean leaves contacted by the spray will be killed.

Do not apply Metribuzin 4L postemergence to sensitive soybean varieties. See "Special Precautions" in the front of this label.

To avoid injury to other crops or desirable plants from spray drift, sprayer pressure must not exceed 30 psi and the sprayer must be fitted with nozzles no smaller than 8002 T-Jet (or equivalent). Do not apply under weather conditions which favor drift.

POTATOES

Metribuzin 4L herbicide may be used for use in ground, aircraft or specified chemigation equipment as a preemergence and/or postemergence application to potatoes. Early maturing smooth skinned white and all red skinned varieties may be injured with postemergence applications. The varieties Atlantic, Belchip, Centennial, Chippelle and Shepody are sensitive to Metribuzin 4L. Avoid postemergence applications on these varieties. Preemergence applications on these varieties may cause crop injury under adverse weather conditions, on coarse soils, under high soil pH, with higher rates per acre and with mechanical incorporation.

Ground Application: Metribuzin 4L may be used for use with ground spray equipment applied as a preemergence and/or postemergence application for control of the listed grass and broadleaf weeds in potatoes. Apply as a uniform broadcast spray at 20 or more gallons per acre.

Aerial Application: Metribuzin 4L may be applied in aerial spray equipment as a preemergence and/or postemergence application at 5 or more gallons per acre.

Chemigation: Metribuzin 4L may be applied preemergence and/or early postemergence to potatoes using center pivot, solid set and lateral roll systems. Apply specified dosage in 1/4 to 3/4 inch of water per acre (1/4 to 1/2 inch on sandy soil) as a continuous injection in self-propelled systems or apply in the last 15 to 30 minutes of the set in other systems. Be sure all the Metribuzin 4L has been flushed from the lines before shutting down the system.

WEEDS CONTROLLED

Metribuzin 4L applied to potatoes according to directions, will provide economic control of the following weeds. For optimum control, applications should be made before weeds are 1 inch tall. (See **NOTE**)

BROADLEAVES

Carpetweed, common ¹	Mustard, tansy ¹	Shepherdspurse ¹
Cocklebur, common ^{1, 2}	Mustard, tumble ¹	Sicklepod ¹
Jimsonweed ¹	Mustard, wild ¹	Smartweed, Pennsylvania ^{1, 2}
Kochia ³	Pennycress, field ^{1, 2}	Sunflower, common ³
Lambsquarters, common ^{1, 2}	Pigweed, redroot ^{1, 2}	Thistle, Russian ²
Mustard, Indian ¹	Pigweed, smooth ^{1, 2}	
	Ragweed, common ^{1, 2}	

GRASSES

Barnyardgrass ³	Foxtail, green ¹	Panicum, fall ¹
Crabgrass, large ¹	Foxtail, yellow ¹	Signalgrass, broadleaf ¹
Crabgrass, smooth ¹	Johnsongrass, seedling ¹	
Foxtail, giant ¹		

¹ Weeds controlled with preemergence applications.

² Weeds controlled with postemergence applications.

³ Weeds requiring two applications for control.

HARD TO CONTROL WEEDS

Although Metribuzin 4L may not provide commercially acceptable control in every instance, it will suppress growth of the following weeds and reduce their competition with potato plants.

BROADLEAVES

Kochia	Purslane, common
Nightshade, hairy	Sunflower, common

GRASSES

Barnyardgrass	Nutsedge, yellow
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NOTE: Where triazine-resistant weeds are present, Metribuzin 4L alone may not provide adequate control.

BROADCAST APPLICATION INSTRUCTIONS

CROP	Metribuzin 4L Pt/Acre
Potatoes	1/2 to 2

PREEMERGENCE: Apply specified dosage as a broadcast spray. Do not mechanically incorporate into soil. Use the 1/2 to 1 pint/acre rate for control of wild mustard (Brassica sp.) only. On sand soils or sensitive varieties, do not exceed 1 pint/acre.

Potatoes 1/2 to 1
(Except early maturing smooth skinned, red skinned, and other specified varieties.)

POSTEMERGENCE: Apply specified dosage as a broadcast spray over the tops of potato plants.* Use rates of 1/2 to 1 pint/acre for control of redroot pigweed and common lambsquarters only. Apply the 1 pint/acre rate for control of other weeds listed on this label.

SPLIT APPLICATIONS: This product may be applied once preemergence and once postemergence as directed above.* Do not exceed 2 pint total per acre per season.

IDAHO, OREGON AND WASHINGTON ONLY: Two postemergence applications can be made as broadcast sprays over the tops of potato plants if Metribuzin 4L is not applied preemergence. Use 1/2 to 1 pint/acre for control of redroot pigweed and lambsquarters only. On coarse (sandy) soils with low organic matter do not exceed 3/4 pint/acre per application. On medium and heavy soils only, use 1 pint/acre per application for control of other weeds listed on this label and for suppression of hairy nightshade. Make the first application early in the season while weeds are still small. Allow at least 14 days before the second application. Do not apply after June 30 if treated land is to be planted to crops other than potatoes.

* Refer to Use Restrictions - Potatoes below.

TANK MIXES: Metribuzin 4L may be tankmixed with the following herbicides: Dual/Dual II, Eptam, Prowl 3.3 EC and Matrix. In addition, three-way tankmix combinations may be used for Metribuzin 4L plus Dual/Dual II, Eptam or Prowl 3.3 EC plus Matrix when applied preemergence. Refer to each product's label for precautionary statements, restrictions, application information and weeds controlled.

Dual/Dual II: Metribuzin 4L may be applied in a tankmix combination with Dual/Dual II as a preemergence broadcast application. Apply Metribuzin 4L at 3/4 to 2 pints per acre and Dual/Dual II at 1.5 to 3 pints per acre according to the respective labels for use of each product alone on potatoes.

Eptam: Metribuzin 4L may be tankmixed with Eptam at rates and uses permitted on each product's label.

Prowl 3.3 EC: Metribuzin 4L may be applied in tankmix combination with Prowl as a preemergence or early postemergence broadcast application. As a preemergence mix, apply Metribuzin 4L at 1 to 2 pints per acre and Prowl at 1.2 to 3.6 pints per acre. As an early postemergence spray, apply Metribuzin 4L at 1/2 to 1 pint per acre and Prowl at 1.2 to 3.6 pints per acre before the crop is in the 6-inch growth stage.

Matrix: (except the following counties in Colorado: Almosa, Conejos, Costilla, Rio Grande and Saguache): Metribuzin 4L may be applied in tankmix combination with Matrix as a preemergence and/or early postemergence application for improved control on weeds such as Russian thistle, kochia and common lambsquarters. As a preemergence mix, apply Metribuzin 4L at 1/2 to 1.125 pints per acre and Matrix at 1 to 1-1/2 oz. product per acre. As an early postemergence spray, apply Metribuzin 4L at 1/2 to 1 pint per acre and Matrix at 1 to 1-1/2 oz. product per acre. Use a nonionic surfactant at a rate of 0.125% v/v (1 pt./100 gallon of water). Apply before the crop exceeds 14 inches in height. Postemergence applications of Matrix treatments should be made prior to June 30.

Use Restrictions (Potatoes):

- Do not use Metribuzin 4L on potatoes in Kern County, California.
- Do not apply more than a total of 2 pints Metribuzin 4L per acre in a single crop season regardless of the method of application.
- Do not make postemergence applications prior to rainfall or irrigation on recently cultivated potatoes, nor within 3 days after periods of cool, wet cloudy weather or injury may occur.
- Do not apply Metribuzin 4L within 60 days of harvest.
- Do not use air blast sprayers.
- Do not apply to sweet potatoes or yams.
- Do not rotate any crop not listed on this label for 18 months following application of Metribuzin 4L.

Use Precautions:

- Postemergence applications may cause some chlorosis or minor necrosis. These symptoms may be more severe if seed-piece decay is occurring or if growing conditions favor crop stress.
- Postemergence applications may be made only on russet or white skinned varieties that are not early maturing.
- Potato varieties may vary in their response to herbicide application. When using Metribuzin 4L for the first time on a particular variety, always determine crop tolerance before using on a field scale.

Certain varieties of wheat and barley are sensitive to Metribuzin 4L (see the wheat and barley section of this label for sensitive varieties) and should not be planted during the next growing season unless the following cultural practices occur:

- Potato vines left in rows as a result of harvest must be uniformly distributed over the soil surface prior to plowing and,
- Plow with a moldboard plow to a depth sufficient to mix the upper 8 inches of soil.

ALFALFA AND SAINFOIN

Metribuzin 4L herbicide may be used for use in alfalfa and sainfoin in the following areas:

- Alfalfa and sainfoin (including mixed stands with grasses) (all areas except California).
- Alfalfa and sainfoin (including mixed stands with grasses) (California only).
- Alfalfa - Tank Mix Combination with Gramoxone (Colorado, Idaho, Montana, Nevada, Oregon, Utah, Washington, Wyoming, and the following California counties: Del Norte, Lassen, Modoc, Nevada, Plumas, Shasta, Sierra, and Siskiyou).
- Alfalfa - Post Dormant Application of Metribuzin 4L Impregnated on Dry Fertilizer Only (Connecticut, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Nebraska, New Mexico, New York, Ohio, Oklahoma, Pennsylvania, South Dakota, Tennessee, Texas and Wisconsin).

Metribuzin 4L may be used for use in aerial or ground spray equipment as a broadcast surface application to established crops of alfalfa and sainfoin for the control of certain grass and broadleaf weeds.

APPLICATION: Refer to *Product Information* in the front of this label for detailed information on the application of Metribuzin 4L. For information on applying Metribuzin 4L in fluid or on dry fertilizer refer to the *Application Of Metribuzin 4L In Fluid Fertilizers or Commercial Impregnation And Application Of Metribuzin 4L On Dry Bulk Fertilizer* under the *Product Information* section of this label.

Use Restrictions:

- Use Metribuzin 4L only on established alfalfa and sainfoin.
- Do not apply Metribuzin 4L after growth begins in the spring or before growth ceases in the fall, except as specified on this label.
- Do not graze or harvest within 28 days after application.

Use Precautions:

- For best weed control, apply Metribuzin 4L when weeds are less than 2 inches tall or before weed foliage is 2 inches in diameter.
- Reduced weed control may occur when extended dry conditions follow application of Metribuzin 4L.
- Crop injury may occur when:
 - Crop is under stress conditions such as diseases, insect infestations, poorly drained soils, drought or winter injury at time of application;
 - Crop is treated within 12 months after seeding;
 - There is excessive irrigation or rainfall immediately after application. Do not apply more than 1/2 inch of water in the first irrigation after Metribuzin 4L is applied.

ALFALFA and SAINFOIN (All Areas Except California) BROADCAST APPLICATION INSTRUCTIONS

CROP	METRIBUZIN 4L Pt/Acre
Alfalfa and Sainfoin (Except California)	1/2 to 2

Select the proper dosage according to weeds known to be and present in field to be treated. On loamy sand soils in Oregon and Washington, do not apply more than 1 pt of Metribuzin 4L per acre.

FOR USE ON MIXED STANDS OF ALFALFA AND GRASSES:

Rates of 1 to 1-1/2 pt of Metribuzin 4L per acre will provide partial reduction of forage grass stands. These rates may be used to reduce forage grass stands to prevent crowding out of alfalfa. Higher rates will severely reduce forage grass stands.

Metribuzin 4L should not be used on sand soils. In areas west of the Rocky Mountains, avoid using Metribuzin 4L on soils with calcareous surface area, high levels of lime or sodium, or a pH greater than 8.2.

ALFALFA and SAINFOIN Weeds Controlled (Except California)	
1/2 to 3/4 Pt METRIBUZIN 4L/Acre	
Chickweed, Common (<i>Stellaria media</i>)	
3/4 to 1 Pt METRIBUZIN 4L/Acre	
Cheat (<i>Bromus secalinus</i>)	Pennycress (<i>Thlaspi arvense</i>)
Deadnettle, Purple (<i>Lamium purpureum</i>)	Rescuegrass (<i>Bromus catharticus</i>)
Downy brome (<i>Bromus tectorum</i>)	Shepherdspurse (<i>Capsella bursa pastoris</i>)
Japanese brome (<i>Bromus japonicus</i>)	
1 to 2 Pt METRIBUZIN 4L/Acre	
Broadleaves	Mustard, Jim Hill (tumble) (<i>Sisymbrium altissimum</i>)
Fleabane, Rough (<i>Erigeron strigosus</i>)	Mustard, Tansy (<i>Descurainia pinnata</i>)
Flixweed (<i>Descurainia sophia</i>)	Pepperweed (<i>Lepidium virginicum</i>)
Henbit (<i>Lamium amplexicaule</i>)	Pigweed, Redroot (<i>Amaranthus retroflexus</i>)
Kochia (<i>Kochia scoparia</i>)	Prickly Lettuce (<i>Lactuca serriola</i>)
Lambsquarters, Common (<i>Chenopodium album</i>)	White Cockle (<i>Melandrium album</i>)
Marestail (Horseweed) (<i>Hippuris vulgaris</i>)	Wild Buckwheat (<i>Polygonum convolvulus</i>)
Meadow Salsify (<i>Tragopogon pratensis</i>)	Yellow Rocket (<i>Barbarea vulgaris</i>)
Mustard, Blue (<i>Chorispora tenella</i>)	
Grasses	Smooth Brome (<i>Bromus inermis</i>)
Foxtail, Green (<i>Setaria viridis</i>)	Wild Oats (<i>Avena fatua</i>)
Little Barley (<i>Hordeum pusillum</i>)	
2 Pt METRIBUZIN 4L/Acre	
Broadleaves	Ragweed, Common (<i>Ambrosia artemisiifolia</i>)
Chickweed, Mousear (<i>Cerastium vulgatum</i>)	
Dandelion (<i>Taraxacum officinale</i>)	
Grasses	Foxtail Barley (<i>Hordeum jubatum</i>)
Barnyardgrass (<i>Echinochloa crus-galli</i>)	
Bluegrass (<i>Poa annua</i>)	

Weeds Partially Controlled: At the rate of 2 pt/acre Metribuzin 4L may be used to reduce the competition from curly dock (*Rumex crispus*). At 1 to 2 pt/acre, Metribuzin 4L may be used to reduce the competition of German Moss or knawel (*Scelanthus annuus*).

ALFALFA AND SAINFOIN (California Only) (Including Mixed Stands With Grasses)

Metribuzin 4L may be used in aerial or ground spray equipment as a broadcast surface application to dormant established crops of alfalfa and sainfoin.

APPLICATION: Metribuzin 4L may be used in aerial or ground spray equipment as a broadcast surface application to dormant established crops of alfalfa and sainfoin for control of certain grass and broadleaf weeds. Do not apply Metribuzin 4L after growth begins in the spring or before growth ceases in the fall. Do not apply to either alfalfa or sainfoin during the first growing season after seeding.

For information on applying Metribuzin 4L in fluid fertilizer solutions to alfalfa, refer to the appropriate section of this label.

For information on commercial impregnation and application of Metribuzin 4L on dry bulk fertilizer, refer to the appropriate section of this label.

Weeds Controlled	
3/4 to 1 Pt METRIBUZIN 4L/Acre	
Cheatgrass (downy brome) (<i>Bromus secalinus</i>)	
1 to 2 Pt METRIBUZIN 4L/Acre	
Broadleaves	Mustard, Tansy (<i>Descurainia pinnata</i>)
Chickweed, Common (<i>Stellaria media</i>)	Pepperweed, Virginia (<i>Lepidium virginicum</i>)
Flixweed (<i>Descurainia sophia</i>)	Shepherdspurse (<i>Capsella bursa-pastoris</i>)
Henbit (<i>Lamium amplexicaule</i>)	White Cockle (<i>Melandrium album</i>)
Kochia (<i>Kochia scoparia</i>)	Wild Buckwheat (<i>Polygonum convolvulus</i>)
Meadow Salsify (<i>Tragopogon pratensis</i>)	Yellow Rocket (<i>Barbarea vulgaris</i>)
Mustard, Blue (<i>Chlorispora tenella</i>)	
Grasses	Wild Oats (<i>Avena fatua</i>)
Smooth Brome (<i>Stellaria media</i>)	
2 Pt METRIBUZIN 4L/Acre	
Broadleaves	
Dandelion (<i>Taraxacum officinale</i>)	
Grasses	Foxtail Barley (<i>Hordeum jubatum</i>)
Barnyardgrass (<i>Echinochloa crus-galli</i>)	
Bluegrass (<i>Poa annua</i>)	

BROADCAST APPLICATION INSTRUCTIONS

CROP	METRIBUZIN 4L Pt/Acre
Alfalfa and Sainfoin (California Only)	3/4 to 2

Select the proper dosage according to weeds known to be present in the field to be treated. Apply specified dosage in 20 to 40 gallons of water per acre with ground spray equipment or 3 to 10 gallons of water per acre with aerial spray equipment fitted with nozzles suitable for broadcast applications of herbicides. Treat only dormant established crops of alfalfa and sainfoin. Injury may occur to alfalfa if Metribuzin 4L is applied earlier than 12 months after seeding. Do not apply after Spring growth begins or before growth ceases in the Fall. Do not graze or harvest within 28 days after application.

At the 2 pt/acre rate, Metribuzin 4L may be used for suppression of curly dock.

FOR USE ON MIXED STANDS OF ALFALFA AND GRASSES: Rates of 1 to 1-1/2 pt of Metribuzin 4L per acre will provide partial reduction of forage grass stands. These rates may be used to reduce forage grass stands to prevent crowding out of alfalfa. Higher rates will severely reduce forage grass stands.

Do not apply with aerial spray equipment when wind speed is greater than 10 mph. Do not apply when weather conditions favor spray drift and/or when sensitive cool season crops, such as cole crops, onions, peas, or strawberries, are present in adjacent fields. Applications should not be made when weather conditions favor spray drift, especially in areas where wheat is growing on coarse textured soils in adjacent fields, or injury may occur.

ALFALFA

METRIBUZIN 4L PLUS GRAMOXONE EXTRA TANK MIX

Colorado, Idaho, Montana, Nevada, Oregon, Utah, Washington, Wyoming and the following California counties: Del Norte, Lassen, Modoc, Nevada, Plumas, Shasta, Sierra, and Siskiyou.

APPLICATION: Metribuzin 4L plus Gramoxone Extra herbicide tank mix application may be used, during the dormant season, in aerial or ground spray equipment as a broadcast surface application to established alfalfa for the control of certain grass and broadleaf weeds. Do not apply Metribuzin 4L/Gramoxone Extra tank mix to growth that is more than 2 inches tall. Apply once per season. Do not apply following cuttings during growing season. Use a minimum of 10 gallons of water per acre with aerial spray equipment and a minimum of 20 gallons of water per acre with ground spray equipment. Add a non-ionic spreader at label rates to the spray solution.

Weeds Controlled: Metribuzin 4L plus Gramoxone Extra (1-1/2 to 2-1/2 pints/acre) tank mix application will control established weeds. Gramoxone controls weeds by contact activity.

1/2 to 3/4 Pt METRIBUZIN 4L/Acre

Common Chickweed

3/4 to 1-1/2 Pt METRIBUZIN 4L/Acre

Bluegrass	Field pennycress	Rescuegrass
Cheat	Henbit	Shepherd's-purse
Downy brome	Japanese brome	

Use Metribuzin 4L at 1 to 1-1/2 Pt/Acre for control of the following weeds:

Blue mustard	Marestail (Horseweed)	Sow thistle
Common lambsquarters	Meadow salsify	Tansy mustard
Flixweed	Pepperweed	White cockle
Green foxtail	Prickly lettuce	Wild oats
Groundsel	Redroot pigweed	Wild buckwheat
Jim Hill mustard	Rough fleabane	Yellow rocket
Kochia	Ryegrass	
Little barley	Smooth brome	

APPLICATION INSTRUCTIONS

DOSAGE/ACRE

Metribuzin 4L 1/2 to 1-1/2 Pt Plus Gramoxone Extra 1-1/2 to 2-1/2 Pt	Apply specified dosages of Metribuzin 4L and Gramoxone Extra in at least 10 gallons of water per acre with aerial equipment or at least 20 gallons of water per acre with ground equipment. Do not apply this tank mix to alfalfa growth if more than 2 inches tall. For best weed control, apply when broadleaf weeds and grasses are 1-6 inches tall and are actively growing. Care should be taken to avoid overlaps. Do not apply more than 1 pt of Metribuzin 4L per acre on loamy sand soils. Reduced weed control may occur when extended dry conditions follow application of Metribuzin 4L. Crop injury may occur if alfalfa is under stress conditions such as diseases, insect infestations, drought or winter injury or if Metribuzin 4L is applied to alfalfa earlier than 12 months after seeding.
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FOR USE ON MIXED STANDS OF ALFALFA AND GRASSES: Rates of 1 to 1-1/2 pt of Metribuzin 4L per acre will provide partial reduction of forage grass stands. These rates may be used to reduce forage grass stands to prevent crowding out of alfalfa.

Do not graze or harvest within 42 days after application.

In areas west of the Rockies, avoid the use of Metribuzin 4L on soils with calcareous surface, soils with high levels of lime or sodium, and with a pH greater than 8.2.

Do not apply when weather conditions favor spray drift. Aerial application should not be made when wind speed is greater than 10 mph. Do not use on sand soil. Refer to the Gramoxone Extra label for additional directions, weed species controlled and precautions.

Post Dormant Application of Metribuzin 4L Impregnated on Dry Fertilizer Only
Metribuzin 4L may be applied after dormancy has broken, but prior to three inches of new alfalfa shoot growth, only when impregnated on dry fertilizer in Connecticut, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Nebraska, New Mexico, New York, Ohio, Oklahoma, Pennsylvania, South Dakota, Tennessee, Texas and Wisconsin.

Apply at rates of 1-1/2 to 2 pt per acre as directed on this label for application during dormancy. Apply only when alfalfa foliage is dry or crop injury may occur. When using this application method, do not harvest or graze treated alfalfa for 60 days after application.

ASPARAGUS (Established)

Metribuzin 4L may be used in ground spray equipment or sprinkler irrigation (center pivot, lateral move, or solid set) systems as a single preemergence broadcast application or as a split application consisting of a preemergence broadcast application followed by a post harvest broadcast application.

Refer to the *Product Information* section of this label for directions.

Weeds Controlled: Metribuzin 4L, applied to established asparagus according to directions, will effectively control:

Broadleaves Chickweed, Common (<i>Stellaria media</i>) Jimsonweed (<i>Datura stramonium</i>) Lambsquarters (<i>Chenopodium album</i>) Pigweed, Redroot (<i>Amaranthus retroflexus</i>)	Ragweed, Common (<i>Ambrosia artemisiifolia</i>) Smartweed, Pennsylvania (<i>Polygonum pensylvanicum</i>) Sorrel, Red (<i>Rumex acetosella</i>) Velvetleaf (<i>Abutilon theophrasti</i>)
Grasses Crabgrass (<i>Digitaria</i> spp.) Foxtails (<i>Setaria</i> spp.)	Sandbur, Field (<i>Cenchrus pauciflorus</i>)

BROADCAST APPLICATION INSTRUCTIONS

CROP	METRIBUZIN 4L Pt/Acre
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Asparagus 2 to 4

PREEMERGENCE APPLICATION ONLY

Make a single surface application in early Spring before asparagus spears or ferns emerge. If the field is to be disked, apply Metribuzin 4L after disking but before the crop emerges. Use the lower rate for control of the broadleaf weeds listed above. Use the higher rate in fields with a history of severe infestations of grasses and for maximum residual control. Do not apply within 14 days of harvest.

1 to 2 preemergence
plus
2 to 3 post harvest

SPLIT APPLICATION PREEMERGENCE AND POST HARVEST

Preemergence Application: Apply before asparagus spears or ferns emerge. If the field is to be disked, apply after disking but prior to crop emergence. Do not apply within 14 days of harvest.

Post Harvest Application: Apply after last harvest of the season but prior to emergence.

The lower combination rates may be used for control of common ragweed, lambsquarters, redroot pigweed, and red sorrel. Use the higher combination rates for other weeds listed or in fields with severe grass infestations or for maximum post harvest control of emerged weeds.

IMPORTANT: The total amount of Metribuzin 4L applied in one crop season may not exceed 4 pt per acre.

Use Restrictions (Asparagus):

- Do not use on newly seeded asparagus nor on young plants during the first growing season after setting crowns.
- DO NOT APPLY POST HARVEST APPLICATIONS UNTIL AFTER THE LAST HARVEST OF SPEARS.
- Aerial application is prohibited.

CARROTS

Use on Carrots: The following directions for use were developed under the direction of IR-4 (government minor crops use program). As such the testing was done independently from the testing program of Loveland Products, Inc..

Apply Metribuzin 4L herbicide with ground equipment as specified below under *Application Instructions*. For effective control of broadleaf weeds with postemergence applications, apply Metribuzin 4L before weeds are 1 inch in height or diameter. Thorough spray coverage is essential for adequate weed control.

Do not use air blast or other high pressure spray equipment to make postemergence applications of Metribuzin 4L. Refer to the appropriate section of this label for additional information regarding spray equipment, dilution rates, mixing, sprayer cleanup, restrictions, container disposal and cautions.

Refer to *Mixing* under the *Product Information* section on the front of this label.

For specific application information see *Product Information* and *Application* sections at the front of this label.

Weeds Controlled: Metribuzin 4L applied to carrots according to directions will effectively control:

APPLICATION INSTRUCTIONS**CROP METRIBUZIN 4L Pt/Acre**

CROP	METRIBUZIN 4L Pt/Acre
Carrots	1/2

Apply specified dosage per acre as a broadcast spray over the tops of carrot plants. Application should be made after carrots have formed 5-6 true leaves but before weeds are 1 inch in height or diameter. If needed, a second application may be made after an interval of at least 3 weeks. Applications may be made up to 60 days of harvest.

IMPORTANT: The total amount of Metribuzin 4L applied in one crop season must not exceed 1 pt per acre.

Use Restrictions:

- Do not apply to carrots grown for seed.
- Do not apply within 3 days after periods of cool, wet or cloudy weather or crop injury will occur.
- Do not apply Metribuzin 4L within 3 days of any other chemical unless specified on this label.
- Do not apply on very hot days or excessive crop injury will result.
- Do not apply until carrots have at least 5-6 true leaves. Earlier applications will result in excessive crop damage.

Use Precautions:

- Crop injury or delayed maturity may result from applications of Metribuzin 4L if carrots are growing under stress conditions such as periods of drought or cool, wet and cloudy weather preceding application.
- Following an application of Metribuzin 4L, chlorosis (yellowing) and burning of the leaf tissue may occur.
- For newly introduced varieties of carrots with unknown tolerance to Metribuzin 4L, treat only a small area to determine if Metribuzin 4L can be used without injury to the crop.

FIELD CORN**POSTEMERGENCE APPLICATION**

Metribuzin 4L may be used for control of selected broadleaf weeds when applied as a tank mix combination with certain broadleaf herbicides presently registered for postemergence use in field corn. Herbicides which may be tank mixed with Metribuzin 4L include:

2,4-D	Marksman
Atrazine	Buctril + atrazine (Premix)
Banvel	Clarity
Basagran	Pursuit*
Buctril/Buctril Gel	Resource

* Use only on Pursuit resistant/tolerant corn hybrids (IMI- Corn).

APPLICATION: Metribuzin 4L may be applied to field corn after crop emergence until just prior to tasseling. Broadcast applications may be made with ground or aerial equipment. For optimum weed control, apply treatments when weeds are small and actively growing, but before reaching the maximum heights listed in the Weeds Controlled table.

POSTEMERGENCE BROADCAST APPLICATION

Ground Application: Adjust nozzle height above crop and weed canopy to ensure uniform spray coverage. Gallonage should be increased with increasing weed size and population density.

For tank mixes of Metribuzin 4L plus atrazine, Basagran, Buctril, Buctril + atrazine, Pursuit, Resource, or 2,4-D amine formulations, use flat fan nozzles spaced a maximum of 20 inches apart. Best results are achieved using a minimum spray volume of 10 gallons per acre and spray pressure from 20 to 40 psi.

For Metribuzin 4L tank mixes with Banvel, Clarity, Marksman, or 2,4-D low volatile ester formulations, use drift-reducing nozzles which are specifically designed to produce coarse sprays and reduce the amount of driftable fines. Additional measures which will help avoid potential drift to sensitive crops and plants include using a minimum spray volume of 20 gallons per acre and keeping spray pressures at or below 20 psi unless otherwise specified by the nozzle manufacturer.

For further precautions and additional instructions, consult the tank mix partner's label.

Aerial Application: Apply in a minimum spray volume of 3 gallons per acre. For optimum spray coverage and distribution, use a minimum of 5 gallons per acre and a maximum pressure of 40 psi. Use a boom and nozzle configuration which will provide a uniform deposition pattern and coverage with low drift potential. Avoid overlaps to prevent potential crop injury. Do not apply near sensitive crops or sensitive plants growing near the treated area. Do not apply when wind speed is greater than 10 mph or when winds are moving toward sensitive crops or plants. To avoid drift hazards, applicator must follow the most restrictive labeling of the products used in a tank mix. Refer to the appropriate tank mix partner's label for further precautions and instructions.

POST DIRECTED APPLICATION

Metribuzin 4L in tank mix combinations with Banvel, 2,4-D or Buctril may be applied post directed to field corn. Use drop nozzles and appropriate spacing to direct spray below the corn whorl and upper leaves. The top of the target weed canopy must be sufficiently below the whorl and upper leaves of the crop to permit this application and provide adequate spray coverage. The height differential required between the crop and weed canopy will depend on the specific equipment used. Apply before tassel emergence. For further precautions and additional instructions, refer to the appropriate tank mix partner's label.

ADJUVANTS

The adjuvant types listed below may be utilized with certain Metribuzin 4L tank mix combinations. Consult the tank mix instructions section for the appropriate adjuvant and rate. Use of non-recommended adjuvants or rates may result in severe leaf burn, crop stunting, and/or stand reduction. Use only adjuvants which are exempt from tolerance requirements under 40 CFR 180.1001.

UAN (urea ammonium nitrate) is commonly referred to as 28, 30, or 32% N.

Ammonium sulfate (spray grade) may be used as an alternative to UAN with certain tank mix combinations.

Non-ionic surfactants should contain at least 80% active ingredient.

DO NOT USE crop oil concentrate (COC) or any adjuvant containing vegetable or petroleum oils with any Metribuzin 4L tank mixtures as severe leaf burn, crop stunting, and/or stand reduction may occur.

RAINFASTNESS

Metribuzin 4L will not reduce rainfastness of the above tank mix partners. Refer to the individual product labels for rainfastness recommendations.

SPRAYER CLEANUP

Refer to each tank mix partner's label and the Sprayer Cleanup section of the Metribuzin 4L label for specific instructions on cleaning spray equipment. Special attention should be given to the required cleanup procedures for 2,4-D, Banvel, Clarity, and Marksman.

Use Restrictions:

- Do not use on corn grown for seed, sweet corn, popcorn, or white corn.
- Do not apply more than 0.25 pounds a.i. metribuzin (8 fl oz Metribuzin 4L) per acre per use season.
- Do not apply when field corn is under stress (see Stress statement below).
- Do not use aerial applications if sensitive crops or plants are growing in the vicinity of the area to be treated.
- Do not allow spray drift onto sensitive crops or plants.
- Do not use on sand, loamy sand or sandy loam soils that have less than 0.5% organic matter.
- Do not use on sand or loamy sand soils in Washington, Oregon or Idaho or crop injury may occur.
- Observe all precautions and limitations on labeling of all products used in the tank mixtures.

Stress is any condition or combination of conditions which impairs normal crop growth. Weather, disease, insect damage, fertility or other factors may cause stress. Applications made before or after the corn is under stress from these factors or from periods of prolonged cool, wet and cloudy weather or widely fluctuating day and nighttime temperatures, may result in temporary leaf burn, yellowing and/or stunting of the crop. Recovery from damage is generally rapid with no lasting effects on new growth. Under extreme stress, stand reductions may occur.

Feeding Restrictions: Field corn treated with Metribuzin 4L may be grazed or harvested for silage or grain 60 days after treatment. Follow the most restrictive preharvest interval on the labels of the products used in the tank mixtures.

TANK MIX COMBINATIONS

The Metribuzin 4L tank mixtures listed below can be utilized for control of certain annual broadleaf weeds.

METRIBUZIN 4L POST DIRECTED INSTRUCTIONS

PRODUCT	RATE	DIRECTIONS AND REMARKS*
Metribuzin 4L + 2,4-D Amine + 2,4-D LVE	3 to 4.5 fl oz/A + 3/4 to 1-1/2 pt/A ¹ + 1/2 to 3/4 pt/A ¹	For corn greater than 8-inches tall, apply as a directed spray with drop nozzles before tassel emergence. Apply only to varieties known to be tolerant to 2,4-D. DO NOT USE ADJUVANTS. 2,4-D may cause injury to nearby sensitive crops. 2,4-D applications may result in brittle corn stalks, and winds or cultivation may cause stalk breakage. To reduce damage, delay cultivation 8 to 10 days after application.
Metribuzin 4L + Banvel	3 to 4.5 fl oz/A + 1/2 pt/A	For corn 8 to 36 inches tall, apply as a directed spray with drop nozzles. Application may be made up to 15 days prior to corn tasseling. If growing conditions are dry and plants are stressed, addition of a non-ionic surfactant (1 qt/100 gal of spray solution) may improve weed control. For corn grown on coarse textured soils, apply Banvel at 0.5 pt/acre, regardless of application method. Application may cause injury to nearby sensitive crops or plants. Application may result in temporary leaning of corn plants. Delay cultivation until plants return to normal growth patterns to avoid stalk breakage.
Metribuzin 4L + Buctril or Buctril Gel	3 to 4.5 fl oz/A + 1 to 1-1/2 pt/A or 1/2 to 3/4 pt/A	Apply as a directed spray with drop nozzles before tassel emergence. DO NOT USE ADJUVANTS. Occasional temporary corn leaf burn may occur and is similar to that observed from liquid fertilizers. Recovery is generally rapid with no lasting effect. To reduce potential for crop damage, application should be made to dry corn foliage when weather conditions are not extreme.
		* Consult the appropriate tank mix partner's label for additional instructions or restrictions. The most restrictive labeling applies to tank mixes with Metribuzin 4L. ¹ Application rate is based on, but not restricted to, 4 pounds active ingredient per gallon of 2,4-D.

METRIBUZIN 4L POSTEMERGENCE BROADCAST INSTRUCTIONS

PRODUCT	RATE	DIRECTIONS AND REMARKS*
Metribuzin 4L + 2,4-D Amine + 2,4-D LVE	3 fl oz/A + 1/2 to 1 pt/A ¹ + 1/3 to 1/2 pt/A ¹	Apply as a broadcast spray during the interval from corn emergence until corn is 8 inches tall. Apply only to varieties known to be tolerant to 2,4-D. DO NOT USE ADJUVANTS. 2,4-D may cause injury to nearby sensitive crops. 2,4-D applications may result in brittle corn stalks, and winds or cultivation may cause stalk breakage. To reduce damage, delay cultivation 8 to 10 days after application.
Metribuzin 4L + Atrazine	3 fl oz/A + 1/2 to 1-1/2 lb ai/A	Apply as a broadcast spray during the interval from corn emergence until corn is 12 inches tall. A non-ionic surfactant (1 qt/100 gal of spray solution) may be added to improve weed control. Atrazine is a restricted use herbicide. Follow all state and federal label instructions and restrictions pertaining to atrazine applications.
Metribuzin 4L + Banvel or Clarity	3 fl oz/A + 1/2 to 1 pt/A or 1/2 to 1 pt/A	Apply as a broadcast spray during the interval from corn emergence through the five leaf stage or when corn is 8 inches tall, whichever occurs first. For Banvel applications to corn greater than 8 inches in height, consult the Banvel label for use rates and restrictions. If growing conditions are dry and plants are stressed, addition of a non-ionic surfactant (1 qt/100 gal of spray solution) may improve weed control. For corn grown on coarse textured soils, apply Banvel or Clarity at 0.5 pt/A, regardless of application method. Application may cause injury to nearby sensitive crops or plants. Application may result in temporary leaning of corn plants. Delay cultivation until plants return to normal growth patterns to avoid stalk breakage.
Metribuzin 4L + Basagran	3 fl oz/A + 1 pt/A	Apply as a broadcast spray after corn emergence but before corn exceeds 30 inches in height and the crop canopy closes the row. Adjuvants such as UAN (0.5 to 1 gal/A), ammonium sulfate (17 lbs/100 gal of spray solution), or non-ionic surfactant (1 qt/100 gal of spray solution) may improve weed control.
Metribuzin 4L + Buctril or Buctril Gel	2.4 to 3 fl oz/A + 1 pt/A or 1/2 pt/A	Apply as a broadcast spray when corn is in the fourth true leaf stage or later but before the crop canopy closes the row. DO NOT USE ADJUVANTS. Occasional temporary corn leaf burn may occur and is similar to that observed from liquid fertilizers. Recovery is generally rapid with no lasting effect. To reduce potential for crop damage, application should be made to dry corn foliage when weather conditions are not extreme.
Metribuzin 4L + Buctril + Atrazine (Premix)	2.4 to 3 fl oz/A + 1-1/2 to 2 pt/A	Apply as a broadcast spray during the interval from corn emergence until corn is 12 inches tall. DO NOT USE ADJUVANTS. Occasional temporary corn leaf burn may occur and is similar to that observed from liquid fertilizers. Recovery is generally rapid with no lasting effect. To reduce potential for crop damage, application should be made to dry corn foliage when weather conditions are not extreme.

METRIBUZIN 4L POSTEMERGENCE BROADCAST INSTRUCTIONS

PRODUCT	RATE	DIRECTIONS AND REMARKS*
Metribuzin 4L + Marksman	3 fl oz/A + 1-1/2 to 2 pt/A	Apply as a broadcast spray during the interval from corn emergence through the five-leaf stage or when corn is 8 inches tall, whichever occurs first. DO NOT USE ADJUVANTS. Application may cause injury to nearby sensitive crops or plants. Application may result in temporary leaning of corn plants. Delay cultivation until plants return to normal growth patterns to avoid stalk breakage. Marksman contains atrazine, and is a restricted use product. Follow all state and federal label instructions and restrictions pertaining to atrazine.
Metribuzin 4L + Pursuit	3 fl oz/A + 2 to 4 oz/A	Use only on designated IMI-Corn hybrids (hybrids which are resistant/ tolerant to Pursuit). Apply the 4.0 ounce rate of Pursuit if grasses are present or broadleaf weeds are near the maximum heights shown. Apply in combination with a non-ionic surfactant (1 qt/100 gal of spray solution) and UAN (1 to 2 qt/A).
Metribuzin 4L + Resource	3 fl oz/A + 4 to 6 fl oz/A	Apply as a broadcast spray to field corn from 2-leaf through 10-leaf (visible leaf collars) stage. Adjuvants such as nonionic surfactant (0.25% v/v), UAN (2% v/v) or ammonium sulfate (2.5 lbs/A) may improve weed control.

* Consult the appropriate tank mix partner's label for additional instructions or restrictions. The most restrictive labeling applies to tank mixes with Metribuzin 4L.
¹ Application rate is based on, but not restricted to, 4 pounds active ingredient per gallon of 2,4-D.

Cont'd

WEEDS CONTROLLED - POSTEMERGENCE BROADCAST APPLICATION

These tank mixtures with Metribuzin 4L will control the following annual weeds up to the maximum weed heights listed:

COMMON WEED NAME	METRIBUZIN 4L +							
	Atrazine	Banvel / Clarity	Basaaran	Buctril / Buctril + atrazine	2,4-D	Marksman	Pursuit	Resource
	MAXIMUM WEED HEIGHT IN INCHES*							
Amaranth, Palmer	4 ^a	4	2 ^a	4 ^a	4	4	8 ^b	4
Buckwheat, wild	3	3	3	3	2	3	2	4
Buffalobur	4	4		4		4	1	
Burcucumber		4		4	2	4		
Carpetweed	2	2	2	2	2	2		3
Cocklebur, common	8	8	8	8	8	8	8 ^b	3
Eclipta	3	3	3	3	3	3		
Henbit	3	3	2	2	2	4	3	
Horseweed/marestail	3	4	1	1	3	6		3
Jimsonweed	5	5	6	5	5	5	5	3
Knotweed	6	6	6	4	2	6	4	6
Kochia	2 ^a	2	1 ^a	2 ^a	2 ^a	2	2	2 ^a
Ladysthumb	6	6	6	6	4	6	4	4
Lambsquarters, common	6 ^a	6	1	6	6	6	4	4
Lettuce, prickly	4	4		3	4	5		
Mallow, Venice	2	2	2	2	2	2	2	
Morningglory, entire leaf	3	3	1	3	3	3	2	
Morningglory, ivyleaf	3	3	1	3	3	3	2	
Morningglory, pitted	3	3	1	3	3	3	2	
Morningglory, tall	3	3	1	3	3	3	2	
Mustard, tansy	4	4	4	4	4	4	4	
Mustard, wild	4	4	4	4	4	4	4	
Nightshade, black	6	6		6	1	6	3	
Nightshade, eastern black	6	6		6	1	6	3	
Pigweed, redroot	6 ^a	6	2 ^a	6 ^a	6	6	8 ^b	4
Pigweed, smooth	6 ^a	6	2 ^a	6 ^a	6	6	8 ^b	4
Poorjoe	3	3	3	3	3	3	3	
Purslane, common	1	3				4	1	
Pusley, Florida	3	3	3	3	3	3		3
Ragweed, common	5	5	3	5	5	6	3	3
Ragweed, giant	4	5	2	4	3	6	4	
Sicklepod	3	3	3	3	3	3	3	
Sida, prickly	1	1	3	1	1	2	1	2
Smartweed, Pennsylvania	6	6	6	6	4	6	4	4
Sunflower, common	6	6	6	6	6	6	5	
Thistle, Russian	1	3		3	1	3	1	
Velvetleaf	6 ^a	6	6	6	4	6	5	6
Waterhemp, spp.	5 ^a	5	2 ^a	5 ^a	5	5	4 ^b	4

* When weeds are approaching the maximum height listed or found in high densities, use the higher rate of Metribuzin 4L and the selected tank mix partners.

^a These treatments will not control triazine resistant biotypes.

^b These treatments will not control ALS resistant biotypes.

WEEDS CONTROLLED - POST DIRECTED APPLICATION

These tank mixtures with Metribuzin 4L will control the following annual weeds up to the maximum weed heights listed:

METRIBUZIN 4L +			
COMMON WEED NAME	2,4-D	Banvel	Buctril
	MAXIMUM WEED HEIGHT IN INCHES*		
Amaranth, Palmer	12	12	6
Cocklebur, common	12	12	12
Jimsonweed	12	10	10
Ladysthumb	6	8	6
Lambsquarters, common	12	12	10
Morningglory, entire leaf	18	18	6
Morningglory, ivyleaf	18	18	6
Morningglory, pitted	18	18	6
Morningglory, tall	18	18	6
Nightshade, black	10	8	8
Nightshade, eastern black	10	8	8
Pigweed, redroot	12	12	6
Pigweed, smooth	12	12	6
Ragweed, common	8	8	8
Ragweed, giant	12	12	8
Smartweed, Pennsylvania	6	8	6
Sunflower, common	12	12	12
Velvetleaf	10	8	8
Waterhemp, tall	12	12	6

* When weeds are approaching the maximum height listed or found in high densities, use the higher rate of Metribuzin 4L and the selected tank mix partners.

PERENNIAL WEED SUPPRESSION

The following Metribuzin 4L tank mixtures will provide top growth burndown and in season suppression of the following perennial weeds; however, regrowth may occur. For the best performance on these weeds, use the maximum rates of Metribuzin 4L, Banvel, Buctril, Buctril + atrazine, Clarity, Marksman, 2,4-D LVE or Pursuit specified for these tank mixtures.

Metribuzin 4L + Banvel or Clarity

Bindweed, field; Dandelion, common; Dock, curly; Smartweed, swamp; Thistle, Canada.

Metribuzin 4L + Buctril or Buctril + atrazine

Thistle, Canada.

Metribuzin 4L + 2,4-D LVE

Bindweed, field; Dandelion, common; Dock, curly; Smartweed, swamp; Thistle, Canada.

Metribuzin 4L + Marksman

Bindweed, field; Dandelion, common; Dock, curly; Smartweed, swamp; Thistle, Canada.

Metribuzin 4L + Pursuit

Thistle, Canada

PREPLANT AND PREEMERGENCE APPLICATIONS

(Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, Ohio, South Dakota and Wisconsin)

Metribuzin 4L may be used for additional residual control of certain broadleaf weed species in corn when applied as a tank mix combination with both grass and broadleaf herbicides registered for use in field corn. Metribuzin 4L can be tank mixed with specified rates of the following herbicides:

Alachlor	Dual	Marksman
Atrazine	Dual II	Pentagon
Banvel	Frontier	Prowl
Bicep	Guardsman	Pursuit Plus*
Bicep II	Harness	Pursuit*
Bicep Lite	Harness Xtra	Simazine
Broadstrike + Dual	Lariat	Surpass
Broadstrike Plus	Linex	Surpass 100
Bullet	Linuron	Topnotch
Clarity	Lorox	

* Use only on Pursuit resistant/tolerant corn hybrids (IMI corn).

Application: Metribuzin 4L may be applied to field corn preplant without incorporation up to 30 days prior to planting or preemergence. Applications may be made by either ground or aerial equipment. For tank mixes, follow the most restrictive application methods of all products used.

Use Restrictions:

- Do not apply more than 8 fluid ounces Metribuzin 4L (0.25 pound active ingredient) per acre per growing season.
- Do not apply on soils having pH 7.0 or greater.
- Corn seed should be planted a minimum of 1-1/2 inches deep.
- Metribuzin 4L may only be used in hybrid seed corn production fields if both inbred parents are known to be tolerant to Metribuzin 4L.
- Do not use on muck soils as reduced weed control may result.
- Observe all precautions and limitations on labeling of all products used in tank mixes.

Feeding restrictions: Corn treated with Metribuzin 4L may be harvested for silage or grain 60 days after treatment. For tank mixes, follow the most restrictive preharvest interval of all products used.

Weeds Controlled*: Metribuzin 4L will aid in the residual preemergence control of the following weed species when tank mixed with other registered grass and/or broadleaf corn herbicides:

Horseweed/marestail	Smartweed, Pennsylvania
Ladysthumb	Sunflower
Lambsquarters, common	Velvetleaf
Pigweed spp.	Waterhemp, Tall
Ragweed, common	

* For control of emerged weeds refer to the "Burndown Weed Control" section of the Metribuzin 4L label.

METRIBUZIN 4L FIELD CORN RATE INSTRUCTIONS

STATES	APPLICATION TIMING	METRIBUZIN 4L fl ozs/A
Iowa	Preplant	3 to 8
Kansas	(0 to 30 days)	
Missouri	Preemergence	
Nebraska		
South Dakota		
Illinois	Preplant	3 to 8
Indiana	(10 to 30 days)	3 to 6
Kentucky	Preplant	
Michigan	(0 to 9 days)	
Minnesota	Preemergence	
Ohio		
Wisconsin		

REMARKS: Apply as a broadcast spray prior to corn emergence from the soil. Do not apply Metribuzin 4L on coarse textured soils with less than 1.5% organic matter. Do not apply more than 6 fl. oz. Metribuzin 4L per acre on soils with less than 2.0% organic matter.

For heavy weed infestations and/or early preplant applications, use the higher rates of Metribuzin 4L.

Consult the label of herbicide tank mix partners to determine proper use rates for the other product(s).

BURNDOWN WEED CONTROL - FIELD CORN See page 26**GARBANZO BEANS (Chickpeas)**

California, Idaho, Oregon, and Washington

Use on Garbanzo Beans (Chickpeas): The following directions for use were developed under the direction of IR-4 (government minor crops use program). As such the testing was done independently from the testing program of Loveland Products, Inc.

Metribuzin 4L herbicide may be used as a preemergence application for the suppression of certain broadleaf weeds in garbanzo beans.

Weeds Suppressed*:

Common Chickweed	Herbit	Wild Mustard
Dog Fennel (Mayweed)	Common Lambsquarters	Pigweed
Field Pennycress	Shepherdspurse	

* Suppression is a reduction in weed size and growth compared to a non-treated area in the same field. Metribuzin 4L used alone will not control triazine-resistant weed species.

APPLICATION INSTRUCTIONS

CROP	METRIBUZIN 4L Pt/Acre
Garbanzo beans	1/2 to 3/4

Apply specified dosage in a single preemergence application using 10 to 40 gallons of water per acre with ground spray equipment. Apply before or after planting but before crop emergence. Thorough incorporation, either by rainfall or by mechanical means, is essential for weed suppression. Under dry conditions, incorporate Metribuzin 4L into the top 1 to 2 inches of soil with spike harrows, or similar shallow incorporation equipment, then cross harrow to insure uniform soil incorporation. Where soil surface is moist at the time of application and rain follows before weed emergence, a broadcast application should provide adequate weed suppression. Use on coarse-textured soils, sandy soils or any soil with less than 1.5% organic matter will likely cause crop injury. Use the higher rate on fine textured soils (high in clay or organic matter) and in fields with a history of high weed populations.

Use Restrictions:

- Do not use on clay knobs or poorly covered subsoils.
- Do not apply preemergence on shallow seedlings less than 2 inches deep.
- Do not graze or feed treated vines to livestock within 40 days after application.

Use Precautions:

- Crop injury may result if crop is under stress conditions caused by cold weather, poor soil fertility, disease or insect damage.
- Crop injury may result if application is followed by heavy rain. Avoid application of more than 1/2 inch of irrigation within one month after application of Metribuzin 4L, or crop injury may occur.
- Maintain continuous spray tank agitation to keep material in suspension. Avoid overlapping of spray swaths and shut off spray booms while turning, slowing or stopping, or crop injury will occur.

NOTE: This treatment may cause some chlorosis or minor necrosis. Because garbanzo bean varieties may vary in their susceptibility to Metribuzin 4L, determine crop tolerance prior to adoption as a field scale practice to prevent possible injury.

**LENTILS AND PEAS
(Idaho, Oregon, and Washington)**

Metribuzin 4L herbicide may be used as a preemergence and postemergence application for the suppression of certain broadleaf weeds in lentils and peas.

Weeds Suppressed*

Common Chickweed**	Lambsquarters	Redroot Pigweed
Corn Spurry	Pennsylvania	Shepherdspurse**
Dog Fennel	Smartweed	Wild Mustard
Field Pennycress	Pineapple Weed	
Herbit**	Prostrate Knotweed	

* Suppression is a reduction in weed size and growth compared to a non-treated area in the same field.

** Preemergence application only.

PREEMERGENCE APPLICATION: Make a single preemergence application of Metribuzin 4L, at 3/8 to 3/4 pint per acre per crop year. Apply in 10 or more gallons of water per acre with ground spray equipment or 5 or more gallons of water per acre with aerial spray equipment. Apply Metribuzin 4L before or after planting. Thorough incorporation, either by rainfall or by mechanical means, is essential for weed suppression. Under dry conditions, incorporate Metribuzin 4L into the top 1 to 2 inches of soil with spike harrows, or similar shallow incorporation equipment, then cross harrow to ensure uniform soil incorporation. Where soil surface is moist at the time of application and rain follows before weed emergence, a broadcast application should provide adequate weed suppression.

Use the higher rate on fine-textured soils (high in clay or organic matter) and in fields with a history of high weed populations.

Metribuzin 4L may be applied pre- or post plant incorporated as a tank mix combination with FARGO 4EC. Follow the Directions for Use statements on both product labels.

POSTEMERGENCE APPLICATION: One postemergence application may be made per season. Use 1/4 to 1/2 pint of Metribuzin 4L per acre on **lentils and spring peas**. On **winter peas**, use 3/8 to 1/2 pint of Metribuzin 4L per acre. For suppression of dog fennel, use 1/2 pint Metribuzin 4L per acre. Apply specified dosage in 20 or more gallons of water per acre with ground spray equipment or 5 or more gallons of water per acre with aerial spray equipment. Do not exceed 40 psi with ground spray equipment. Apply as a broadcast spray when weeds are small (less than 2 inches in height or diameter) and before crop is 6 inches tall.

Temporary chlorosis of the crop may occur. There is an added risk of crop injury if a postemergence application is made following a previous preemergence or post plant incorporated Metribuzin 4L application.

Do not apply over very moist soils or wet crop foliage. Do not apply postemergence within 3 days after periods of cool, wet, or cloudy weather or crop injury may occur. Do not apply within 24 hours of treatment with other pesticides.

Use Restrictions (all applications):

- Do not apply more than 1 pint of Metribuzin 4L per acre per year.
- Do not use on coarse-textured soils, sandy soils or soils with less than 1.5% organic matter.
- Do not apply to "Estin" lentils.
- Do not use on clay knobs or poorly covered subsoils.
- Do not apply on shallow seedlings less than 2 inches deep (preemergence only).
- Do not apply within 50 days of harvest of peas, or within 75 days of harvest of lentils.
- Do not graze or feed treated vines to livestock within 40 days after application.

Use Precautions:

- Crop injury may result if crop is under stress conditions caused by cold weather, low fertility, disease or insect damage.
- Crop injury may also result if application is followed by heavy rain.

Maintain continuous spray tank agitation to keep material in suspension. Avoid overlapping and shut off spray booms while turning, slowing or stopping, or crop injury will occur.

NOTE: This treatment may cause some chlorosis or minor necrosis. Because lentil and pea varieties may vary in their susceptibility to Metribuzin 4L, determining crop tolerance prior to adoption as a field scale practice is suggested to prevent possible injury.

For additional precautions, restrictions, limitations, and sprayer clean-up information refer to the appropriate sections of this label.

SUGARCANE

Use Restrictions:

- For aerial and chemigation application methods on sugarcane the maximum application rate is 4 pts Metribuzin 4L/acre (2.0 lbs a/A).
- To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply this product by aircraft at a minimum upwind distance of 400 ft from sensitive plants.
- Do not rotate any crop not listed on this label for 18 months following application of Metribuzin 4L. Refer to the *Crop Rotation Restrictions* section of this label for more information.

SUGARCANE (Hawaii Only)

Metribuzin 4L, a selective herbicide, is effective as a preemergence and an early postemergence broadcast application for control of certain grass and broadleaf weeds. When applied as a spot treatment, it also provides excellent control of perennial grasses and broadleaves.

Ground Application: Metribuzin 4L should be mixed by filling the spray tank half full of clean water. Then add the specified amount of Metribuzin 4L to suit the total tank capacity and the rate of application per acre (preferably 25 to 35 gallons per acre). Complete filling the tank and maintain sufficient agitation during mixing and spraying to insure a uniform spray mixture.

Aerial Application: Metribuzin 4L may be used for use in aerial spray equipment as a preemergence or postemergence application to irrigated sugarcane. Aerial spray equipment should be calibrated to apply the proper amount of Metribuzin 4L in 7 to 10 gallons of spray mixture per acre.

Metribuzin 4L applied preemergence or postemergence to the sugarcane as a broadcast spray or spot treatment will effectively control the following when weeds are less than 3 inches in height.

Weeds Controlled in Irrigated and Non-irrigated Sugarcane

Broadleaves	Floras paintbrush (<i>Emilia sonchifolia</i>)
Amaranth, Spiny (<i>Amaranthus spinosus</i>)	Spurge, Garden (<i>Euphorbia hirta</i>)
Euphorbia, Wild (<i>Euphorbia</i> spp.)	Spurge, Graceful (<i>Euphorbia glomerifera</i>)
Fireweed (<i>Erechtites hieracifolius</i>)	
Grasses	Plushgrass (<i>Chloris radiata</i>)
Crabgrass (<i>Digitaria</i> spp.)	Ricegrass (<i>Oryzopsis hymenoides</i>)
Guineagrass (<i>Panicum maximum</i>)	Wiregrass (<i>Eleusine indica</i>)

Weeds Controlled in Irrigated Sugarcane Only

Broadleaves	Hilahila (<i>Mimosa pudica</i>)
Amaranth, Spleen (<i>Amaranthus dubius</i>)	Purslane, Common (<i>Portulaca oleracea</i>)
Haole Koa (<i>Leucaena leucocephala</i>)	Rattlepod (<i>Crotalaria spectabilis</i>)
Hialoa (<i>Waltheria americana</i>)	
Grasses	Bristly foxtail (<i>Setaria verticillata</i>)
Alexandergrass (<i>Brachiaria plantaginea</i>)	

Weeds Controlled in Non-irrigated Sugarcane Only

Broadleaves	Richardia (<i>Richardia brasiliensis</i>)
Ageratum (<i>Ageratum conyzoides</i>)	Tarweed (<i>Cuphea carthagensis</i>)

SUGARCANE (HAWAII ONLY)

BROADCAST APPLICATION INSTRUCTIONS

METRIBUZIN 4L Pt/Acre	REMARKS
4 to 8 (1/2 to 1 gal) (non-irrigated)	PREEMERGENCE (Irrigated and non-irrigated sugarcane): Apply specified dosage per acre as a broadcast spray to the soil surface. Applications should be made within two weeks after planting prior to cane emergence or shortly after emergence (spike stage). OR
8 to 12 (1 to 1-1/2 gal) (irrigated)	EARLY POSTEMERGENCE (Irrigated and non-irrigated sugarcane): Apply specified dosage per acre as a broadcast spray over the cane. Application may be delayed as long as 4 to 6 weeks after planting provided weeds are less than 3 inches in height.
4 to 8 (1/2 to 1 gal)	OR POSTEMERGENCE: Apply specified dosage per acre as a broadcast spray to control weeds prior to "close in" time when cane shades out the weed growth.
5 to 10 (1-1/8 to 1-1/4 gal)	SPOT TREATMENT: Apply specified dosage in 30 to 50 gallons of finished spray per acre. Spot treatments may be used to control weeds in missed areas, corners of fields, or areas of hard to control weeds.

NOTE: Do not apply more than 16 pt (2 gal) of Metribuzin 4L (8 lb active ingredient)/acre per crop cycle regardless of the method of application. The last application may be made up to 17 months of harvest.

Use Restrictions:

- Do not use treated foliage for feed or forage.

SUGARCANE (Louisiana and Texas Only)

Preemergence and postemergence applications of Metribuzin 4L with aerial or ground spray equipment may be used for control of the following weeds in sugarcane in Louisiana and Texas:

Broadleaves	Marestail
Amaranth, Spiny (<i>Amaranthus spinosus</i>)	(<i>Coryza canadensis</i>)
Bindweed, Field (<i>Convolvulus arvensis</i>)	Mustard, Wild (<i>Brassica kaber</i>)
Chickweed (<i>Cerastium vulgatum</i>)	Pigweeds (<i>Amaranthus</i> spp.)
Henbit (<i>Lamium amplexicaule</i>)	Purslane (<i>Portulaca oleracea</i>)
Lambsquarters (<i>Chenopodium album</i>)	Sowthistle (<i>Sonchus</i> spp.)
London rocket (<i>Sisymbrium irio</i>)	
Grasses	Johnsongrass, Seedling (<i>Sorghum halepense</i>)
Broadleaf Signalgrass (<i>Brachiaria platyphylla</i>)	Oats, Winter (<i>Avena</i> spp.)
Crabgrass (<i>Digitaria</i> spp.)	
Foxtails (<i>Setaria</i> spp.)	

SUGARCANE (LOUISIANA AND TEXAS ONLY)**BROADCAST APPLICATION INSTRUCTIONS**

METRIBUZIN 4L Pt/Acre	REMARKS
3 to 6	BROADCAST: Apply specified dosage per acre using 20 to 30 gallons of water with ground equipment or 5 gallons of water with aircraft spray equipment. Apply as a broadcast spray during the Fall after planting or to the stubble after harvest. Make a second application early in the Spring.
1-1/2 to 3	BAND: Apply specified dosage in 10 to 20 gallons of water per acre in a 30 to 36 inch band over the row during the Fall after planting or to the stubble after harvest. Make a second application early in the Spring.

Use Restrictions (Louisiana and Texas only):

- Do not use treated foliage for feed or forage.
- Use the higher rate on heavy clay soil and soil with a high percentage of organic matter. If necessary, a third application may be made in late Spring at layby.
- Do not apply within 60 days of harvest.
- For aerial and chemigation application methods on sugarcane the maximum application rate is 4 pts Metribuzin 4L/acre.
- To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply this product by aircraft at a minimum upwind distance of 400 ft from sensitive plants.

SUGARCANE (Florida Only)

Postemergence over-the-top or directed spray applications of Metribuzin may be used for the control of the following weeds in sugarcane in Florida.

Broadleaves	Butterweed (<i>Cressleaf groundsel</i>) (<i>Senecio glabellus</i>)
Amaranth, Spiny (seedling) (<i>Amaranthus spinosus</i>)	Purslane (<i>Portulaca oleracea</i>)
Grasses	Panicum, broadleaf (<i>Panicum adspersum</i>)
*Crabgrass, large (<i>Digitaria sanguinalis</i>)	Signalgrass, broadleaf (<i>Brachiaria platyphylla</i>)
Foxtail, bristlegrass (<i>Setaria magna</i>)	
Goosegrass (<i>Eleusine indica</i>)	
* Best control is achieved when applications are made when this weed is less than 4" in diameter.	

SUGARCANE (FLORIDA ONLY)**APPLICATION INSTRUCTIONS**

METRIBUZIN 4L Pt/Acre	REMARKS
2 to 4	GROUND APPLICATION: Metribuzin 4L may be used in one or two applications with a minimum of 14 days between each application. Apply when weeds are less than 6 inches tall in 10 to 40 gallons of spray mixture per acre. POSTEMERGENCE BROADCAST OR BAND: Apply over the top of stubble or plant cane while sugarcane is less than 14 inches tall. POSTEMERGENCE DIRECTED SPRAY: Apply to sugar cane that is a minimum of 14 inches tall and before row closing.
2 to 3	AERIAL APPLICATION: Apply when weeds are less than 4 inches tall in 5 to 10 gallons of spray mixture per acre. Apply to stubble or plant cane while the sugarcane is less than 14 inches tall.

METRIBUZIN 4L PLUS ATRAZINE TANK MIX: Metribuzin 4L may be used with atrazine as a preemergence or postemergence (before row closing) application to sugarcane. Rates for Metribuzin 4L are 1-1/2 to 4 pt/acre and atrazine 80% WP (4L) are 2-1/2 to 5 lb/acre (2 to 4 qt/acre). For additional information on precautions, instructions, limitations, application, and weeds controlled, refer to this label and the atrazine label.

Use Restrictions (Florida only):

- Do not use more than 4 pt per acre in a single growing season.
- Do not use on sand soils.
- Do not apply within 60 days of harvest.
- Do not use treated crop for feed or forage.
- Avoid spray overlaps or variations in application speed that may result in insufficient or excessive rates of application.
- To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply this product by aircraft at a minimum upwind distance of 400 ft from sensitive plants.

Use Precaution (Florida only):

- Spray contact with sugarcane foliage may result in minor leaf margin chlorosis and/ or necrosis.

TOMATOES

Apply Metribuzin 4L herbicide with ground equipment to seeded and transplanted tomatoes as specified below under *Application Instructions*.

For effective control of grasses and broadleaf weeds with postemergence applications, apply Metribuzin 4L before weeds are 1-inch tall. Thorough spray coverage on weed foliage is essential for adequate control with postemergence applications. Do not use air blast or other high pressure spray equipment to make postemergence applications of Metribuzin 4L. Refer to the appropriate section of this label for additional information regarding spray equipment, dilution rates, mixing, sprayer cleanup, restrictions, container disposal and cautions.

For specific application information see the *Product Information* section in the front of this label.

WEEDS CONTROLLED

PREPLANT INCORPORATED APPLICATIONS TRANSPLANT TOMATOES ONLY Broadcast Sprays - 1/2 to 1 Pt Metribuzin 4L/Acre

Broadleaves	*Pigweed, Redroot (<i>Amaranthus retroflexus</i>)
Galinsoxa (<i>Galinsoxa</i> spp.)	*Purslane, Common (<i>Portulaca oleracea</i>)
Lambsquarters (<i>Chenopodium album</i>)	
Grasses	
*Goosegrass (<i>Eleusine indica</i>)	

Preplant incorporated applications applied as directed will suppress foxtails, panicums and barnyardgrass.

Metribuzin 4L/Trifluralin Tank Mix: This tank mix combination applied preplant incorporated as directed on this label will control the weeds listed above plus those weeds listed on the Trifluralin label.

* For optimum control of these weeds, use the highest rate specified on the label for the type of application to be made. Repeat postemergence applications may be needed for best control.

WEEDS CONTROLLED

POSTEMERGENCE APPLICATIONS ESTABLISHED TOMATOES

For effective control of weeds with postemergence applications, apply Metribuzin 4L before weeds are 1-inch tall.

Broadcast Sprays - 1/2 to 1 Pt Metribuzin 4L/Acre

Broadleaves	Mustard, Wild (<i>Brassica kaber</i>)
Carpetweed (<i>Mollugo verticillata</i>)	Pigweeds (<i>Amaranthus</i> spp.)
Fumitory (<i>Fumaria officinalis</i>)	Purslane (<i>Portulaca oleracea</i>)
Galinsoxa (<i>Galinsoxa</i> spp.)	*Ragweed, Common (<i>Ambrosia artemisiifolia</i>)
*Jimsonweed (<i>Datura stramonium</i>)	*Smartweed, Pennsylvania (<i>Polygonum pensylvanicum</i>)
*Ladysthumb (<i>Polygonum persicaria</i>)	Toadflax (<i>Linaria</i> spp.)
Lambsquarters (<i>Chenopodium album</i>)	*Velvetleaf (<i>Abutilon theophrasti</i>)

Directed Sprays - 1 to 2 Pt Metribuzin 4L/Acre

Grasses	Plus Weeds Listed Under Broadcast Sprays
*Foxtail, Yellow (<i>Setaria glauca</i>)	
Goosegrass (<i>Eleusine indica</i>)	

* For optimum control of these weeds, use the highest rate specified on the label for the type of application to be made. Repeat postemergence applications may be needed for best control.

Postemergence applications as directed on this label will suppress barnyardgrass and crabgrass when these weeds are less than 1-inch tall.

BROADCAST APPLICATION INSTRUCTIONS FOR TOMATOES**METRIBUZIN 4L REMARKS**

*Pt/Acre

1/2 to 1 **PREPLANT INCORPORATED-TRANSPLANT TOMATOES ONLY:** Apply specified dosage in 10 or more gallons of water per acre as a broadcast spray to the soil surface immediately before transplanting. Incorporate to a depth of 2 to 4 inches with equipment capable of uniformly mixing the chemical into the soil. This application may be made alone or in a tank mix combination with Trifluralin E.C. When transplanting tomatoes, place the root system of the plants below the herbicide incorporation zone or injury may occur. Refer to the Trifluralin label for specific rate of application and for additional precautions and restrictions for tomatoes.

1/2 to 1 **POSTEMERGENCE BROADCAST SPRAY-ESTABLISHED TOMATOES:** Apply specified dosage in 20 or more gallons of water per acre as a broadcast spray, or apply in 1/4 to 3/4 inch of water (use 1/4 to 1/2 inch of water on sandy soils) per acre as a continuous injection in center pivot and lateral move systems or apply in the last 15 to 30 minutes of set in permanent solid set sprinkler systems. One or more applications may be applied per use season. Allow at least 14 days between applications or severe crop injury may occur. For transplanted tomatoes, do not apply until transplants have recovered from transplant shock and new growth is evident. Do not apply to tomatoes within 24 hours of application of other pesticides. Do not tank mix with other pesticides. (See "Use Restrictions" below.)

1 to 2 **POSTEMERGENCE DIRECTED SPRAY-ESTABLISHED TOMATOES:** Apply specified dosage in 20 or more gallons of water per acre as a directed spray. One or more applications may be applied per use season. Allow at least 14 days between applications or severe crop injury may occur. Avoid contacting tomato foliage with spray. This method of treatment can be used in fields with a history of severe weed pressure or in fields infested with hard-to-control weeds. For transplanted tomatoes, do not apply until transplants have recovered from transplant shock and new growth is evident. Do not apply to tomatoes within 24 hours of application of other pesticides. (See "Use Restrictions" below.) When banding see the appropriate section in the front of this label.

* Use the higher rate in fields with a history of severe weed pressure and for maximum residual weed control.

Use Restrictions (Tomatoes):

- Do not apply more than a total of 2 pts. Metribuzin 4L per crop season.
- Do not apply the total amount of 2 pt Metribuzin 4L within a time span of less than 35 days, except in the case of directed sprays.
- Allow at least 14 days between applications, regardless of dosage or method of application or severe crop injury may occur.
- Do not apply within 7 days of harvest.
- Do not apply within 3 days after periods of cool, wet or cloudy weather, or crop injury will occur.
- Do not use hot caps on tomatoes within 7 days before or at any time after application of Metribuzin 4L.
- Do not treat seeded tomatoes until plants have reached the 5 to 6 leaf stage or severe crop injury may occur.
- **Aerial application is prohibited.**

Use Precautions:

- Crop injury or delayed maturity may result from broadcast or directed spray applications if tomatoes are growing under stress conditions such as periods of drought or cool, wet and cloudy weather preceding application.
- For newly introduced tomato varieties with unknown tolerance to Metribuzin 4L, treat only a small area to determine if Metribuzin 4L can be used without injury to the crop.

DO NOT USE METRIBUZIN 4L ON TOMATOES IN KERN COUNTY, CALIFORNIA.

SPRING AND WINTER BARLEY AND WINTER WHEAT

Metribuzin 4L herbicide may be used for control or suppression of certain grasses and broadleaf weeds when applied postemergence to spring and winter barley or winter wheat. Metribuzin 4L, alone and several tank mixture treatments may be used in the following states: AR, GA, ID, IL, IN, KS, KY, LA, MS, MO, MT, NV, OH, OK, OR, TN, TX, UT, WA.

Mixing: See the "Product Information" section of this label for specific mixing procedures. When tank mixing, carefully follow the instructions on this label. Refer to the other product labels registered for use on barley and winter wheat for additional use directions, rates, weeds controlled and restrictions.

Application: Metribuzin 4L may be applied by aerial or ground application equipment. Use a minimum spray volume of 2 gpa by air and 10 gpa by ground. Uniform spray coverage is necessary to obtain optimum weed control and to minimize potential for crop injury. Do not exceed rates specified on this label. Do not apply Metribuzin 4L through any type of irrigation equipment. Apply Metribuzin 4L when the crop is healthy and actively growing. Metribuzin 4L may be applied more than once per crop season. Allow a minimum of 21 days between applications if wheat is actively growing or allow 45 days between applications if wheat is growing in adverse conditions, has entered dormancy or is stressed due to frost damage, disease, drought or excessive moisture. Do not use on soils containing less than 0.75% organic matter. Do not apply more than a total of 16 fluid ounces Metribuzin 4L (8 ounces active ingredient) per acre per year. On irrigated wheat and barley, do not apply more than 0.5 inch of water for the first irrigation, the maximum amount for each additional irrigation should not exceed 1 inch. Allow a minimum of 14 days between the first irrigation and subsequent irrigations.

Performance Factors: Weed control may not be observed for 2 to 4 weeks under normal growth conditions and for 4 to 6 weeks under very dry conditions. Moisture (at least 1/2 inch) is required within 2 to 3 weeks after application to move Metribuzin 4L into the weed root zone. Lack of adequate moisture after application may result in poor or erratic weed control. Control or suppression of listed weeds is dependent on weed size at time of application. Control or suppression may be reduced if broadleaf weeds are taller than 1 inch or grasses have more than 2 leaves.

Tank Mixtures: Metribuzin 4L may be tank mixed with Ally, Amber, Finesse, Glean FC, Harmony Extra, 2,4-D, MCPA, Igran, Banvel/Banvel SGF, Bronate or Buctril herbicides. A nonionic surfactant containing at least 80% active ingredient may be used in Metribuzin 4L tank mixes with sulfonylurea herbicides (Ally, Amber, Finesse, Glean FC and Harmony Extra). Do not use a crop oil concentrate or any adjuvant containing vegetable or petroleum oils with any Metribuzin 4L mix as crop injury may result. Additional pesticides may also be tank mixed with Metribuzin 4L unless specifically prohibited on the mix products' label. In some instances, combinations with organophosphate insecticides may cause temporary leaf yellowing and/or crop injury, especially when widely fluctuating day/night temperatures occur near application. Always refer to the other product labels registered for use on wheat and barley for additional directions, rates and weed species controlled. Observe all precautions and limitations on labeling of all products used in mixtures.

Feeding Restrictions: Do not graze wheat within 14 days of Metribuzin 4L application or harvest grain within 21 days after last application. Do not graze or harvest barley before crop maturity. For tank mix combinations, follow the most restrictive label.

Special Precautions: Wheat and Barley Injury - Crop injury may occur if Metribuzin 4L is applied:

- When the crop is under stress such as winter kill, frost damage, disease, drought or excessive moisture, severe grazing, or when these conditions follow the application.
- In combination with fluid fertilizer especially with the addition of surfactant.
- Prior to the growth stage specified on this label.
- To soils high in lime or sodium, a pH greater than 7.7, calcareous, gravely, thinly covered or exposed subsoil areas.
- To fields where wheat and barley seeds have been planted less than 1 inch deep.
- To a non-winter hardy wheat or barley variety.
- To a sensitive wheat or barley variety as listed below.
- To frozen soil or crop still in winter dormancy.

Wheat and Barley Rotations Following Potatoes Treated with Metribuzin 4L: If planting a sensitive wheat and barley variety (listed under the wheat and barley variety tolerance portion of this label), following potatoes treated with Metribuzin 4L or metribuzin containing products, refer to the potato section of the Metribuzin 4L label for special cultural practices to follow.

APPLICATION INSTRUCTIONS

Metribuzin 4L alone or in a tank mix with labeled broadleaf herbicides may be applied by aerial or ground spray equipment as a broadcast postemergence spray.

POSTEMERGENCE BROADCAST APPLICATION INSTRUCTIONS FOR METRIBUZIN 4L

CROP GROWTH STAGE	SOIL TEXTURE	METRIBUZIN 4L RATE (fl oz/A) % ORGANIC MATTER	
		0.75 to 2.0	OVER 2.0
2 Leaf To	Coarse	1.5 to 3	1.5 to 4.5
	Medium	1.5 to 4.5	3 to 4.5
2 Tiller	Fine	3 to 4.5	3 to 6

Use these rates on crops with secondary roots smaller than 1 inch. For dryland winter wheat (nonirrigated), apply the highest specified rate to achieve maximum weed suppression/control.

3 Tiller To	Coarse	4.5 to 6	6 to 7.5
	Medium	6 to 7.5	7.5 to 9
4 Tiller	Fine	7.5 to 9	7.5 to 9

Do not apply within 2 weeks after grazing or breaking of winter dormancy. Apply after the crop is at or beyond the 3 tiller growth stage but before jointing. Secondary roots should be developed and larger than 1 inch long. Do not apply before 75 days after planting. For dryland winter wheat (nonirrigated), apply the highest specified rate to achieve maximum weed suppression/control.

GEORGIA ONLY: Wheat must be planted before November 15 in the Piedmont area and Northern part of the state, and before December 1 in the Coastal Plain area.

Over 4 Tillers	Coarse	6 to 9	7.5 to 12
	Medium	6 to 12	7.5 to 12
	Fine	7.5 to 12	12 to 16

Do not apply within 2 weeks after grazing or breaking of winter dormancy. Apply after the crop is at or beyond the 3 tiller growth stage but before jointing. Secondary roots should be developed and larger than 1 inch long. Do not apply before 75 days after planting. For dryland winter wheat (nonirrigated), apply the highest specified rate to achieve maximum weed suppression/control.

GEORGIA ONLY: Wheat must be planted before November 15 in the Piedmont area and Northern part of the state, and before December 1 in the Coastal Plain area.

WHEAT AND BARLEY VARIETAL TOLERANCE*

Wheat and barley varieties vary in their tolerance to Metribuzin 4L. Varieties below are tolerant to and may be used with Metribuzin 4L:

Winter Wheat: Abe, AgriPro Mason, AgriPro Shiloh, Arthur, AS 7846, AS 7853, Baker Seed 32, Barbie VI, Basin, Batum, Bayles, Becker, Bintee V, Buchshot DS 2368, Caldwell, Cardinal, Cashup, Centurk, Cherokee, Cheyenne, Clark, Coker 747, Coker 762, Coker 797, Coker 68-15, Coker 9134, Coker 9543, Coker 9904, Coker 9907, Daws, DB 533W, DB 562W, DB 580W, Delta King 502, Delta King 9027, Dixie 952, Doublecrop, Dusty, Dyna-gro 426, Dynasty, Excel, Faro, FFR 525W, Florida 302, FS 432, FS 433, FS 435, Gains, Garst 64, Georgia 100, Genie V, Hatton, Hawk, Hill 81, Howell, Hunter, Hyak, Hyslop, Katie VI, KY 16-2, Larned, Lewis 833, Lewjain, Lisa, Longhorn, Luke, Madison, Magnum, Malcom, McDermid, McNair 1003, McNair 1813, Molly, Moro, Neely, Nelson, Newton, Norstar, Norwin, Nugaines, Oasis, Omega 78, Paha, Peck, Pike, Pioneer 2157, Pioneer 2180, Pioneer 2510, Pioneer 2545, Pioneer 2548, Pioneer 2550, Pioneer 2552, Pioneer 2555, Pioneer 2566, Pioneer 2571, Pioneer 2580, Pioneer 2684, Quantum 577,

Redwin, Rocky, Saluda, Sawyer, SC 104, Siouxland, Sprague, Southern Belle, Stacy, Stallion, Stephens, TAM W101, TAM 105, TE 877, TE 2548, TE SR204, TR 8555, TR 8557, TR 8768, Tiber, Tomahawk, Traveler, Tres, Tyee, Tyler, Verne, Victory, Wakefield, Wanser, Weston, Winalta, Wrawler.

Barley: Advance, Boyer, Clark, Compana, Hannchen, Hector, Hesk, Hudson, Lud, Luther, Kamiak, Klages, Olympic, Piroline, Steptoe and Triumph.

Do not use the following wheat and barley varieties which are sensitive to Metribuzin 4L: **Winter Wheat:** AgriPro Clemens, AT 90W, AT 91W, Arapaho, Baker Seed 33, Century, Cimarron, Coker 833, Coker 916, Coker 983, Coker 9024, Coker 9105, Coker 9323, Coker 9663, Choker 9474, Choker 9835, Choker 9766, Choker 9877, EK 102, EK 114, FAR 555, Florida 304, Freedom, FS 417, FS 423, FS 425, FS 430, Gore, Hazen, Hickory, Jackson, Julie III, KY-49-25, Linden, Madison, Mesa, Mustang, Pacer, Pioneer 2551, Pioneer 2163, Pioneer 2643, Pioneer 2691, Princeton 733, PER W71, PER 226, PER 278, Rosen, Savannah, Sierra, TAM 107, TR 101, TR 1011, TR 8822, Triumph 64, Vona, Wings, Winridge, Yamhill.

Spring/Durum Wheat: Avoid use on Spring wheat and Durum wheat varieties.

Barley: Glenn, Morex, Moravian 3, Larker, Summit, Bracken, Anheuser Busch B2601 and varieties with Morex parentage.

Varieties Not Listed: To avoid possible crop injury on any variety not mentioned in this label, contact a Loveland Products representative or herbicide expert for a variety recommendation prior to treatment or treat a small strip of the unlisted variety with the specified Metribuzin 4L rate to ascertain crop tolerance before treating an entire field.

* Abbreviated names of vendors: AS (Agesco), AT (Agratech), DB (Diener Bros.), FS (Gromark FS), PI (Pioneer), PER (Hybritech), SC (J.M. Schultz), TE (Terra), and TR (Terral).

Weeds Controlled

Used at specified rates, Metribuzin 4L will control many annual broadleaf weeds. Control is best when applied to young, actively growing weeds. Weeds controlled by Metribuzin 4L include:

Bittercress	Knotweed, Prostrate
Catchfly, Conical (Sand)	Lambsquarter, Common
Catchweed (Madwort)	Letuce, Miners
Chickweed, Common	Mustard, Wild
Chickweed, Mousear	Mustard, Blue
Corncockle	Pennycress, Field
Dogfennel (Mayweed)	Pepperweed, Virginia
Evening Primrose, Cutleaf	Pigweed, spp.
Falseflax, Smallseed	Pineappleweed
Fiddleneck, Tarweed	Polemonium, Annual (Jacob's Ladder)
Filaree, Redstem	Radish, Wild
Geranium, Carolina	Shepardswort
Gromwell, spp.	Speedwell, Iyleaf
Henbit	Turnip, Wild

Weeds Suppressed

Metribuzin 4L control of the following weeds varies from poor to excellent depending on time of application, stage of growth at application, temperatures and soil moisture conditions following treatment. For maximum effect on these weeds, apply the highest specified rate at the earliest growth stage timing for each particular soil type and organic matter. Suppression is a reduction in weed size and growth as compared to a non-treated area in the same field.

BROADLEAVES

Buckwheat, Wild*	Mustard, Tumble (Jim Hill)*
Buttercup, spp.	Tanymustard
Cowcockle Kochia*	Thistle, Russian
Lettuce, Prickly	Vetch, Winter

GRASSES

Barley, Hare (Wild)	Brome, Rigput*
Barley, Little	Cheat*
Blackgrass	Foxtail, spp*
Bluegrass, Annual	Oat, Wild*
Bluegrass, Bulbous	Rescuegrass*
Brome, Downy*	Whitlowgrass, Spring (Vernal)
Brome, Japanese*	Windgrass

* Use the highest specified Metribuzin 4L rate for maximum weed suppression.

**FOR WEED CONTROL IN A WHEAT/FALLOW/WHEAT ROTATION
(Idaho, Oregon, Utah and Washington Only)**

Metribuzin 4L may be applied to provide weed control during the fallow period after wheat harvest or in the Spring before winter wheat is planted. Winter wheat can be seeded 4 months (120 days) after Spring application. Mechanical tillage or the application of a contact herbicide may be required to control weeds germinating prior to seeding of winter wheat. Best results will be obtained where straw and chaff are evenly distributed across the field.

For specific application information see the *Product Information* section in the front of this label.

Where weed growth is present at application time, Metribuzin 4L should be applied with Gramoxone or other contact herbicide. Refer to the other product label registered for additional directions, rates, and weed species controlled.

Weeds Controlled**BROADLEAVES**

Chickweed, Common (<i>Stellaria media</i>)	Mustard, Treacle (<i>Erysimum repandum</i>)
Henbit (<i>Lamium amplexicaule</i>)	Mustard, Wild (<i>Brassica kaber</i>)
*Kochia (<i>Kochia scoparia</i>)	Pennycress, Field (Fanweed) (<i>Thlaspi arvense</i>)
Lambsquarters (<i>Chenopodium album</i>)	Pigweeds (<i>Amaranthus</i> spp.)
Mustard, Blue or Purple (<i>Chorispora tenella</i>)	*Russian thistle (<i>Salsola iberica</i>)
Mustard, Jim Hill (<i>Sisymbrium altissimum</i>)	*Wild Sunflower (<i>Helianthus</i> spp.)
Mustard, Tansy (<i>Descurainia pinnata</i>)	

GRASSES

Cheatgrass (<i>Bromus secalinus</i>)	*Wheat, Volunteer (<i>Triticum</i> spp.)
Downy Brome (<i>Bromus tectorum</i>)	

* Note: Since control of these weeds may be variable depending on moisture following application, the higher labelled rate should be used.

After Harvest Application (Fall Fallow): Metribuzin 4L may be applied to wheat stubble after harvest in the Fall. Apply 1 to 1-1/4 pt per acre broadcast before weeds emerge. Use higher rate for longer weed control or for weeds designated as requiring the higher rate for control. Rainfall (1/2 inch or more) is necessary for herbicide activation.

Do not plant crops in treated areas for at least 10 months following Fall applications. Do not rotate any crop not listed on this label for 18 months following application of Metribuzin 4L.

Metribuzin 4L may be applied at 1 to 1-1/4 pt per acre as directed above for a Fall application. If other vegetation is present at the time of application use a contact herbicide.

Spring Application (Summer Fallow): Metribuzin 4L may be applied to wheat stubble in the Spring. Apply 3/4 to 1 pt per acre broadcast before weeds emerge in the Spring. Use higher rate for longer weed control or weeds designated as requiring higher rate for control. Rainfall (1/2 inch or more) is necessary for herbicide activation.

Use Restrictions:

- Do not graze treated fields.
- Do not plant Spring seeded barley following Fall fallow applications of Metribuzin 4L.
- Where Metribuzin 4L was applied in the Fall, do not apply Metribuzin 4L in the Spring.

**FOR WEED CONTROL IN A FALLOW ROTATION WITH BARLEY AND WHEAT
(Colorado, Kansas, Montana, Nebraska, and Wyoming Only)**

Metribuzin 4L may be applied to provide weed control during the fallow period after wheat or barley harvest or in the Spring before planting of Winter wheat or barley. Mechanical tillage or the application of a contact herbicide may be required to control weeds germinating prior to seeding of Winter wheat or barley.

For specific application information see the *Product Information* section in the front of this label.

Where weed growth is present at application time, Metribuzin 4L should be applied with Gramoxone, Roundup, or other contact herbicide. Refer to the other product label registered for additional directions, rates, and weed species controlled. Do not plant crops in treated areas earlier than 10 months following Fall applications. Do not rotate any crop not listed on this label for 18 months following application of Metribuzin 4L.

Weeds Controlled**BROADLEAVES**

Chickweed, Common (<i>Stellaria media</i>)	Mustard, Tansy (<i>Descurainia pinnata</i>)
Cowcockle (<i>Vaccaria pyramidata</i>)	Mustard, Treacle (<i>Erysimum repandum</i>)
Henbit (<i>Lamium amplexicaule</i>)	Mustard, Wild (<i>Brassica kaber</i>)
*Kochia (<i>Kochia scoparia</i>)	Pennycress, Field (Fanweed) (<i>Thlaspi arvense</i>)
Lambsquarters (<i>Chenopodium album</i>)	Pigweeds (<i>Amaranthus</i> spp.)
Mustard, Blue or Purple (<i>Chorispora tenella</i>)	Russian thistle (<i>Salsola iberica</i>)
Mustard, Jim Hill (<i>Sisymbrium altissimum</i>)	Sunflower (<i>Helianthus</i> spp.)

GRASSES

Cheatgrass (<i>Bromus secalinus</i>)	*Wheat, Volunteer (<i>Triticum</i> spp.)
Downy Brome (<i>Bromus tectorum</i>)	*Wild Oats (<i>Avena fatua</i>)

* Note: Since control of these weeds may vary depending on moisture following application, use the higher rate specified below.

AFTER HARVEST APPLICATION (Fall Fallow): Metribuzin 4L may be applied to the stubble after harvest in the Fall. Apply 1-1/4 to 1-1/2 pt per acre broadcast before weeds emerge. Use the higher rate for longer weed control or for weeds designated as requiring the higher rate for control. Rainfall (1/2 inch or more) is necessary for herbicide activation.

SPRING APPLICATION (Summer Fallow): Metribuzin 4L may be applied to the stubble in the Spring. Apply 3/4 to 1 pt per acre broadcast before weeds emerge in the Spring. Use the higher rate for longer weed control or weeds designated as requiring the higher rate for control. Rainfall (1/2 inch or more) is necessary for herbicide activation. Wheat or barley can be seeded 120 days after Spring application.

Use Restrictions:

- Do not graze treated fields.
- Do not plant Spring seeded barley following Fall applications for fallow.
- Where Metribuzin 4L was applied in the Fall, do not apply Metribuzin 4L in the Spring.

CROP ROTATION RESTRICTIONS

Waiting Period After Metribuzin 4L Flowable Herbicide Application ¹			
4 Months	Alfalfa Asparagus Barley ² Corn	Forage Grasses Sainfoil Soybeans	Sugarcane Tomatoes Wheat ⁴
8 Months	Barley Lentils	Peas Wheat	
12 Months	Potatoes	Rice ³	
18 Months	Sugar Beets, Onions and other root crops not listed on this label, and all other crops not listed on this label.		

¹ Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed. Stand reductions may occur in some areas.

² Following peas, lentils or soybeans.

³ Do not rotate rice after any application to a primary crop greater than 1.0 lb ai/A of Metribuzin 4L per season.

Do not rotate any crop not listed on this label after application of Metribuzin 4L to sugarcane.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed below. In spill or leak incidents, keep unauthorized people away.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site in accordance with the uses permitted on this label, or at an approved waste disposal facility.

CONTAINER HANDLING: Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide related materials in the container. Contact your state regulatory agency to determine allowable practices in your state.

Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at 1-877-952-2272 or www.agrecycling.org. If not recycled, then puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

For nonrefillable containers up to 5 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For help with any spill, leak, fire or exposure involving this product, call day or night CHEMTREC - 1-800-424-9300.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. 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 when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS" AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL AND TO THE EXTENT REQUIRED BY APPLICABLE LAW, BUYER OR USER MUST SEND WRITTEN NOTICE OF ITS CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, P.O. BOX 1286, GREELEY, CO 80632-1286.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

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