

70506-68

3-30-2005

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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505C)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:
70506-68

Date of Issuance:
3/30/2005

NOTICE OF PESTICIDE:
 Registration
 Reregistration

Term of Issuance:
Conditional

Name of Pesticide Product:
Metribuzin 4F

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

United Phosphorus, Inc.
423 Riverview Plaza
Trenton, NJ 08611

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

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

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

This letter replaces the original registration letter dated 3/30/05.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided you agree in writing to:

1. Submit outstanding data requirements 830.6317 (one year storage stability study) and 830.6320 (corrosion characteristics study) within 1 year from the date of this letter.
2. Change the EPA Reg. No. on label from 70506- to 70506-68.
3. Add appropriate EPA establishment number on label.
4. Add "or rinsate" at the end of the statement "Do not contaminate water when disposing of equipment washwaters." in the section Environmental Hazards on pages 2 and 6.
5. Move the sections Environmental Hazards and Ground Water Advisory form before PPE to after User Safety Recommendations on pages 2 and 6.
6. On page 6, change "waterproof gloves" to "Chemical resistant gloves made of any waterproof material" in the Agricultural Use Requirements box.

Signature of Approving Official:

James Tompkins, Product Manager (25)
Herbicide Branch, Registration Division (7505C)

Date:
5/12/2005

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7. On page 7, under the section "General Precautions and Restrictions" add the following restriction: "*Do not rotate any crop not listed on this label for 18 months following application.*"
8. On page 17, remove the statement "In the Central United States, do not plant sorghum or oats.....Cool, wet weather conditions during the early stage of growth may increase the possibility of injury to sorghum." from the Special Precautions section in SOYBEANS: UPI METRIBUZIN plus TREFLAN. Add the statement "*Do not rotate any crop not listed on this label for 18 months following application.*" to the Special Precautions section.
9. On page 22, in the section Special Precautions for UPI METRIBUZIN plus COMMAND, remove "Oats" and "Rye" from the statement "Do not rotate to wheat, oats, barley, rye, 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." Add the statement "*Do not rotate any crop not listed on this label for 18 months following application.*" to the Special Precautions section.
10. On page 22, in the section Special Precautions for UPI METRIBUZIN plus COMMENCE, remove "Oats" and "Rye" from the statement "Do not rotate to wheat, oats, barley, rye, 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." Add the statement "*Do not rotate any crop not listed on this label for 18 months following application.*" to the Special Precautions section. Make these same changes on page 23 to the METRIBUZIN plus COMMENCE tank mix Special Precautions section.
11. On page 28, in the section UPI METRIBUZIN 4F in Combination with Other Herbicides table, add "pint" after "Dual 8EC 1-1/4 to 1-1/2" in the column COMBINATION PRODUCT/ACRE.
12. On page 31 and 44, remove the products Bladex and Extrazine II from the tank mix lists, as these products have been cancelled.
13. On page 33, remove the statement "Do not plant sensitive crops such as onions, lettuce, cole crops, and cucurbits during the next growing season following UPI METRIBUZIN 4F application." from the section Special Precautions. Add the statement "*Do not rotate any crop not listed on this label for 18 months following application.*" to the Special Precautions section.
14. On page 37 and 49 of the sections ASPARAGUS and TOMATO, make the statement "Aerial Application is Prohibited" **BOLD** and move these statements to their respective Special Precautions section.
15. On page 46, add the statement "*Do not rotate any crop not listed on this label for 18 months following application.*" to the Special Precautions section in SUGARCANE.
16. On page 52, add the following items to the Winter Wheat list of varieties that are tolerant to and are recommended for use with Metribuzin 4F: *AgriPro Mason, AgriPro Shiloh, Delta King 502, Delta King 9027, TR 8555, TR 8557, and TR 8768.*

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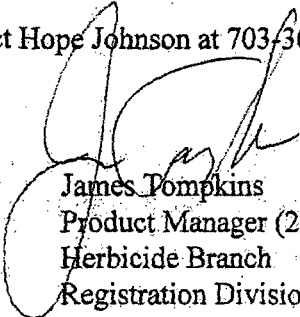
17. On page 52, add the following items to the Winter Wheat list of varieties that are sensitive and not recommended for use with Metribuzin 4F: *AgriPro Clemens, EK 102, EK 114, Pioneer 2643, and Pioneer 2691.*

18. On page 54 add the statement "*Do not rotate any crop not listed on this label for 18 months following application.*" after the statement "Do not plant crops in treated areas for at least 10 months following Fall applications." in the sections FOR WEED CONTROL IN A WHEAT/FALLOW/WHEAT ROTATION and FOR WEED CONTROL IN A FALLOW ROTATION WITH BARLEY AND WHEAT.

19. On page 55, remove "Cotton" and "rice" from the 8 month section of the Crop Rotation Recommendations table. Remove "other crops not listed (except root crops)" from the 12 month section and ADD "potatoes" and "rice". In the 18 month section change "other root crops" to "other root crops not listed" and ADD "all other crops not listed on this label." Also, add a third footnote stating "Do not rotate rice after any application to a primary crop greater than 1 lb ai/A of Metribuzin 4F per season." And finally, add the following statement at the end of the table "Do not rotate any crop not listed on this label after application of Metribuzin 4F to sugarcane.

You will submit one (1) copy of your final printed labeling before you release the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). A stamped copy of labeling is enclosed for your records.

If you have any questions, please contact Hope Johnson at 703-305-5410.


James Tompkins
Product Manager (25)
Herbicide Branch
Registration Division (7505C)

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[Container Label]

UPI METRIBUZIN 4F HERBICIDE

For control of certain grasses and broadleaf weeds.

ACTIVE INGREDIENT:

Metribuzin*:

4-Amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4H)-one 41%

INERT INGREDIENTS:.....

59%

100%

*Contains 4 lb active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

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

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. For 24-hour medical emergency assistance, contact the National Poison Control Center at 1-800-222-1222.	
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.	

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident,
Call CHEMTREC at 1-800-424-9300**



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423 Riverview Plaza
Trenton, NJ 08611
1-800-247-1557
www.upi-usa.com

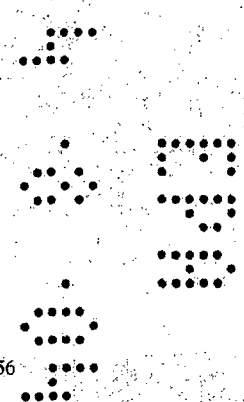
EPA Reg. No. 70506-
EPA Establishment No.
Net Contents:

ACCEPTED
with COMMENTS
in EPA Letter Dated

MAR 30 2005

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

70506-68



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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.

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.

Personal Protection Equipment (PPE)

Applicators and other handlers must wear:

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

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, 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 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, washing thoroughly and change into clean clothing.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to the label booklet for Directions for Use and Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. **Before buying or using this product, read "Conditions of Sale and Limitation of Warranty Liability" inside the label booklet.**

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[Label Booklet]

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CAUTION

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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

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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.

Personal Protection Equipment (PPE)

Applicators and other handlers must wear:

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

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, 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 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, washing thoroughly and change into clean clothing.

AGRICULTURAL USE REQUIREMENTS

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

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

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

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

- Coveralls
- Waterproof gloves
- Shoes plus socks

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NOTICE: Read these entire Directions and Conditions of Sale before using METRIBUZIN 4F Flowable Herbicide.

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.

GENERAL INFORMATION

UPI METRIBUZIN 4F cannot be applied with low-pressure or high-volume hand-wand equipment.

MIXING

When using UPI METRIBUZIN 4F, 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 UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F alone or in tank mix combinations with other herbicides is:

1. Fill the spray tank $\frac{1}{4}$ to $\frac{1}{3}$ full with clean water.
2. Add recommended rate of UPI METRIBUZIN 4F 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.

GENERAL PRECAUTIONS AND RESTRICTIONS

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

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

UPI METRIBUZIN 4F is recommended for application through sprinkler irrigation equipment to potatoes, soybeans, tomatoes, and asparagus as directed on this label. Refer to the crop sections of this label for recommended 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 UPI METRIBUZIN 4F. 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 $\frac{1}{4}$ to $\frac{3}{4}$ 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.

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4. Add required amount of water to nurse tank and start the agitation system. Then add sufficient UPI METRIBUZIN 4F at the recommended rate (See RECOMMENDED BROADCAST APPLICATIONS) 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 UPI METRIBUZIN 4F are required.

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

Do not connect any 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 recommended on this label may result in decreased product performance by removing the chemical from the zone 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.

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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 should 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 rates flows produce larger droplets.
- Pressure – Do not exceed the nozzle manufacturer’s recommended 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 recommended 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 downward 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 (high 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.

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SENSITIVE AREAS: UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F in a minimum of 10 to 40 gallons of spray mixture per acre broadcast.

Banded Application: Use proportionally less UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F. (2) To treat a 14-inch band on rows 42 inches apart, use one-third of the broadcast rate of UPI METRIBUZIN 4F.

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

NOTE: Do not apply aurally when UPI METRIBUZIN 4F is tank mixed with Lasso.

For All Applications of UPI METRIBUZIN 4F: Sprayer must be accurately calibrated before applying UPI METRIBUZIN 4F. 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, mis-application, 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 UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F IN FLUID FERTILIZERS

UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F and tank mix combinations which include UPI METRIBUZIN 4F should be made for each batch of fluid fertilizers because of the variability of these fertilizers.

Compatibility Check:

1. Pre-mix 2 teaspoonsful of UPI METRIBUZIN 4F with 8 teaspoonsful of water (1:4 ratio) in a quart jar by adding the water first and followed with UPI METRIBUZIN 4F. 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 UPI METRIBUZIN 4F 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 re-suspended by shaking, then application is possible with good agitation in the spray tank.

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Tank Mixing Guidelines:

1. Add the required amount of water and compatibility agent (if required) to the tank. Start agitation system while adding UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F 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.

COMMERICAL IMPREGNATION AND APPLICATION OF UPI METRIBUZIN 4F ON DRY BULK FERTILIZER

Dry bulk fertilizer may be impregnated or coated with UPI METRIBUZIN 4F for application to established alfalfa and to soybeans. All recommendations, cautions, and special precautions 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 UPI METRIBUZIN 4F except 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 UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F to dry bulk fertilizer will vary and if the absorptivity is not adequate, an adsorptive powder may be added to produce a dry, free-flowing mixture. Micro-Cel E (Johns-Manville Product Corporation) is the recommended absorbent powder. When another herbicide is used with UPI METRIBUZIN 4F, 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 recommended rate of UPI METRIBUZIN 4F per acre from the appropriate section of this label and refer to the formula below to determine the amount of UPI METRIBUZIN 4F 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.

$$\frac{\text{Pints UPI METRIBUZIN 4F}}{\text{Per Acre}} \times \frac{2000 \text{ lb Fertilizer}}{\text{Per Acre}} = \frac{\text{Pints UPI METRIBUZIN 4F}}{\text{Ton of Fertilizer}}$$

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 recommended 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 UPI METRIBUZIN 4F is to be used in combination with another herbicide, follow directions on this label for combinations, rates, crops, incorporation, and special precautions.

**SOYBEANS
(Except in California)**

UPI METRIBUZIN 4F herbicide tank mix combinations are recommended for preplant incorporated applications, pre-emergence surface applications, Split-Shot application and Extended Split-Shot application. UPI METRIBUZIN 4F is also recommended as an overlay application following a preplant incorporated application of a recommended grass herbicide and alone as a pre-emergence surface application. All these applications can be applied with ground equipment, and some can be applied with aerial spray equipment. In addition, UPI METRIBUZIN 4F can be applied as a postemergence directed spray to soybeans in certain states.

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Special Precautions (soybeans): Injury to soybeans may occur when UPI METRIBUZIN 4F 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, UPI METRIBUZIN 4F is not recommended for use on Altona, AP 55, AP 71, Asgrow 6520, Burlison, Coker 102, Coker 156, Dassel, GL 3202, Govan, Maple Amber, NB 3665, NKS 1884, Paloma 350, Portage, Regal, Semmes, Terra-Vig 505, Terra-Vig 606, Tracy, Vansoy, and Vinton 81. Consult your UPI Representative or your seed supplier for information on the tolerance to UPI METRIBUZIN 4F of newly released soybean varieties, prior to use of UPI METRIBUZIN 4F.
- 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 recommended.
- 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 moisture is required to activate UPI METRIBUZIN 4F. In areas of low rainfall, pre-emergence 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 UPI METRIBUZIN 4F is applied alone or with Treflan®, Dual®, Prowl®, or Lasso®.

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

Rate Ranges: Where a rate change 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 in organic matter.

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

WEEDS CONTROLLED BY UPI METRIBUZIN 4F AND UPI METRIBUZIN 4F HERBICIDE TANK MIX COMBINATIONS									
C=Control S=Suspension or Erratic Control P=Poor or No Control O=No information (Control may range from poor to excellent)									
1=UPI METRIBUZIN 4F Alone	4=UPI METRIBUZIN 4F Plus Dual			7=Extended Split-Shot					
2=UPI METRIBUZIN 4F Split-Shot	5=UPI METRIBUZIN 4F Plus Prowl			8=UPI METRIBUZIN 4F Plus Sonalan					
3=UPI METRIBUZIN 4F Plus Treflan	6=UPI METRIBUZIN 4F Plus Lasso			9=UPI METRIBUZIN 4F Plus Linuron plus (Lasso or Dual)					
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 illinoense</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
Galinsoga (<i>Galinsoga</i> spp.)	C	C	C	C	C	C	C	C	C
Horseweed Maretail (<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>Kochia scoparia</i>)	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 lacunose</i>)	P	P	S	P	P	P	P	P	P
Morningglory, Smallflower (<i>Jacquemontia tamnifolia</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

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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 spp.</i>)	C	C	C	C	C	C	C	C	C
Shepherdspurse (<i>Capella 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 spp.</i>)	G	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	O
Sunflower (<i>Helianthus spp.</i>)	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 irionum</i>)	C	C	C	C	C	C	C	C	C
Wild Mustards (<i>Brassica spp.</i>)	C	C	C	C	C	C	C	C	C

WEEDS CONTROLLED BY UPI METRIBUZIN 4F AND UPI METRIBUZIN 4F HERBICIDE TANK MIX COMBINATIONS										
C=Control S=Suspension OR Erratic Control P=Poor or No Control O=No information (Control may range from poor to excellent)										
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2=UPI METRIBUZIN 4F Split-Shot	5=UPI METRIBUZIN 4F Plus Prowl			8=UPI METRIBUZIN 4F Plus Sonalan						
3=UPI METRIBUZIN 4F Plus Treflan	6=UPI METRIBUZIN 4F Plus Lasso			9=UPI METRIBUZIN 4F Plus Linuron plus (Lasso or Dual)						
ANNUAL GRASSES	1	2	3	4	5	6	7	8	9	
Barnyard Grass (<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 spp.</i>)	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 gracillis</i>)	P	C	P	P	P	P	C	O	O	
Foxtails (<i>Setaria spp.</i>)	S	C	C	C	C	C	C	C	C	
Goosegrass (<i>Eleusine 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	
Jungle rice (<i>Echinochloa colonum</i>)	C	C	C	C	C	C	C	C	O	
Nutsedge, Yellow (<i>Cyperus esculentus</i>)	P	P	P	C	P	C	C	P	O	
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 spp.</i>)	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 spp.</i>)	P	C	C	P	P	P	P	O	P	
Sprangletop (<i>Leptochloa spp.</i>)	P	C	C	P	P	P	P	O	P	
Stinkgrass (<i>Eragrostis spp.</i>)	P	C	C	P	P	P	P	O	P	
Wheat, Volunteer (<i>Triticum spp.</i>)	P	P	P	P	P	P	P	O	P	
Witchgrass (<i>Panicum capillare</i>)	P	C	C	C	C	C	C	C	O	

SOYBEANS: UPI METRIBUZIN 4F ALONE

Preemergence Application: The following rates of UPI METRIBUZIN 4F may be applied pre-emergence to soybeans through center pivot or lateral move sprinkler irrigation systems that apply water in a uniform manner. Refer to "Chemigation" section of this label for directions.

UPI METRIBUZIN 4F 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 "General 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.

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Pints of UPI METRIBUZIN 4F 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 SOILS ¹ (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 SOILS ¹ (Silty clay, silty clay loam ² 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 UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F alone can be applied regardless of soil pH. For control of other weeds listed on this label use UPI METRIBUZIN 4F at full rates recommended 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 UPI METRIBUZIN 4F on soybeans in coarse soils with 0.5% or more organic matter in certain states.

USES OF UPI METRIBUZIN 4F HERBICIDE IN COMBINATION WITH OTHER HERBICIDES

SOYBEANS: SEQUENTIAL APPLICATION OF SCEPTER® FOLLOWING UPI METRIBUZIN 4F

If needed, application of UPI METRIBUZIN 4F 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 ounces of Scepter 70 DG) if cockleburs 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 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, directions, limitations, and information on environmental hazards and planting of rotational crops.

SOYBEANS: SPLIT-SHOT APPLICATION

A preplant incorporated application of UPI METRIBUZIN 4F tank mixed with either Treflan, Lasso, Dual, Prowl or Sonalan and followed by a pre-emergence surface application of UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F. Carefully observe the "Special Precautions" section concerning the use of UPI METRIBUZIN 4F in tank mix combinations on soybeans.

When a Split-Shot application of UPI METRIBUZIN 4F 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 14 days prior to planting.

On medium and fine textured soils with greater than 2% organic matter, a rate range is recommended for the UPI METRIBUZIN 4F pre-emergence 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 pre-emergence 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.

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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						
				Rate of UPI METRIBUZIN 4F (Pint/Acre)		
				Organic Matter		
SOIL TEXTURE ¹	Rate of Combination Product/Acre	Plus	Rate of UPI METRIBUZIN 4F Pint/Acre	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 UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F 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.

SOYBEANS: 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 UPI METRIBUZIN 4F tank mixed with either Dual or Lasso, followed by a pre-emergence surface application of UPI METRIBUZIN 4F 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 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 UPI METRIBUZIN 4F 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 recommended, 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 pre-emergence 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.

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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 UPI METRIBUZIN 4F P/A		Rate of Combination Product/Acre	Plus	Rate of UPI METRIBUZIN 4F Pints/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 3/4 to 1	Dual or Lasso	3/4 pt. 1 to 2 qt.	Plus	1/2	1/2-3/4	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 1 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.
¹On 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.
²Use the lower rate of UPI METRIBUZIN 4F in the early preplant tank mix on soils having a calcareous surface area or a pH of 7.5 or higher, and in those rate situations where soils within a field vary extremely in texture or organic matter content.

SOYBEANS: UPI METRIBUZIN 4F plus Sonalan

UPI METRIBUZIN 4F plus Sonalan Overlay Application: UPI METRIBUZIN 4F F may be applied as a pre-emergence overlay application following a preplant incorporated application of Sonalan 3 EC. Consult the Sonalan label for specific directions on use, recommendations, restrictions and any additional weeds not specified on this label.

UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F 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 "General 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 "General Information" section in the front of this label.

BROADCAST RATES		
SOIL TEXTURE	UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F in tank mix combination with Sonalan can be applied regardless of soil pH. For control of other weeds not listed on the label, use UPI METRIBUZIN 4F at full rates recommended 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: 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.

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SOYBEANS: UPI METRIBUZIN 4F plus TREFLAN

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

UPI METRIBUZIN 4F plus Treflan Tank mix Application: A single application of a tank mix combination of UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F plus Treflan tank mix combination may be applied and incorporated into the soil up to 10 days before planting.

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

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

Apply UPI METRIBUZIN 4F plus Treflan to the soil surface and incorporate in the same operation, if possible. Variable weed control may result from delayed incorporation if UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F 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.

Incorporation Equipment:

1. 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 hours.
2. Set disk to cut 4 to 6 inches deep and operate twice in different directions at 4 to 6 miles per hours.
3. 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.
4. **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.

BROADCAST RATES		
SOIL TEXTURE	UPI METRIBUZIN 4F Pt/Acre	Treflan EC Pt Per 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 , clay, clay loam) 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 UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F in tank mix combination with Treflan can be applied regardless of soil pH. For control of other weeds not listed on the label, use UPI METRIBUZIN 4F at full rates recommended 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:

Seedling disease, cold weather, excessive moisture, high salt concentration or drought may weaken soybean seedlings and increase the possibility of damage from the tank mix. Do not plant soybeans deeper than 2 inches.

In the Central United States, do not plant sorghum or oats for 12 months where the tank mix has been applied unless 20 inches or more of irrigation and/or rainfall (total) was used to produce the crop. If less than 20 inches total water was used to produce the crop during the year, do not plant either crop for 18 months after the tank mix application. Cool, wet weather conditions during the early stage of growth may increase the possibility of injury to sorghum.

For additional precautions, restrictions, limitations and sprayer clean-up information refer to the appropriate section of this label. Do not use this tank mix combination on soils containing charcoal in Arkansas, Louisiana, and Mississippi.

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SOYBEANS: UPI METRIBUZIN 4F Plus DUAL

UPI METRIBUZIN 4F 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 pre-emergence treatment of UPI METRIBUZIN 4F as directed on this label for use on soybeans.

UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F 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.

Pre-emergence Application: Dry weather following pre-emergence application of UPI METRIBUZIN 4F 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 "General Information" section in the front of this label.

For information on applying UPI METRIBUZIN 4F in fluid or dry fertilizer, refer to the "Application of UPI METRIBUZIN 4F in Fluid Fertilizers" or "Commercial Impregnation and Application of UPI METRIBUZIN 4F on Dry Bulk Fertilizer" sections in the front of this label.

Special Precautions (UPI METRIBUZIN 4F and Dual):

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

BROADCAST RATES				
UPI METRIBUZIN 4F Plus Dual Tank Mix Preemergence Applications				
SOIL TEXTURE	Organic Matter			
	0.5% to 3%		Over 3%	
	METRIBUZIN 4F (Pt/Acre)	Dual 8E Pt/Acre	METRIBUZIN 4F (Pt/Acre)	Dual 8E Pt/Acre
COARSE ¹ (Loamy sand, sandy loam)	1/2	1-1/4	3/4	1-1/2
MEDIUM (Loam, silt loam, silt)	3/4	1-1/2	1	2
FINE (Silty clay loam ² , sandy clay loam, silty clay, sandy clay, clay loam, clay)	1	2	1 to 1-1/4	2 to 2-1/2
MISSISSIPPI DELTA ONLY: (Silty clay, clay)	1 to 1-1/2	2	1-1/2	2 to 2-1/2

¹ Do not use on sand soils. Do not apply UPI METRIBUZIN 4F 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				
UPI METRIBUZIN 4F Plus DUAL Tank Mix PrePlant Incorporated Applications				
SOIL TEXTURE	Organic Matter			
	0.5% to Less Than 3%		3% or Greater	
	UPI METRIBUZIN 4F (Pt/Acre)	Dual 8E Pt/Acre	UPI METRIBUZIN 4F (Pt/Acre)	Dual 8E Pt/Acre
COARSE ¹ (Loamy sand, sandy loam)	1/2	1-1/4	1/2	1-1/2
MEDIUM (Loam, silt loam, silt)	3/4	1-1/2	3/4	2
FINE (Silty clay loam ² , sandy clay loam, silty clay, sandy clay, clay loam, clay)	1	2	1	2 to 2-1/2
MISSISSIPPI DELTA ONLY: (Silty clay, clay)	1 to 1-1/4	2	1 to 1-1/4	2 to 2-1/2

¹ Do not use on sand soils. Do not apply UPI METRIBUZIN 4F plus Dual tank mix preplant incorporated on sand or loamy sand with less than 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.

SOYBEANS: UPI METRIBUZIN 4F Plus PROWL

UPI METRIBUZIN 4F plus Prowl Overlay Application: Apply a preplant incorporated treatment of Prowl as directed on that product label for use on soybeans. Follow with a pre-emergence treatment of UPI METRIBUZIN 4F as directed on this label for use on soybeans.

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UPI METRIBUZIN 4F 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 "General 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.

Pre-emergence 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 "General Information" section in the front of this label. Do not apply Prowl pre-emergence 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 "General Information" section in the front of this label.

For information on applying UPI METRIBUZIN 4F in fluid or dry fertilizer refer to the "Application of UPI METRIBUZIN 4F in Fluid Fertilizers" or "Commercial Impregnation and Application of UPI METRIBUZIN 4F On Dry Bulk Fertilizer" sections in the front of this label.

Special Precautions (UPI METRIBUZIN 4F plus Prowl): Soil incorporation deeper than the recommended 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.

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*.		
*UPI METRIBUZIN 4F plus Prowl is not recommended for use on soils with less than 2% organic matter in the coastal plain of New Jersey or the Delmarva Peninsula.		
BROADCAST RATES		
UPI METRIBUZIN 4F Plus Prowl Tank mix Applications		
SOIL TEXTURE	UPI METRIBUZIN 4F Pt/Acre	Prowl Pt/Acre
COARSE ¹ (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.		

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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 in the "Bootheel" Region).				
BROADCAST RATES				
UPI METRIBUZIN 4F Plus Prowl Tank Mix Applications				
SOIL TEXTURE	Organic Matter			
	1/2 to 3%		Over 3%	
	UPI METRIBUZIN 4F (Pt/Acre)	Prowl Pt/Acre	UPI METRIBUZIN 4F (Pt/Acre)	Prowl Pt/Acre
COARSE ¹ (Sandy loam, Loamy sand)	1/2	1	3/4	1-1/2
MEDIUM (Loam, silt loam, sandy clay, sandy clay loam)	3/4	1-1/2 to 2	3/4 to 1	1-1/2 to 2
FINE ² (Silty clay, silty clay loam ² , clay, clay loam)	3/4 to 1	1-1/2 to 2	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 some regions of the U.S.

Do not use on muck or peat soils.

SOYBEANS: UPI METRIBUZIN 4F Plus LASSO

UPI METRIBUZIN 4F Plus Lasso Tank mix Application

PREEMERGENCE

UPI METRIBUZIN 4F may be used in a tank mix combination with Lasso as a pre-emergence band or broadcast application to soybeans in accordance with the specified soil types and dosages recommended.

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.

Special Precautions (UPI METRIBUZIN 4F Plus Lasso): For additional precautions, restrictions, limitations and sprayer clean-up information, refer to the appropriate sections of this label and the Lasso label. Refer to the Lasso label for pertinent recommendations, directions for use, restrictions and any additional weeds not specified on this label.

Do not use on muck soils.

RECOMMENDED APPLICATIONS						
BROADCAST RATES						
UPI METRIBUZIN 4F Plus Lasso Tank Mix Preemergence Applications						
SOIL TEXTURE	Organic Matter					
	1/2 to 3%			Greater Than 3%		
	UPI METRIBUZIN 4F (Pt/Acre)	Plus	Lasso Qt/Acre	UPI METRIBUZIN 4F (Pt/Acre)	Plus	Lasso Qt/Acre
COARSE ¹ (Sandy loam)	1/2	plus	1-1/2 to 2	3/4	plus	1-1/2 to 2
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	3/4	plus	1-1/2 to 2	1	plus	1-1/2 to 2
FINE ² (Silty clay, silty clay loam ³ , clay, clay loam)	1	plus	2	1 to 1-1/4	plus	2 to 2-1/2
MISSISSIPPI DELTA ONLY (Silty clay to heavy clay)	<u>UPI METRIBUZIN 4F Pt/Acre + Lasso Qt/Acre</u> 2 + 2 to 2-1/2					

¹ Do not use UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F in tank mix combination with Lasso can be applied regardless of soil pH. For control of other weeds use UPI METRIBUZIN 4F at full rates recommended 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.

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Preplant Incorporated: For specific application information refer to the "General Information" section in the front of this label.

Apply UPI METRIBUZIN 4F 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.

RECOMMENDED APPLICATIONS		
BROADCAST RATES		
UPI METRIBUZIN 4F Plus Lasso Tank Mix Preplant Incorporated Applications		
SOIL TEXTURE	UPI METRIBUZIN 4F Pt/Acre	Lasso Qt/Acre
COARSE ¹ (Loamy sand, <i>over 2% organic matter</i>), 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 UPI METRIBUZIN 4F 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.

SOYBEANS: UPI METRIBUZIN 4F Plus Command®

UPI METRIBUZIN 4F 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 4EC label for specific directions on use, recommendations, restrictions and any additional weeds not specified on this label.

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

Application: UPI METRIBUZIN 4F plus Command 4EC may only be applied with ground equipment as a preplant or shallow incorporated application. UPI METRIBUZIN 4F plus Command 4EC 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 recommended 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 and application instructions as set forth in that label.

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

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

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

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RECOMMENDED APPLICATIONS				
BROADCAST RATES				
UPI METRIBUZIN 4F Plus Command 4EC Tank Mix Preplant Incorporated Application				
SOIL TEXTURE ¹	Organic Matter			
	0.5% to 3%		Over 3%	
	UPI METRIBUZIN 4F (Pt/Acre)	Command 4EC Pt/Acre	UPI METRIBUZIN 4F (Pt/Acre)	Command 4EC Pt/Acre
COARSE ² (Sandy loam, loamy sand)	1/2	1-1/2 to 2	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	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	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.

Special Precautions: Do not rotate to wheat, oats, barley, rye, 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 apply when weather conditions favor drift. Do not use treated vines for feed or forage.
Observe all cautions and limitations on labeling of all products used in mixtures.
Do not apply aerially or through irrigation equipment.

SOYBEANS: UPI METRIBUZIN 4F Plus Commence[®]

UPI METRIBUZIN 4F plus Commence Tank mix Early Preplant Incorporated Application: UPI METRIBUZIN 4F in a tank mix with Commence 5.25 EC may be applied broadcast preplant incorporated up to 30 days before planting soybeans for the control of certain broadleaf weeds and grasses. Refer to the Commence herbicide label for additional directions for use, weeds controlled, recommendations, restrictions and limitations not specified on this label.

Mixing: Refer to the "General Information" section on this label.

Application: For information on applying UPI METRIBUZIN 4F, refer to the "General Information" section on this label.

RECOMMENDED APPLICATIONS				
UPI METRIBUZIN 4F Plus Commence 5.25 EC Tank Mix - Early Preplant Incorporated Application ^a				
SOIL TEXTURE	Organic Matter			
	1/2 to 3%		Over 3%	
	UPI METRIBUZIN 4F (Pt/Acre)	Commence 5.25 EC Pt/Acre	UPI METRIBUZIN 4F (Pt/Acre)	Commence 5.25 EC Pt/Acre
COARSE ^b	3/4	1-1/3 to 2	3/4	1-1/3 to 2
MEDIUM	1	2 to 2-1/4	1	2 to 2-1/4
FINE	1	2-2/3	1-1/2	2-2/3

^a For use on soils with a pH of 7.5 or lower.
^b Do not use on coarse soils with less than 1% organic matter.

Restrictions and Limitations: Do not apply aerially or through irrigation equipment.
Do not apply when weather conditions favor drift. Do not allow sprays to drift onto adjacent desirable plants. Do not use treated vines for feed or forage.
Do not rotate to wheat, oats, barley, rye, 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.

UPI METRIBUZIN 4F plus Commence Tank mix Preplant Incorporated: UPI METRIBUZIN 4F may be tank mixed with Commence 5.25 EC for preplant incorporated application to control certain weeds in soybeans. Refer to the "General Information" section of this label for information on mixing, application, restrictions, special precautions and weeds controlled by UPI METRIBUZIN 4F. See appropriate sections of the Commence 5.25 EC herbicide label for additional precautionary statements, directions for use, recommendations and additional weeds controlled.

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RECOMMENDED APPLICATIONS				
UPI METRIBUZIN 4F Plus Commence 5.25 EC Tank Mix - Preplant Incorporated Application				
SOIL TEXTURE ¹	Organic Matter			
	1/2 to 3%		Over 3%	
	UPI METRIBUZIN 4F (Pt/Acre)	Commence 5.25 EC (Pt/Acre)	UPI METRIBUZIN 4F (Pt/Acre)	Commence 5.25 EC (Pt/Acre)
COARSE ² (Sandy loam, loamy sand)	1/2	1-1/3 to 2	1/2	1-1/3 to 2
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	1/2 to 3/4	2 to 2-1/4	1/2 to 3/4	2 to 2-1/4
FINE (Silty clay, silty clay loam ³ , clay, clay loam)	1/2 to 3/4	2-2/3	3/4 to 1	2-2/3

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.

Special Precautions (UPI METRIBUZIN 4F plus Commence): Do not rotate to wheat, oats, barley, rye, alfalfa or seed corn in the fall of the year of application or in the spring of the following year as a crop injury may occur. 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. Do not allow sprays to drift onto adjacent desirable plants.

SOYBEANS: UPI METRIBUZIN 4F Plus Freedom®

UPI METRIBUZIN 4F may be tank mixed with Freedom 3 EC for preplant incorporated application to control certain weeds in soybeans. Refer to the "General Information" section of this label for information on mixing, application, restrictions, special precautions and weeds controlled by UPI METRIBUZIN 4F. See appropriate sections of the Freedom 3 EC herbicide label for additional precautionary statements, directions for use, recommendations and additional weeds controlled.

RECOMMENDED APPLICATIONS						
BROADCAST RATES						
UPI METRIBUZIN 4F Plus Freedom Tank Mix Preplant Incorporated Application						
SOIL TEXTURE	Organic Matter					
	1/2 to 3%			Greater than 3%		
	UPI METRIBUZIN 4F (Pt/A)	Plus	Freedom 3EC (Q/A)	UPI METRIBUZIN 4F (Pt/A)	Plus	Freedom 3EC (Q/A)
COARSE ¹ (Sandy loam)	1/2	Plus	2-3/4 to 3-1/2	3/4	Plus	3 to 3-1/2
MEDIUM ² (Loam, silt loam, silt, sandy clay, sandy clay loam)	3/4	Plus	2-3/4 to 3-1/2	1	Plus	3-1/2 to 4
FINE ² (Silty clay, silty clay loam ³ , clay, clay loam)	1	Plus	3-1/2 to 4	1 to 1-1/4	Plus	3-1/2 to 4-1/2
MISSISSIPPI DELTA ONLY (Silty clay to heavy clay)	UPI METRIBUZIN 4F Pt/Acre + Freedom 3EC Qt/Acre 2 + 3-1/2 to 4-1/2					

¹ Do not use UPI METRIBUZIN 4F plus Freedom 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 UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F in tank mix combination with Freedom can be applied regardless of soil pH. For control of other weeds use UPI METRIBUZIN 4F at full rates recommended 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.

Do not use on muck soils.
Do not allow sprays to drift onto adjacent desirable plants.

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SOYBEANS: UPI METRIBUZIN 4F Plus Canopy® Plus a Grass Herbicide

A tank mix combination of UPI METRIBUZIN 4F plus Canopy 75 DF plus a registered and recommended grass herbicide (Dual, Lasso, Prowl, Sonalan or Treflan) is recommended for control of the following weeds in soybeans:

WEEDS CONTROLLED			
Annual Grasses		Annual Broadleaves	
Barnyardgrass	Johnsongrass (seedling)	Bristly Starbur	Prickly Sida/Teaweed
Bluegrass	Junglerice	Carpetweed	Purslane
Broadleaf Signalgrass	Panicum, Fall	Cocklebur	Ragweed, Common
Browntop Millet	Panicum, Texas	Copperleaf, Hophornbeam	Redweed
Crabgrass	Sandbur	Florida Beggarweed	Russian Thistle
Crowfootgrass	Sprangletop	Florida Pusley	Sesbania
Foxtails	Stinkgrass	Galinsoga	Shepherdspurse
Goosegrass		Jimsonweed	Smartweed
		Knotweed	Spurred Anoda
		Kochia	Velvetleaf
		Lambsquarters	Venice Mallow
		Pigweed	Wild Mustard

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

RECOMMENDED APPLICATIONS							
BROADCAST RATES							
UPI METRIBUZIN 4F Plus Canopy 75 DF Plus A Grass Herbicide							
Soil Texture ¹	Treflan (Pt/Acre)	Dual (Pt/Acre)	Prowl (Pt/Acre)	Lasso (Qt/Acre)	Sonalan (Pt/Acre)	UPI METRIBUZIN 4F (Pt/Acre)	Canopy DF (Oz/Acre)
COARSE ²	1	1-1/4 to 1-1/2	1-1/2	2 to 2-1/2	1-1/14 to 2	1/2	3
MEDIUM	1-1/2	1-1/2 to 2	1-1/2 to 2	2-1/2 to 3	1-1/4 to 2-1/2	1/2 to 3/4 ³	3
FINE	2	2 to 2-1/2	1-1/2 to 2-1/2	2-1/2 to 3	2-1/4 to 3	3/4 to 1/3 ³	3 to 4

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 UPI METRIBUZIN 4F in preplant incorporated tank mix as in those situations where soils within a field vary extremely in texture or organic matter content.

IMPORTANT: If weeds escape in fields treated with these tank mix combinations, postemergence application of a registered and recommended herbicide will be needed for control.
Refer to the "General Information" section of this label for mixing and application directions.
SPECIAL PRECAUTIONS: For additional precautions, restrictions, limitations and sprayer clean-up information, refer to the appropriate sections of the labels for UPI METRIBUZIN 4F and Canopy 75 DF.
Do not use treated vines for feed or forage.

SOYBEANS: UPI METRIBUZIN 4F Plus Command Plus a Grass Herbicide

UPI METRIBUZIN 4F 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. UPI METRIBUZIN 4F 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, recommendations, restrictions and additional weeds controlled not specified on this label.

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

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

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WEEDS CONTROLLED			
Annual Grasses		Annual Broadleaves	
Barnyardgrass	Foxtails	Bristly Starbur	Ragweed, Common
Bluegrass	Goosegrass	Carpetweed	Redweed
Broadleaf Signalgrass	Johnsongrass (seedling)	Copperleaf, Hophornbeam	Russian Thistle
Browntop Millet	Panicum, Fall	Florida Beggarweed	Sesbania
Crabgrass	Witchgrass	Florida Pusley	Shepherdspurse
Crowfootgrass		Galinsoga	Sicklepod
		Jimsonweed	Smartweeds
		Knotweed	Spotted Spurge
		Kochia	Spurred Anoda
		Lambsquarters	Velvetleaf
		Pigweeds	Venice Mallow
		Prickly Sida/Teaweed	Wild Mustards
		Purslane	

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

RECOMMENDED APPLICATIONS							
BROADCAST RATES							
UPI METRIBUZIN 4F Plus Command Plus A Grass Herbicide							
SOIL Texture	Treflan (Pt/Acre)	Dual (Pt/Acre)	Prowl (Pt/Acre)	Lasso (Qt/Acre)	Sonalan (Pt/Acre)	UPI METRIBUZIN 4F (Pt/Acre)	Command 4EC ³ (Pt/Acre)
COARSE	1	1-1/4 to 1-1/2	1-1/2	2 to 2-1/2	1-1/4 to 2	1/2	1/2 to 3/4
MEDIUM	1-1/2	1-1/2 to 2	1-1/2 to 2	2-1/2 to 3	1-3/4 to 2-1/2	1/2 to 3/4 ²	1/2 to 3/4
FINE	2	2 to 2-1/2	1-1/2 to 2-1/2	2-1/2 to 3	2-1/4 to 3	3/4 to 1 ²	1/2 to 3/4

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 UPI METRIBUZIN 4F is recommended for the control of sicklepod and hemp sesbania. Use the lower rate of UPI METRIBUZIN 4F 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 is recommended under moderate to heavy weed infestations.

SOYBEANS: UPI METRIBUZIN 4F Plus Scepter Plus a Grass Herbicide

UPI METRIBUZIN 4F 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. UPI METRIBUZIN 4F and Scepter plus Treflan or Sonalan may be applied preplant incorporated broadcast. UPI METRIBUZIN 4F and Scepter plus Lasso, Dual or Prowl may be applied preplant incorporated, pre-emergence broadcast or in a band application.

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

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

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

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

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WEEDS CONTROLLED			
Annual Grasses		Annual Broadleaves	
Barnyardgrass	Foxtails	Bristly Starbur	Pigweeds
Bluegrass	Goosegrass	Buffalobur	Prickly Sida/Teaweed
Broadleaf Signalgrass	Johnsongrass (seedling)	Carpetweed	Purslane
Browntop Millet	Panicum, Fall	Cocklebur	Ragweed, Common Redweed
Crabgrass	Witchgrass	Coffee Senna	Russian Thistle
Crowfootgrass		Copperleaf, Hophornbeam	Sesbania
		Florida Beggarweed	Shepherdspurse
		Florida Pulsey	Sicklepod
		Galinsoga	Smartweeds
		Jimsonweed	Spotted Spurge
		Knotweed	Spurred Anoda
		Kochia	Sunflower
		Lambsquarters	Velvetleaf
		Morningglory, Pitted	Venice Mallow
		Morningglory, Smallflower	Wild Mustards

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

RECOMMENDED APPLICATIONS BROADCAST RATES								
Soil Texture ¹	Treflan (Pt/A)	Dual (Pt/A)	Prowl (Pt/A)	Lasso (Qt/A)	Sonalan (Pt/A)	UPI METRIBUZIN 4F (Pt/A)	Scepter (1.5 lb/Gal liquid ³ Pt/A) - or -	Scepter 70 DG ³ (Oz/A)
COARSE	1	1-1/4 to 1-1/2	1-1/2	2 to 2-1/2	1-1/4 to 2	1/2	1/3 to 1/2	1.4 to 2.1
MEDIUM	1-1/2	1-1/2 to 2	1-1/2 to 2	2-1/2 to 3	1-3/4 to 2-1/2	1/2 to 3/4 ²	1/3 to 1/2	1.4 to 2.1
FINE	2	2 to 2-1/2	1-1/2 to 2-1/2	2-1/2 to 3	2-1/4 to 3	3/4 to 1 ²	1/3 to 1/2	1.4 to 2.1

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 UPI METRIBUZIN 4F is recommended for preemergence tank mix application and for the control of sicklepod and hemp sesbania. Use the lower rate of UPI METRIBUZIN 4F 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 is recommended under moderate to heavy weed infestations.

SOYBEANS: UPI METRIBUZIN 4F Plus Pursuit® and a Grass Herbicide

UPI METRIBUZIN 4F may be tank mixed with Pursuit herbicide and a registered and recommended 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, recommendations, restrictions and limitations not included on this label.

Tank mix combinations of UPI METRIBUZIN 4F, Pursuit and Dual, Lasso or Prowl can be applied broadcast pre-emergence 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 "General Information" section of this label for directions on mixing and application of UPI METRIBUZIN 4F.

RECOMMENDED APPLICATIONS BROADCAST RATES UPI METRIBUZIN 4F Plus Pursuit and a Grass Herbicide*		
SOIL TEXTURE	UPI METRIBUZIN 4F (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 UPI METRIBUZIN 4F 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 onto 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.

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SOYBEANS: UPI METRIBUZIN 4F Plus Pursuit Plus Herbicide

UPI METRIBUZIN 4F may be tank mixed with Pursuit Plus herbicide for broadcast pre-emergence 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, recommendations, restrictions and limitations not included on this label.

Mixing and Application: Refer to the "General Information" section of this label for directions on mixing and application of UPI METRIBUZIN 4F.

RECOMMENDED APPLICATIONS		
BROADCAST RATES		
UPI METRIBUZIN 4F Plus Pursuit Plus Herbicide		
SOIL TEXTURE	UPI METRIBUZIN 4F (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 onto 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.		

SOYBEANS: UPI METRIBUZIN 4F Plus Linuron Plus (Lasso or Dual)

UPI METRIBUZIN 4F plus Linuron Plus (Lasso or Dual) Tank mix Application: UPI METRIBUZIN 4F may be applied in combination with linuron 50 DF or 4L and Lasso 4 or Dual 8EC as a pre-emergence application for the control of certain weeds in soybeans. Consult the linuron, Lasso, or Dual labels for specific directions for use, recommendations, restrictions and any additional weeds not specified on this label.

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

UPI METRIBUZIN 4F Plus Linuron Plus (Lasso or Dual)					
Broadcast Rates (0.5% to 3% Organic Matter Only)					
SOIL TEXTURE	UPI METRIBUZIN 4F (Pt/Acre)	Linuron 50 DF (lb/Acre) or 4L (Pt/Acre)	Lasso 4 ¹ (Qt/Acre)	Or	Dual 8EC (Pt/Acre)
COARSE ² (Sandy, loamy sand, sandy loam)	1/4 to 3/8	1/3 to 1/2	3/4 to 1	Or	1 to 1-1/4
MEDIUM (Loam, silt loam, silt, sandy clay, sandy clay loam)	3/8 to 1/2	1/2 to 3/4	1 to 1-1/2	Or	1-1/4 to 1-1/2
FINE (Silty clay, silty clay loam ² , clay, clay loam)	1/2 to 3/4	3/4 to 1-1/2	1-1/4 to 2	Or	1-1/2 to 2
¹ Do not use UPI METRIBUZIN 4F plus linuron (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: 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.

UPI METRIBUZIN 4F herbicide is recommended 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 label for specific directions for use, recommendations, restrictions, and any additional weeds not specified on this label.

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

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

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BROADCAST RATES		
UPI METRIBUZIN 4F (Alone) Pre-emergence Application		
Soil Texture	Organic Matter	UPI METRIBUZIN 4F (Pt/Acre)
Coarse (Light) Soils (Sand ¹ , Loamy Sand, Sandy Loam)	0.5% or Above	1/2 to 3/4 ²

¹ Not recommended for 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.

UPI METRIBUZIN 4F in Combination with Other Herbicides: UPI METRIBUZIN 4F is recommended in a tank mix combination with Treflan as a preplant incorporated application or as a pre-emergence overlay application following a preplant incorporated application of Treflan. UPI METRIBUZIN 4F is also recommended for use as a pre-emergence application in combination with Lasso or Dual.

For Use in Coarse (Light) Soils (Broadcast Rates)				
SOIL TEXTURE	ORGANIC MATTER	COMBINATION PRODUCT/ACRE	PLUS	UPI METRIBUZIN 4F (Pt/Acre)
COARSE (Light) SOILS Sand ¹ , Loamy Sand, Sandy Loam	0.5% or Above	Preplant Incorporated Treflan 4EC 1 pt	Plus	1/2 to 3/4 ²
		Preemergence Plus Lasso 4EC 1-1/2 to 2 qt Dual 8EC 1-1/4 to 1-1/2	Plus Plus	1/2 to 3/4 ² 1/2 to 3/4 ²

¹ Not recommended for 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.

Special Precautions: 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.

FIELD CORN AND SOYBEANS: BURNDOWN WEED CONTROL

UPI METRIBUZIN 4F can be used as part of a herbicide program for burndown of existing vegetation prior to crop emergence in conservation tillage systems. UPI METRIBUZIN 4F 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. UPI METRIBUZIN 4F 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. UPI METRIBUZIN 4F 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 recommended states.

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

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

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UPI METRIBUZIN 4F PLUS TANK MIX PARTNER BURNDOWN RATES – FIELD CORN OR SOYBEANS		
PRODUCT	RATE	DIRECTIONS AND REMARKS
UPI METRIBUZIN 4F + 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.
UPI METRIBUZIN 4F + 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.
UPI METRIBUZIN 4F + 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 UPI METRIBUZIN 4F+ 2,4-D LVE and UPI METRIBUZIN 4F+ 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.
UPI METRIBUZIN 4F + 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 "Weeds Controlled" 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 UPI METRIBUZIN 4F.
UPI METRIBUZIN 4F + 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 UPI METRIBUZIN 4F+2,4-D LVE and UPI METRIBUZIN 4F+ Roundup/Roundup Ultra/Touchdown, paying special attention to planting restrictions with 2,4-D LVE. Use the adjuvant recommendations under the UPI METRIBUZIN 4F+ Roundup/Roundup Ultra/Touchdown tank mix. Do not use crop oil concentrate.

* If applied to field corn in Illinois, Indiana, Kentucky, Michigan, Minnesota, Ohio and Wisconsin, refer to Table "UPI METRIBUZIN 4F Burndown Rates – Field Corn and Soybeans" for correct UPI METRIBUZIN 4F rate based on application timing.

UPI METRIBUZIN 4F PLUS TANK MIX PARTNER BURNDOWN RATES – SOYBEANS ONLY		
PRODUCT	RATE	DIRECTIONS AND REMARKS
UPI METRIBUZIN 4F + 2,4-DB	3 to 8 fl oz/A + 1/8 to 7/32 lb ai/A	Apply preplant on or before soybean emergence. Include nonionic surfactant at 2 quarts per 100 gallons (0.5% v/v) of spray solution.
UPI METRIBUZIN 4F + 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 UPI METRIBUZIN 4F + 2,4-D LVE. Fusion rates of 4, 6 and 8 fl. oz. will control certain grasses up to 2, 4, and 6 inches in height respectively. Include either crop oil concentrate at 1 gallon per 100 gallon (1.0% v/v) or nonionic surfactant at 1 to 2 quarts per 100 gallons (0.25 to 0.5% v/v) of spray solution. Refer to the Fusion label for additional information.
UPI METRIBUZIN 4F + 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 UPI METRIBUZIN 4F + 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.
UPI METRIBUZIN 4F + Select + 2,4-D LVE	3 to 8 oz/A + 3 to 4 fl oz/A + 1/4 to 1 lb ai/A	For this tank mix follow the planting restriction under the Directions and Remarks Section above for UPI METRIBUZIN 4F + 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 to 2 quarts per acre. Refer to the Select label for additional information.

Special Precautions. 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 General Information section of this label for additional information; precautions, and limitations.

Field Corn:

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

Soybeans:

- Apply only 2,4-D low volatile ester formulations which are registered and recommended 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 UPI METRIBUZIN 4F may be harvested for silage or grain 60 days after treatment. Soybean vines or hay treated with UPI METRIBUZIN 4F 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: UPI METRIBUZIN 4F in tank mixtures with the above herbicides will provide burndown control of the weeds listed below.

WEEDS CONTROLLED BY BURNDOWN RATES OF UPI METRIBUZIN 4F 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/ Roundup Ultra/ Touchdown + 2,4-D LVE	Gramoxone Extra	Gramoxone Extra + 2,4-D LVE	2,4-DB		
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.		2 to 3	3 to 4	2 to 6		8		4 to 6			
Johnsongrass, seedling		2 to 3				8		4 to 6			
Panicum, fall	Does Not Control These Species	2 to 3	3	2 to 6		6		4 to 6	Does not control these species		
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			
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 ^b	4 dia ^a	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 ^a		
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		
Lentice, 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 ^a		
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 UPI METRIBUZIN 4F at 4 oz/A for optimum control.

^d Suppression only.

^e Does not control triazine resistant biotypes.

RESIDUAL WEED CONTROL

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UPI METRIBUZIN 4F 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, UPI METRIBUZIN 4F 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	UPI Metribuzin 4F ^b
Detail	Pentagon	Squadron
Dual	Preview	Turbo
Dual II	Prowl	

^b UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F and UPI METRIBUZIN 4F Tank mix Combinations" section of the UPI METRIBUZIN 4F label. Refer to the individual product labels for additional information, precautions, and limitations.

SOYBEANS: SOUTHERN AND SOUTHEASTERN STATES ONLY
Postemergence Directed Spray Applications

UPI METRIBUZIN 4F can be applied in postemergence directed sprays to soybeans for control of certain weeds which escape preplant or pre-emergence herbicide applications and for control of additional flushes of weeds that may occur after soybeans have emerged. Postemergence directed sprays of UPI METRIBUZIN 4F can be applied to soybeans in addition to a pre-emergence or pre-plant application of UPI METRIBUZIN 4F herbicide according to label directions.

Weeds Controlled: UPI METRIBUZIN 4F, 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:

WEEDS CONTROLLED		
1/2 Pt/Acre	1/2 to 1 Pt/Acre	1 Pt/Acre
Florida beggarweed (<i>Desmodium tortuosum</i>) Pigweeds (<i>Amaranthus spp.</i>) Carpetweed (<i>Mollugo verticillata</i>) Cocklebur (<i>Xanthium pensylvanicum</i>) Dayflower (<i>Commelinā spp.</i>) Mexicanweed (<i>Caperonia castaniifolia</i>) Purslane (<i>Portulaca oleracea</i>) Sicklepod (<i>Cassia obtusifolia</i>) Velvetleaf (<i>Abutilon theophrasti</i>) Crabgrass (<i>Digitaria spp.</i>)	Sesbania (<i>Sesbania spp.</i>) Prickly Sida/Teaweed (<i>Sida sponosa</i>)	Ragweed, common (<i>Ambrosia artemisiifolia</i>)
At the rate of 1/2 pt/acre morningglory species, (<i>Ipomoea spp.</i>) horsenettle, (<i>Solanum spp.</i>) Florida pusley, (<i>Richardia scabra</i>) spotted spurge (<i>Euphorbia maculata</i>) and wild poinsettia (<i>Euphorbia heterophylla</i>) are suppressed when UPI METRIBUZIN 4F is applied before these weeds are 3 inches tall. The 1 pt/acre rate will suppress broadleaf signalgrass (<i>Brachiaria platyphylla</i>) up to 1 inch tall.		

UPI METRIBUZIN 4F POSTEMERGENCE DIRECTED SPRAY

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RECOMMENDED APPLICATIONS		
Crop	UPI METRIBUZIN 4F Pt/Acre	REMARKS
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 of 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 UPI METRIBUZIN 4F for a band application see "Banded Application" under the "General 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 or feed or forage within 70 days of last application.
<p>Special Precautions (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 UPI METRIBUZIN 4F postemergence to sensitive soybean varieties. See "Special Precautions" in the front of this label.</p> <p>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.</p>		

POTATOES

UPI METRIBUZIN 4F herbicide is recommended for use in ground, aircraft or specified chemigation equipment as a pre-emergence and/or post-emergence application to potatoes. Early maturing smooth skinned white and all red skinned varieties may be injured with post-emergence applications. The varieties Atlantic, Bellchip, Centennial, Chipbelle, and Shepody are sensitive to UPI METRIBUZIN 4F. Avoid post-emergence applications on these varieties. Pre-emergence 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: UPI METRIBUZIN 4F is recommended for use with ground spray equipment applied as a pre-emergence and/or post-emergence 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: UPI METRIBUZIN 4F may be applied in aerial spray equipment as a pre-emergence and/or post-emergence application at 5 or more gallons per acre.

Chemigation: UPI METRIBUZIN 4F may be applied pre-emergence and/or early post-emergence to potatoes using center pivot, solid set and lateral roll systems. Apply specified dosage in 1/4 to 3/4 inches of water per acre (1/4 to 1/2 inches 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 UPI METRIBUZIN 4F has been flushed from the lines before shutting down the system.

WEEDS CONTROLLED				
UPI METRIBUZIN 4F 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			Grasses	
Carpenterweed, common ¹	Mustard, tansy ¹	Ragweed, common ^{1,2}	Barnyardgrass ³	Johnsongrass, seedling ¹
Cocklebur, common ^{1,2}	Mustard, tumble ¹	Shepherdspurse ¹	Crabgrass, large ¹	Panicum, fall ¹
Jimsonweed ¹	Mustard, wild ¹	Sicklepod ¹	Crabgrass, smooth ¹	Signalgrass, broadleaf ¹
Kochia ³	Pennycress, field ^{1,2}	Smartweed, Pennsylvania ^{1,2}	Foxtail, giant ¹	
Lambsquarters, common ^{1,2}	Pigweed, redroot ^{1,2}	Sunflower, common ³	Foxtail, green ¹	
Mustard, Indian ¹	Pigweed, smooth ^{1,2}	Thistle, Russian ²	Foxtail, yellow ¹	
¹ Weeds controlled with pre-emergence applications. ² Weeds controlled with post-emergence applications. ³ Weeds requiring two applications for control.				

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HARD TO CONTROL WEEDS

Although UPI METRIBUZIN 4F 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		Grasses	
Kochia	Purslane, common	Barnyardgrass	Nutsedge, yellow
Nightshade, hairy	Sunflower, common		

NOTE: Where triazine-resistant weeds are present, UPI METRIBUZIN 4F alone may not provide adequate control.

RECOMMENDED BROADCAST APPLICATIONS

CROP	UPI METRIBUZIN 4F (Pt/Acre)	REMARKS
Potatoes	1/2 to 2	PRE-EMERGENCE: 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 (<i>Brassica spp.</i>) only. On sand soils or sensitive varieties, do not exceed 1 pint/acre.
Potatoes (except early manufacturing smooth, skinned, red skinned, and other specified varieties.)	1/2 to 1	POST-EMERGENCE: 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 pre-emergence and once post-emergence as directed above.* Do not exceed 2 pint total per acre per season.
		IDAHO, OREGON, AND WASHINGTON ONLY: Two post-emergence applications can be made as broadcast sprays over the tops of potato plants if UPI METRIBUZIN 4F is not applied pre-emergence. 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.

*** SPECIAL PRECAUTIONS (Potatoes):**

Do not use UPI METRIBUZIN 4F on potatoes in Kern County, California.
 Do not apply more than a total of 2 pints UPI METRIBUZIN 4F per acre in a single crop season regardless of the method of application. Do not make post-emergence applications prior to rainfall or irrigation on recently cultivated potatoes, or within 3 days after periods of cool, wet cloudy weather or injury may occur.
 Post-emergence 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.
 Post-emergence 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 UPI METRIBUZIN 4F for the first time on a particular variety, always determine crop tolerance before using on a field scale.
 Do not apply UPI METRIBUZIN 4F within 60 days of harvest.
 Do not use air blast sprayers.
 Do not apply to sweet potatoes or yams.
 Do not plant sensitive crops such as onions, lettuce, cole crops and cucurbits during the next growing season following UPI METRIBUZIN 4F application.
 Certain cereal varieties are sensitive to UPI METRIBUZIN 4F (see cereal section of this label for sensitive varieties) and should not be planted during the next growing season unless the following cultural practices occur:

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

TANK MIXES: UPI METRIBUZIN 4F may be tank mixed with the following herbicides: Dual/Dual II, Eptam, Prowl 3.3 EC and Matrix. In addition, three-way tank mix combinations may be used for UPI METRIBUZIN 4F plus Dual/Dual II, Eptam or Prowl 3.3 EC plus Matrix when applied pre-emergence. Refer to each product's label for precautionary statements, restrictions, application information and weeds controlled.

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Dual/Dual II: UPI METRIBUZIN 4F may be applied in a tank mix combination with Dual/Dual II as a pre-emergence broadcast application. Apply UPI METRIBUZIN 4F 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: UPI METRIBUZIN 4F may be tank mixed with Eptam at rates and uses permitted on each product's label.

Prowl 3.3 EC: UPI METRIBUZIN 4F may be applied in tank mix combination with Prowl as a pre-emergence or early post-emergence broadcast application. As a pre-emergence mix, apply UPI METRIBUZIN 4F at 1 to 2 pints per acre and Prowl at 1.2 to 3.6 pints per acre. As an early post-emergence spray, apply UPI METRIBUZIN 4F 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): UPI METRIBUZIN 4F may be applied in tank mix combination with Matrix as a pre-emergence and/or early post-emergence application for improved control on weeds such as Russian thistle, kochia and common lambsquarters. As a pre-emergence mix, apply UPI METRIBUZIN 4F at 1/2 to 1.125 pints per acre and Matrix at 1 to 1-1/2 oz. product per acre. As an early post-emergence spray, apply UPI METRIBUZIN 4F at 1/2 to 1 pint per acre and Matrix at 1 to 1-1/2 oz. product per acre. Use a non-ionic surfactant at a rate of 0.125% v/v (1 pt/100 gallons of water). Apply before the crop exceeds 14 inches in height. Post-emergence applications of Matrix treatments should be made prior to June 30.

ALFALFA AND SAINFOIN

UPI METRIBUZIN 4F herbicide is recommended 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 UPI METRIBUZIN 4F 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).

UPI METRIBUZIN 4F is recommended 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 "General Information" in the front of this label for detailed information on the application of UPI METRIBUZIN 4F. For information on applying UPI METRIBUZIN 4F in fluid or on dry fertilizer refer to the "Application of UPI METRIBUZIN 4F in Fluid Fertilizers" or "Commercial Impregnation and Application of UPI METRIBUZIN 4F on Dry Bulk Fertilizer" under the "General Information" section of this label.

SPECIAL PRECAUTIONS: Use UPI METRIBUZIN 4F only on established alfalfa and sainfoin. Do not apply UPI METRIBUZIN 4F 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.

For best weed control, apply UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F.

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 UPI METRIBUZIN 4F is applied.

ALFALFA and SAINFOIN (All Areas Except California) RECOMMENDED BROADCAST APPLICATIONS		
CROP	UPI METRIBUZIN 4F (Pt/Acre)	REMARKS
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 UPI METRIBUZIN 4F per acre.

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FOR USE ON MIXED STANDS OF ALFALFA AND GRASSES

Rates of 1 to 1-1/2 pt of UPI METRIBUZIN 4F 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.

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

WEEDS CONTROLLED - ALFALFA and SAINFOIN (Except California)					
1/2 to 3/4 Pt UPI METRIBUZIN 4F/Acre	3/4 to 1 Pt UPI METRIBUZIN 4F/Acre	1 to 2 Pt UPI METRIBUZIN 4F/Acre			2 Pt UPI METRIBUZIN 4F/Acre
Chickweed, Common (<i>Stellaria media</i>)	Cheat (<i>Bromus secalinus</i>) Deadnettle, Purple (<i>Lamium purpureum</i>) Downy brome (<i>Bromus tectorum</i>) Japanese brome (<i>Bromus japonicus</i>) Pennycress (<i>Thlaspi arvense</i>) Rescuegrass (<i>Bromus catharticus</i>) Shepherdspurse (<i>Capsella bursa pastoris</i>)	Broadleaves Fleabane, Rough (<i>Erigeron strigosus</i>) Fixweed (<i>Descurainia sophia</i>) Henbit (<i>Lamium amplexicaule</i>) Kochia (<i>Kochia scoparia</i>) Lambsquarters, Common (<i>Chenopodium album</i>) Marestail (Horseweed) (<i>Hippuris vulgaris</i>) Meadow Salsify (<i>Tragopogon pratensis</i>) Mustard, Blue (<i>Chorispora tenella</i>) Mustard, Jim Hill (tumble) (<i>Sisymbrium altissimum</i>)	Mustard, Tansy (<i>Descurainia pinnaia</i>) Pepperweed (<i>Lepidium virginicum</i>) Pigweed, Redroot (<i>Amaranthus retroflexus</i>) Prickly Lettuce (<i>Lactuca serriola</i>) White Cockle (<i>Melandrium album</i>) Wild Buckwheat (<i>Polygonum convolvulus</i>) Yellow Rocket (<i>Barbarea vulgaris</i>)	Grasses Foxtail, Green (<i>Setaria viridis</i>) Little Barley (<i>Hordeum pusillum</i>) Smooth Brome (<i>Bromus inermis</i>) Wild Oats (<i>Avena fatua</i>)	Broadleaves Chickweed, Mouseear (<i>Cerastium vulgatum</i>) Dandelion (<i>Taraxacum officinale</i>) Ragweed, Common (<i>Ambrosia artemisiifolia</i>) Grasses Barnyardgrass (<i>Echinochloa crus-galli</i>) Bluegrass (<i>Poa annua</i>) Foxtail Barley (<i>Hordeum jubatum</i>)
Weeds Partially Controlled: At the rate of 2 pt/acre UPI METRIBUZIN 4F may be used to reduce the competition from curly dock (<i>Rumex crispus</i>). At 1 to 2 pt/acre, UPI METRIBUZIN 4F may be used to reduce the competition of German Moss or knawel (<i>Scleanthus annus</i>).					

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

UPI METRIBUZIN 4F is recommended for use in aerial or ground spray equipment as a broadcast surface application to dormant established crops of alfalfa and sainfoin.

APPLICATION: UPI METRIBUZIN 4F is recommended for use 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 UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F in fluid fertilizer solutions to alfalfa, refer to the appropriate section of this label.

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

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

RECOMMENDED BROADCAST APPLICATIONS		
CROP	UPI METRIBUZIN 4F pt/Acre	REMARKS
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 UPI METRIBUZIN 4F 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, UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F 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 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: UPI METRIBUZIN 4F 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: UPI METRIBUZIN 4F plus Gramoxone Extra herbicide tank mix application is recommended for use, 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 UPI METRIBUZIN 4F/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: UPI METRIBUZIN 4F 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.

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WEEDS CONTROLLED			
1/2 to 3/4 Pt UPI METRIBUZIN 4F/Acre	3/4 to 1-1/2 Pt UPI METRIBUZIN 4F/Acre	1 TO 1-1/2 Pt UPI METRIBUZIN 4F/Acre	
Common Chickweed	Bluegrass Cheat Downy brome Field pennycress Henbit Japanese brome Rescuegrass Shepherdspurse	Blue Mustard Common lambsquarters Fixweed Green foxtail Groundsel Jim Hill mustard Kochia Little barley Marestail (Horseweed) Meadow salsify Pepperweed	Prickly lettuce Redroot pigweed Rough fleabane Ryegrass Smooth brome Sow thistle Tansy mustard White cockle Wild oats Wild buckwheat Yellow rocket

RECOMMENDED APPLICATIONS	
Dosage/Acre	REMARKS
UPI METRIBUZIN 4F 1/2 to 1-1/2 Pt Plus Gramoxone Extra 1-1/2 to 2-1/2 Pt	Apply specified dosages of UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F per acre on loamy sand soils. Reduced weed control may occur when extended dry conditions follow application of UPI METRIBUZIN 4F. Crop injury may occur if alfalfa is under stress conditions such as diseases, insect infestations, drought or winter injury or if UPI METRIBUZIN 4F is applied to alfalfa earlier than 12 months after seeding.

FOR USE ON MIXED STANDS OF ALFALFA AND GRASSES: Rates of 1 to 1-1/2 pt of UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F on soils with calcareous surface, soils with high levels of lime or sodium, and with 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 UPI METRIBUZIN 4F Impregnated on Dry Fertilizer Only

UPI METRIBUZIN 4F 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)

Aerial application is prohibited

UPI METRIBUZIN 4F is recommended for use in ground spray equipment or sprinkler irrigation (center pivot, lateral move, or solid set) systems as a single pre-emergence broadcast application or as a split application consisting of a pre-emergence broadcast application followed by a post harvest broadcast application.

Refer to the "General Information" section of this label for directions.

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UPI METRIBUZIN 4F, applied to established asparagus according to directions, will effectively control the following weeds:

WEEDS CONTROLLED		
Broadleaves		Grasses
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 pennsylvanicum</i>) Sorrel, Red (<i>Rumex acetosella</i>) Velvetleaf (<i>Abutilon theophrasti</i>)	Crabgrass (<i>Digitaria spp.</i>) Foxtails (<i>Setaria spp.</i>) Sandbur, Field (<i>Cenchrus pauciflorus</i>)

RECOMMENDED BROADCAST APPLICATIONS		
CROP	UPI METRIBUZIN 4F pt/Acre	REMARKS
Asparagus	2 to 4	PRE-EMERGENCE APPLICATION ONLY: Make a single surface application in early Spring before asparagus spears or ferns emerge. If the field is to be disked, apply UPI METRIBUZIN 4F 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 with 14 days of harvest.
Asparagus	1 to 2 preemergence plus 2 to 3 post harvest	SPLIT APPLICATION PRE-EMERGENCE AND POST HARVEST Pre-emergence 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 UPI METRIBUZIN 4F applied in one crop season may not exceed 4 pt. per acre. SPECIAL PRECAUTIONS (Asparagus): Do not use on newly seeded asparagus or on young plants during the first growing season after setting crowns. DO NOT APPLY POST HARVEST APPLICATIONS UNTIL AFTER THE LAST HARVEST OF SPEARS.		

CARROTS

Special Conditions of Sale Provision for 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. Buyer is advised that UPI makes no assurances regarding satisfaction with the product and all risks of crop injury or product performance are assumed by the Buyer.

Apply UPI METRIBUZIN 4F herbicide with ground equipment as specified below under "Recommended Applications". For effective control of broadleaf weeds with post-emergence applications, apply UPI METRIBUZIN 4F 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 post-emergence applications of UPI METRIBUZIN 4F. 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 "General Information" section on the front of this label.

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

UPI METRIBUZIN 4F applied to carrots according to directions will effectively control the following weeds:

WEEDS CONTROLLED	
Carpetweed (<i>Mullugo verticillata</i>) Galinsoga (<i>Galinsoga parviflora</i>) Horseweed (<i>Conyza canadensis</i>) Lambsquarters, Common (<i>Chenopodium album</i>) Mustard, Wild (<i>Sinapis arvensis</i>)	Pigweed, Redroot (<i>Amaranthus retroflexus</i>) Pigweed, Smooth (<i>Amaranthus hybridus</i>) Prickly Lettuce (<i>Lactuca serriola</i>) Shepherdspurse (<i>Capsella bursa-pastoris</i>) Pineappleweed (<i>Matricaria matricarioides</i>)

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RECOMMENDED APPLICATIONS		
CROP	UPI METRIBUZIN 4F pt/Acre	REMARKS
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.
<p>IMPORTANT: The total amount of UPI METRIBUZIN 4F applied in one crop season may not exceed 1 pt per acre.</p> <p>SPECIAL PRECAUTIONS: 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 UPI METRIBUZIN 4F 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.</p> <p>Crop injury or delayed maturity may result from applications of UPI METRIBUZIN 4F if carrots are growing under stress conditions such as periods of drought or cool, wet and cloudy weather preceding application.</p> <p>Following an application of UPI METRIBUZIN 4F, chlorosis (yellowing) and burning of the leaf tissue may occur.</p> <p>For newly introduced varieties of carrots with unknown tolerance to UPI METRIBUZIN 4F, treat only a small area to determine if UPI METRIBUZIN 4F can be used without injury to the crop.</p>		

FIELD CORN

Postemergence Application

UPI METRIBUZIN 4F is recommended for control of selected broadleaf weeds when applied as a tank mix combination with certain broadleaf herbicides presently registered and recommended for postemergence use in field corn. Herbicides which may be tank mixed with UPI METRIBUZIN 4F include:

2,4-D	Buctril + atrazine (Premix)	Resource
Atrazine	Clarity	Scorpion III
Banvel	Laddok S-12	Tough
Basagran	Marksman	
Buctril/Buctril Gel	Pursuit*	

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

APPLICATION: UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F plus atrazine, Basagran, Laddok S-12, Buctril, Buctril + atrazine, Pursuit, Resource, Tough, or 2,4-D amine formulations, use flat nozzles spaced a maximum of 20 inches apart. Best results are achieved using a minimum of spray volume of 10 gallons per acre and spray pressure from 20 to 24 psi.

For UPI METRIBUZIN 4F 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 and recommendations, 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

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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 recommendations.

POST DIRECTED APPLICATION

UPI METRIBUZIN 4F in tank mix combinations with Banvel, 2,4-D, Buctril or Scorpion III 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 recommendations, refer to the appropriate tank mix partner's label.

ADJUVANTS

The adjuvant types listed below may be utilized with certain UPI METRIBUZIN 4F tank mix combinations. Consult the tank mix recommendations section for the appropriate adjuvant and rate. Use of non-recommended adjuvant 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 (urca 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 UPI METRIBUZIN 4F tank mixtures as severe leaf burn, crop stunting, and/or stand reduction may occur.

RAINFASTNESS

UPI METRIBUZIN 4F will not reduce rainfastness of the recommended 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 UPI METRIBUZIN 4F 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.

SPECIAL PRECAUTIONS

- 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 (5-1/3 ounces UPI METRIBUZIN 4F) 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 UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F tank mixtures listed below can be utilized for control of certain annual broadleaf weeds.

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UPI METRIBUZIN 4F POSTEMERGENCE BROADCAST RECOMMENDATIONS		
PRODUCT	RATE	DIRECTIONS AND REMARKS*
UPI METRIBUZIN 4F + 2,4-D Amine or 2,4-D LVE	3 fl oz/A + 1/2 to 1 pt/A ¹ or 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.
UPI METRIBUZIN 4F + 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 recommendations and restrictions pertaining to atrazine applications.
UPI METRIBUZIN 4F + 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 growth 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.
UPI METRIBUZIN 4F + 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.
UPI METRIBUZIN 4F + 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.
UPI METRIBUZIN 4F + 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.
UPI METRIBUZIN 4F + Laddok S-12	3 fl oz/A + 1.33 to 1.66 pt/A	Apply as a broadcast spray after corn emergence until the corn is 12 inches tall. Adjuvants such as UAN (0.5 to 1 gal/A) may increase weed control. Laddok S-12 contains atrazine, and is a restricted use product. Follow all state and federal label recommendations and restrictions pertaining to atrazine.
UPI METRIBUZIN 4F + 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 crop 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 recommendations and restrictions pertaining to atrazine.
UPI METRIBUZIN 4F + 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).
UPI METRIBUZIN 4F + Resource	3 fl oz/A + 4 to 6 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) or aluminum sulfate (2.5 lbs/A) may increase weed control.
UPI METRIBUZIN 4F + Tough	3 fl oz/A + 1 to 2 pt/A	Apply as a broadcast spray after corn emergence but before corn height exceed 30 inches and the crop canopy closes the row. A non-ionic surfactant (1 qt/100 gal. of spray solution) may be added to improve weed control. Use the higher rates of Tough as weeds approach to maximum height listed or are found in high density. Tough may improve control on triazine/ALS resistant weeds.

* Consult the appropriate tank mix partner's label for additional recommendations or restrictions. The most restrictive labeling applies to tank mixes with UPI METRIBUZIN 4F.

¹ Application rate is based on, but not restricted to, 4 pounds active ingredient per gallon of 2,4-D.

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UPI METRIBUZIN 4F POST DIRECTED RECOMMENDATIONS		
PRODUCT	RATE	DIRECTIONS AND REMARKS*
UPI METRIBUZIN 4F + 2,4-D Amine or 2,4-D LVE	3 to 4.5 fl oz/A + 3/4 to 1-1/2 pt/A ¹ or 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.
UPI METRIBUZIN 4F + 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.
UPI METRIBUZIN 4F + 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.
UPI METRIBUZIN 4F + Scorpion III	3 to 4.5 fl. oz./A + 4 oz./A	For corn 8 to 24 inches tall, apply as a directed spray with drop nozzles. Include non-ionic surfactant (1 qt./100 gal.) plus UAN (2.5 gal./100 gal.) for optimum weed control.
* Consult the appropriate tank mix partner's label for additional recommendations or restrictions. The most restrictive labeling applies to tank mixes with UPI METRIBUZIN 4F.		
¹ Application rate is based on, but not restricted to, 4 pounds active ingredient per gallon of 2,4-D.		

WEEDS CONTROLLED - POSTEMERGENCE BROADCAST APPLICATION										
These tank mixtures with UPI METRIBUZIN 4F will control the following annual weeds up to the maximum heights listed:										
COMMON WEED NAME	UPI METRIBUZIN 4F+									
	Atrazine	Banvel/ Clarity	Basagran	Buctril/ Buctril + Atrazine	2,4-D	Marksman	Pursuit	Laddok S-12	Resource	Tough
	MAXIMUM WEED HEIGHT IN INCHES*									
Amaranth, Palmer	4 ^a	4	2 ^a	4 ^a	4	4	8 ^b	6	4	4
Buckwheat, wild	3	3	3	3	2	3	2	3	4	
Buffalobur	4	4		4		4	1			
Burcucumber		4		4	2	4				4
Carpetweed	2	2	2	2	2	2		2	3	4
Cocklebur, common	8	8	8	8	8	8	8 ^b	8	3	6
Eclipta	3	3	3	3	3	3		3		3
Henbit	3	3	2	2	2	4	3	3		4
Horseweed/marestail	3	4	1	1	3	6		2	3	
Jimsonweed	5	5	6	5	5	5	5	6	3	5
Knotweed	6	6	6	4	2	6	4	6		4
Kochia	2 ^a	2	1 ^a	2 ^a	2 ^a	2	2	2 ^a		4
Ladysthumb	6	6	6	6	4	6	4	6	4	6
Lambsquarters, common	6 ^a	6	1	6	6	6	4	5	4	4
Lettuce, prickly	4	4		3	4	5		3		
Mallow, Venice	2	2	2	2	2	2	2	4		
Morningglory, entire leaf	3	3	1	3	3	3	2	2		
Morningglory, ivyleaf	3	3	1	3	3	3	2	2		
Morningglory, pitted	3	3	1	3	3	3	2	2		
Morningglory, tall	3	3	1	3	3	3	2	2		
Mustard, tansy	4	4	4	4	4	4	4	4		
Mustard, wild	4	4	4	4	4	4	4	4		4
Nightshade, black	6	6		6	1	6	3	1		4
Nightshade, eastern black	6	6		6	1	6	3	1		4
Pigweed, redroot	6 ^a	6	2 ^a	6 ^a	6	6	8 ^b	6 ^a	4	6
Pigweed, smooth	6 ^a	6	2 ^a	6 ^a	6	6	8 ^b	6 ^a	4	6
Poorjoe	3	3	3	3	3	3	3	3		
Purslane, common	1	3				4	1			3

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Pusley, Florida	3	3	3	3	3	3	3	3	3	
Ragweed, common	5	5	3	5	5	6	3	4	3	
Ragweed, giant	4	5	2	4	3	6	4	4		
Sicklepod	3	3	3	3	3	3	3	3		2
Sida, prickly	1	1	3	1	1	2	1	2	2	1
Smartweed, Pennsylvania	6	6	6	6	4	6	4	6	4	
Sunflower, common	6	6	6	6	6	6	5	6		5
Thistle, Russian	1	3		3	1	3	1	1		3
Velvetleaf	6 ^a	6	6	6	4	6	5	6	6	
Waterhemp, spp.	5 ^a	5	2 ^a	5 ^a	5	5	4 ^b	2 ^a	4	5

* When weeds are approaching the maximum height listed or found in high densities, use the higher rate of UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F will control the following annual weeds up to the maximum weed heights listed:

COMMON WEED NAME	UPI METRIBUZIN 4F+			
	2,4-D	Banvel	Buctril	Scorpion III
	MAXIMUM WEED HEIGHT IN INCHES *			
Amaranth, Palmer	12	12	6	8
Cocklebur, common	12	12	12	15
Jimsonweed	12	10	10	8
Ladysthumb	6	8	6	6
Lambsquarters, common	12	12	10	12
Morningglory, entire leaf	18	18	6	12
Morningglory, ivyleaf	18	18	6	12
Morningglory, pitted	18	18	6	12
Morningglory, tall	18	18	6	12
Nightshade, black	10	8	8	6
Nightshade, eastern black	10	8	8	6
Pigweed, redroot	12	12	6	8
Pigweed, smooth	12	12	6	8
Ragweed, common	8	8	8	10
Ragweed, giant	12	12	8	15
Smartweed, Pennsylvania	6	8	6	6
Sunflower, common	12	12	12	12
Velvetleaf	10	8	8	8
Waterhemp, tall	12	12	6	8

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

PERENNIAL WEED SUPPRESSION

The following UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F, Banvel, Buctril, Buctril + atrazine, Clarity, Marksman, 2,4-D LVE or Pursuit recommended for these tank mixtures.

COMMON WEED NAME	UPI METRIBUZIN 4F				
	Banvel/Clarity	Buctril/Buctril + atrazine	2,4-D LVE	Marksman	Pursuit
Bindweed, field	x		x	x	
Dandelion, common	x		x	x	
Dock, curly	x		x	x	
Smartweed, swamp	x		x	x	
Thistle, Canada	x	x	x	x	x

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FIELD CORN: PREPLANT AND PRE-EMERGENCE
(Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, Ohio, South Dakota and Wisconsin)

UPI METRIBUZIN 4F is recommended 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 and recommended for use in field corn. UPI METRIBUZIN 4F can be tank-mixed with recommended rates of the following herbicides:

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

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

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

Special precautions:

- Do not apply more than 8 ounces UPI METRIBUZIN 4F (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.
- UPI METRIBUZIN 4F may only be used in hybrid seed corn production fields if both inbred parents are known to be tolerant to UPI METRIBUZIN 4F.
- Not recommended for 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 UPI METRIBUZIN 4F 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*: UPI METRIBUZIN 4F will aid in the residual pre-emergence control of the following weed species when tank mixed with other registered grass and/or broadleaf corn herbicides:		
Horseweed/marestail	Pigweed, spp.	Sunflower
Ladysthumb	Ragweed, common	Velvetleaf
Lambsquarters, common	Smartweed, Pennsylvania	Waterhemp, tall
* For control of emerged weeds refer to the "Burndown Weed Control" section of the UPI METRIBUZIN 4F label.		

UPI METRIBUZIN 4F FIELD CORN RATE RECOMMENDATIONS				
STATES		APPLICATION TIMING	UPI METRIBUZIN 4F FL OZ/A	REMARKS
Iowa Kansas Missouri	Nebraska South Dakota	Preplant 0 to 30 days	3 to 8	Apply as a broadcast spray prior to corn emergence from the soil. Do not apply UPI METRIBUZIN 4F on coarse textured soils with less than 1.5% organic matter.
		Preemergence		
Illinois Indiana Kentucky Michigan	Minnesota Ohio Wisconsin	Preplant 10 to 30 days	3 to 8	Do not apply more than 6 fl oz UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F.
		Preplant 0 to 9 days	3 to 6	
		Preemergence		

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

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BURNDOWN WEED CONTROL – FIELD CORN

See Page 28

GARBANZO BEANS (Chickpeas)

California, Idaho, Oregon, and Washington

Special Conditions of Sale for 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. Buyer is advised that UPI makes no assurances regarding satisfaction with the product and that all risks of crop injury or product performance are assumed by the Buyer.

UPI METRIBUZIN 4F herbicide is recommended as a pre-emergence application for the suppression of certain broadleaf weeds in garbanzo beans.

WEEDS SUPPRESSED*	
Common Chickweed	Common Lambsquarters
Dog Fennel (Mayweed)	Shepherdspurse
Field Pennycress	Wild Mustard
Henbit	Pigweed

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

RECOMMENDED APPLICATIONS	
UPI METRIBUZIN 4F Pt/A	REMARKS
1/2 to 3/4	<p>Applied 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 UPI METRIBUZIN 4F 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.</p> <p>Use on coarse-textured soils, sandy soils or any soil with less than 1.5% organic matter will likely cause crop injury.</p> <p>Use the higher rate on fine textured soils (high in clay or organic matter) and in field with a history of high weed populations.</p>

SPECIAL 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 UPI METRIBUZIN 4F, or crop injury may occur.

Do not use on clay knobs or poorly covered subsoils.

Do not apply pre-emergence on shallow seedlings less than 2 inches deep.

Do not graze or feed treated vines to livestock within 40 days after application.

Maintain continuous spray tank agitation to keep material in suspension. Avoid overlapping of spray swaths and shut off spray blooms 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 UPI METRIBUZIN 4F, determine crop tolerance prior to adoption as a field scale practice to prevent possible injury.

LENTILS AND PEAS

(Idaho, Oregon, Washington, Montana, and North Dakota)

UPI METRIBUZIN 4F herbicide is recommended as a pre-emergence and post-emergence application for the suppression of certain broadleaf weeds in lentils and peas.

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

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

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PRE-EMERGENCE APPLICATION: Make a single pre-emergence application of UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F before or after planting. Thorough incorporation, either by rainfall or by mechanical means, is essential for weed suppression. Under dry conditions, incorporate UPI METRIBUZIN 4F 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.

UPI METRIBUZIN 4F 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.

POST-EMERGENCE APPLICATION: One post-emergence application may be made per season. Use 1/4 to 1/2 pint of UPI METRIBUZIN 4F per acre on **lentils** and **spring peas**. On **winter peas**, use 3/8 to 1/2 pint of UPI METRIBUZIN 4F per acre. For suppression of dog fennel, use 1/2 pint UPI METRIBUZIN 4F 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 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 post-emergence application is made following a previous post-emergence or post plant incorporated UPI METRIBUZIN 4F application.

Do not apply over very moist soils or wet crop foliage. Do not apply post-emergence 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.

SPECIAL PRECAUTIONS (all applications): Do not apply more than 1 pint of UPI METRIBUZIN 4F per acre per year. 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.

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 (pre-emergence 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.

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 UPI METRIBUZIN 4F, 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
Special Precautions**

For aerial and chemigation application methods on sugarcane the maximum application rate is 4 pts. UPI METRIBUZIN 4F per 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.

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SUGARCANE

(Hawaii only)

UPI METRIBUZIN 4F, a selective herbicide, is effective as a pre-emergence 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: UPI METRIBUZIN 4F should be mixed by filling the spray tank half full of clean water. Then add the recommended amount of UPI METRIBUZIN 4F 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 ensure a uniform spray mixture.

Aerial Application: UPI METRIBUZIN 4F is recommended for use in aerial spray equipment as a pre-emergence or postemergence application to irrigated sugarcane. Aerial spray equipment should be calibrated to apply the proper amount of UPI METRIBUZIN 4F in 7 to 10 gallons of spray mixture per acre.

UPI METRIBUZIN 4F applied pre-emergence 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	Grasses
Amaranth, Spiny (<i>Amaranthus spinosus</i>)	Crabgrass (<i>Digitaria spp.</i>)
Euphorbia, Wild (<i>Euphorbia spp.</i>)	Guineagrass (<i>Panicum maximum</i>)
Fireweed (<i>Erechtites hieracifolius</i>)	Plushgrass (<i>Chloris radiata</i>)
Floras Paintbrush (<i>Emilia sonchifolia</i>)	Ricegrass (<i>Oryzopsis hymenoides</i>)
Spurge, Garden (<i>Euphorbia hirta</i>)	Wiregrass (<i>Eleusine indica</i>)
Spurge, Graceful (<i>Euphorbia glomerifera</i>)	

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

WEEDS CONTROLLED IN NON-IRRIGATED SUGARCANE ONLY	
Broadleaves	
Ageratum (<i>Ageratum conyzoides</i>)	
Richardia (<i>Richardia brasiliensis</i>)	
Tarweed (<i>Cuphea carthagenensis</i>)	

RECOMMENDED BROADCAST APPLICATIONS - SUGARCANE - HAWAII ONLY	
UPI METRIBUZIN 4F (P/A)	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.
OR	
4 to 8 (1/2 to 1 gal)	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 UPI METRIBUZIN 4F (8 lb active ingredient) per acre per crop cycle regardless of the method of application. The last application may be made up to 17 months of harvest.	
SPECIAL PRECAUTIONS: Do not use treated foliage for feed or forage.	

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SUGARCANE (Louisiana and Texas Only)

Pre-emergence and postemergence applications of UPI METRIBUZIN 4F with aerial or ground spray equipment are recommended for control of the following weeds in sugarcane in Louisiana and Texas.

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

RECOMMENDED APPLICATIONS - SUGARCANE - LOUISIANA AND TEXAS ONLY	
UPI METRIBUZIN 4F 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 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.

SPECIAL PRECAUTIONS (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. UPI METRIBUZIN 4F per 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 UPI METRIBUZIN 4F are recommended for the control of the following weeds in sugarcane in Florida

Broadleaves	Grasses
Amaranth, Spiny (seedling) (<i>Amaranthus spinosus</i>) Butterweed (Cressleaf groundsel) (<i>Senecio glabellus</i>) Cudweed (<i>Gnaphalium spp.</i>) Purslane (<i>Portulaca oleracea</i>)	* Crabgrass, large (<i>Digitaria sanguinalis</i>) Foxtail, bristlegrass (<i>Setaria magna</i>) Goosegrass (<i>Eleusine indica</i>) Panicum, broadleaf (<i>Panicum adspersum</i>) Signalgrass, Broadleaf (<i>Brachiaria platyphylla</i>)

*Best control is achieved when applications are made when this weed is less than 4" in diameter.

RECOMMENDED APPLICATIONS - SUGARCANE - FLORIDA ONLY	
UPI METRIBUZIN 4F (Pt/Acre)	REMARKS
2 to 4	GROUND APPLICATION: UPI METRIBUZIN 4F 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 sugarcane 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.

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UPI METRIBUZIN 4F PLUS Atrazine TANK MIX: UPI METRIBUZIN 4F may be used with atrazine as a pre-emergence or postemergence (before row closing) application to sugarcane. Rates for UPI METRIBUZIN 4F 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.

SPECIAL PRECAUTIONS (Florida Only): Do not use more than 4 pt per acre in a single growing season. Do not use on sand soils. Spray contact with sugarcane foliage may result in minor leaf margin chlorosis and/or necrosis.

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.

TOMATOES

Aerial application is prohibited.

Apply UPI METRIBUZIN 4F herbicide with ground equipment to seeded and transplanted tomatoes as specified below under "Recommended Applications".

For effective control of grasses and broadleaf weeds with post-emergence applications, apply UPI METRIBUZIN 4F before weeds are 1 inch tall. Thorough spray coverage on weed foliage is essential for adequate control with post-emergence applications.

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

For specific application information see the "General Information" section in the front of this label.

WEEDS CONTROLLED - PREPLANT INCORPORATED APPLICATIONS TRANSPLANT TOMATOES ONLY	
Broadcast Sprays - 1/2 to 1 Pt UPI METRIBUZIN 4F/Acre	
Broadleaves	Grasses
Galinsoga (<i>Galinsoga spp.</i>) Lambsquarters (<i>Chenopodium album</i>) *Pigweed, Redroot (<i>Amaranthus retroflexus</i>) *Purslane, Common (<i>Portulaca oleracea</i>)	*Goosegrass (<i>Eleusine indica</i>)
Preplant incorporated applications applied as directed will suppress foxtails, panicums, and barnyardgrass. UPI METRIBUZIN 4F/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.	
WEEDS CONTROLLED - POST-EMERGENCE APPLICATIONS ESTABLISHED TOMATOES	
For effective control of weeds with post-emergence applications, apply UPI METRIBUZIN 4F before weeds are 1 inch tall.	
Broadcast Sprays - 1/2 to 1 Pt UPI METRIBUZIN 4F/Acre	Directed Sprays - 1 to 2 Pt UPI METRIBUZIN 4F/Acre
Broadleaves	Grasses
Carpetweed (<i>Mollugo verticillata</i>) Fumitory (<i>Fumaria officinalis</i>) Galinsoga (<i>Galinsoga spp.</i>) *Jimsonweed (<i>Datura stramonium</i>) *Ladysthumb (<i>Polygonum persicaria</i>) Lambsquarters (<i>Chenopodium album</i>) Mustard, Wild (<i>Brassica kaber</i>) Pigweeds (<i>Amaranthus spp.</i>) Purslane (<i>Portulaca oleracea</i>) *Ragweed, Common (<i>Ambrosia artemisiifolia</i>) *Smartweed, Pennsylvania (<i>Polygonum pensylvanicum</i>) Toadflax (<i>Linaria spp.</i>) *Velvetleaf (<i>Abutilon theophrasti</i>)	*Foxtail, Yellow (<i>Setaria glauca</i>) Goosegrass (<i>Eleusine indica</i>) Plus Weeds Listed Under Broadcast Sprays
* For optimum control of these weeds, use the highest rate recommended on the label for the type of application to be made. Repeat post-emergence applications may be needed for best control. Post-emergence applications as directed on this label will suppress barnyardgrass and crabgrass when these weeds are less than 1 inch tall.	

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RECOMMENDED BROADCAST APPLICATIONS	
UPI METRIBUZIN 4F Pt/Acre*	REMARKS
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 soil 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 "Special Precautions" 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 is recommended for use 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 "Special Precautions" below). When banding, see the appropriate section in the front of this label.
<p>*Use the higher rate in fields with a history of severe weed pressure and for maximum residual weed control.</p> <p>SPECIAL PRECAUTIONS (Tomatoes): Do not apply more than a total of 2 pints UPI METRIBUZIN 4F per crop season.</p> <p>Do not apply the total amount of 2 pt. UPI METRIBUZIN 4F within a time span of less than 35 days, except in the case of directed sprays.</p> <p>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.</p> <p>Do not use hot caps on tomatoes within 7 days before or at any time after application of UPI METRIBUZIN 4F. Do not treat seeded tomatoes until plants have reached the 5 to 6 leaf stage or severe crop injury may occur.</p> <p>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.</p> <p>For newly introduced tomato varieties with unknown tolerance to UPI METRIBUZIN 4F, treat only a small area to determine if UPI METRIBUZIN 4F can be used without injury to the crop.</p> <p>DO NOT USE UPI METRIBUZIN 4F ON TOMATOES IN KERN COUNTY, CALIFORNIA.</p>	

CEREALS

(Spring and Winter Barley and Winter Wheat)

UPI METRIBUZIN 4F herbicide is recommended for control or suppression of certain grasses and broadleaf weeds when applied post-emergence to spring and winter barley or winter wheat. UPI METRIBUZIN 4F alone and several tank mixture treatments are recommended for use 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 "General 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 in barley and winter wheat for additional use directions, rates, weeds controlled, and restrictions.

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Application: UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F through any type of irrigation equipment. Apply UPI METRIBUZIN 4F when the crop is healthy and actively growing. UPI METRIBUZIN 4F 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 UPI METRIBUZIN 4F (8 ounces active ingredient) per acre per year. On irrigated cereals, do not apply more than 0.5 inches 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 UPI METRIBUZIN 4F 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: UPI METRIBUZIN 4F may be tank mixed with Ally, Amber, Finese, Glean FC, Harmony Extra, 2,4-D, MCPA, Igran, Banvel/Banyel SGF, Bronate or Bucril herbicides. A non-ionic surfactant containing at least 80% active ingredient may be used in UPI METRIBUZIN 4F tank mixes with sulfonylurea herbicides (Ally, Amber, Finese, Glean FC and Harmony Extra). Do not use a crop oil concentrate or any adjuvant containing vegetable or petroleum oils with any UPI METRIBUZIN 4F mix as crop injury may result. Additional pesticides may also be tank mixed with UPI METRIBUZIN 4F unless specifically prohibited on the mix products' labels. 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 cereals 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 UPI METRIBUZIN 4F 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: Cereal injury – Crop injury may occur if UPI METRIBUZIN 4F is applied:

1. 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.
2. In combination with fluid fertilizer especially with the addition of surfactant.
3. Prior to the growth stage specified on this label.
4. To soils high in lime or sodium, a pH greater than 7.7, calcareous, gravelly, thinly covered or exposed subsoil areas.
5. To fields where cereal seeds have been planted less than 1 inch deep.
6. To a non-winter hardy wheat or barley variety.
7. To a sensitive wheat or barley variety as listed below.
8. To frozen soil or crop still in winter dormancy.

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

APPLICATION RECOMMENDATIONS

UPI METRIBUZIN 4F alone or in a tank mix with labeled broadleaf herbicides may be applied by aerial or ground spray equipment as a broadcast post-emergence spray.

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RECOMMENDED POSTEMERGENCE BROADCAST APPLICATIONS OF UPI METRIBUZIN 4F				
Crop Growth Stage	Soil Texture	UPI METRIBUZIN 4F Rate (fl oz/A)		REMARKS
		% ORGANIC MATTER		
		0.75 to 2.0	Over 2.0	
2 Leaf To 2 Tillers	Coarse	1.5 to 3	1.5 to 4.5	Use these rates on crops with secondary roots smaller than 1 inch. For dryland winter wheat (nonirrigated), apply the highest recommended rate to achieve maximum weed suppression/control.
	Medium	1.5 to 4.5	3 to 4.5	
	Fine	3 to 4.5	3 to 6	
3 Tiller to 4 Tillers	Coarse	4.5 to 6	6 to 7.5	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.
	Medium	6 to 7.5	7.5 to 9	
	Fine	7.5 to 9	7.5 to 9	
Over 4 Tillers	Coarse	6 to 9	7.5 to 12	For dryland winter wheat (nonirrigated), apply the highest recommended 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.
	Medium	6 to 12	7.5 to 12	
	Fine	7.5 to 12	12 to 16	

WHEAT AND BARLEY VARIETAL TOLERANCE*

Wheat and barley varieties vary in their tolerance to UPI METRIBUZIN 4F. Varieties below are tolerant to and are recommended for use with UPI METRIBUZIN 4F:

Winter Wheat: Abe, 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, 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, Tiber, Tomahawk, Traveler, Tres, Tyee, Tyler, Verne, Victory, Wakefield, Wanser, Weston, Winalta, Wrangler.

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

The following cereal varieties are sensitive to UPI METRIBUZIN 4F and are not recommended for use:

Winter Wheat: AT 90W, AT 91W, Arapaho, Baker Seed 33, Century, Cimarron, Coker 833, Coker 916, Coker 983, Coker 9024, Coker 9105, Coker 9323, Choker 9474, Choker 9835, Choker 9766, Choker 9877, 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, 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 UPI representative or herbicide expert for a variety recommendation prior to treatment or treat a small strip of the unlisted variety with the recommended UPI METRIBUZIN 4F rate to ascertain crop tolerance before treating an entire field.

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

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Used at recommended rates, UPI METRIBUZIN 4F will control many annual broadleaf weeds. Control is best when applied to young, actively growing weeds. Weeds controlled by UPI METRIBUZIN 4F include:

WEEDS CONTROLLED	
Bittercress	Knotweed, Prostrate
Catchfly, Conical (Sand)	Lambsquarter, Common
Catchweed, (Madwort)	Lettuce, Miners
Chickweed, Common	Mustard, Blue
Chickweed, Mouseear	Mustard, Wild
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	Shepherdspurse
Gromwell, spp.	Speedwell, Ivyleaf
Henbit	Turnip, Wild

UPI METRIBUZIN 4F 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 recommended 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.

WEEDS SUPPRESSED				
Broadleaves		Grasses		
Buckwheat, Wild*	Mustard, Tumble (Jim Hill)*	Barley, Hare (Wild)	Brome, Downy*	Oat, Wild*
Buttercup, spp.		Barley, Little	Brome, Japanese*	Rescuegrass*
Cowcockle	Tansymustard	Blackgrass	Brome, Ripgut*	Whitlowgrass, Spring
Kochia*	Thistle, Russian	Bluegrass, Annual	Cheat*	(Vernal)
Lettuce, Prickly	Vetch, Winter	Bluegrass, Bulbous	Foxtail, spp.*	Windgrass

*Use the highest recommended UPI METRIBUZIN 4F rate for maximum weed suppression.

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

UPI METRIBUZIN 4F 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 information see the "General Information" section in the front of this label.

Where weed growth is present at application time, UPI METRIBUZIN 4F 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		Grasses
Chickweed, Common (<i>Stellaria media</i>)	Mustard, Treacle (<i>Erysimum repandum</i>)	Cheatgrass (<i>Bromus secalinus</i>)
Henbit (<i>Lamium amplexicaule</i>)	Mustard, Wild (<i>Brassica kaber</i>)	Downy Brome (<i>Bromus tectorum</i>)
*Kochia (<i>Kochia scoparia</i>)	Pennycress, Field (Fanweed) (<i>Thlaspi arvense</i>)	*Wheat, Volunteer (<i>Triticum spp.</i>)
Lambsquarters (<i>Chenopodium album</i>)	Pigweeds (<i>Amaranthus spp.</i>)	
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 spp.</i>)	
Mustard, Tansy (<i>Descurainia pinnata</i>)		

* Note: Since control of these weeds may be variable depending on moisture following application, the higher labeled rate is recommended.

After Harvest Application (Fall Fallow): UPI METRIBUZIN 4F 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.

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Do not plant crops in treated areas for at least 10 months following Fall applications.

UPI METRIBUZIN 4F 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): UPI METRIBUZIN 4F may be applied to wheat stubble in the Spring. Apply 3/4 to 1 pint 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.

Precautions and Restrictions: Do not graze treated fields. Do not plant Spring seeded cereals following Fall fallow applications of UPI METRIBUZIN 4F. Where UPI METRIBUZIN 4F was applied in the Fall, do not apply UPI METRIBUZIN 4F in the Spring.

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

UPI METRIBUZIN 4F 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 "General Information" section in the front of this label.

Where weed growth is present at application time, UPI METRIBUZIN 4F 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.

WEEDS CONTROLLED		
Broadleaves		Grasses
Chickweed, Common (<i>Stellaria media</i>)	Mustard, Tansy (<i>Descurainia pinnata</i>)	Cheatgrass (<i>Bromus secalinus</i>)
Cowcockle (<i>Vaccaria pyramidata</i>)	Mustard, Treacle (<i>Erysimum repandum</i>)	Downy Brome (<i>Bromus tectorum</i>)
Henbit (<i>Lamium amplexicaule</i>)	Mustard, Wild (<i>Brassica kaber</i>)	*Foxtail, Green (<i>Setaria viridis</i>)
*Kochia (<i>Kochia scoparia</i>)	Pennycress, Field (fanweed) (<i>Thlaspi arvense</i>)	*Wheat, Volunteer (<i>Triticum spp</i>)
Lambsquarters (<i>Chenopodium album</i>)	Pigweeds (<i>Amaranthus spp.</i>)	*Wild Oats (<i>Avena fatua</i>)
Mustard, Blue or Purple (<i>Chorispora tenella</i>)	Russian thistle (<i>Salsola iberica</i>)	
Mustard, Jim Hill (<i>Sisymbrium altissimum</i>)	Sunflower (<i>Helianthus spp.</i>)	
* Note: Since control of these weeds may vary depending on moisture following application, use the higher rate recommended below		

AFTER HARVEST APPLICATION (Fall Fallow): UPI METRIBUZIN 4F 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): UPI METRIBUZIN 4F 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.

Precautions and Restrictions: Do not graze treated fields. Do not plant Spring seeded cereals following Fall applications for fallow. Where UPI METRIBUZIN 4F was applied in the Fall, do not apply UPI METRIBUZIN 4F in the Spring.

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CROP ROTATION RECOMMENDATIONS

Waiting Period After UPI METRIBUZIN 4F Herbicide Application ¹			
4 Months	Alfalfa Barley ² Asparagus Corn	Forage Grasses Potatoes Sainfoin Soybeans	Sugarcane Tomatoes Wheat ²
8 Months	Barley Cotton	Lentils Peas	Rice Wheat
12 Months	Other Crops Not Listed (except root crops)		
18 Months	Sugar Beets	Onions	Other Root Crops

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.

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, or 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. For large spills, contact CHEMTREC at 1-800-424-9300.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or 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.

IMPORTANT INFORMATION READ BEFORE USING PRODUCT

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of United Phosphorous, Inc. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold United Phosphorous Inc. and Seller harmless for any claims relating to such factors.

United Phosphorous, 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, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions.

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