

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

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

10300-392

Date of Issuance:

70506-392

EPA Reg. Number:

5/23/22

X Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance: Conditional

Name of Pesticide Product:

PREVIEW 2.1 HERBICIDE

Name and Address of Registrant (include ZIP Code):

UPL NA, Inc. 630 Freedom Business Center suite 402 King of Prussia, PA 19406

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

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

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

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

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

Signature of Approving Official:

Emily Schmid

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

Date:

5/23/22

EPA Form 8570-6

- 2. You are required to comply with the data requirements described in the DCI Order identified below:
  - a. Metribuzin GDCI-101101-1304
  - b. Metribuzin GDCI-101101-1825

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI Order listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division:

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

- 3. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 70506-392."
- 4. Submit one copy of the final printed label for the record before you release the product for shipment.

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

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

Basic CSF dated 4/28/2021

If you have any questions, please contact Lydia Crawford by phone at 202-566-2575, or via email at Crawford.Lydia@epa.gov.

Enclosure

# ACCEPTED

5/23/2022

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 70506-392

METRIBUZIN	GROUP	5	HERBICIDE
SULFENTRAZONE	GROUP	14	HERBICIDE

# **PREVIEW 2.1 HERBICIDE**

For Use on Asparagus, Field Corn (Fall application only) Potato, Soybeans, Sugarcane, and Tomato (Transplants only)

Active Ingredients:  Metribuzin*	<b>By Wt</b> . 18 00%
Sulfentrazone**	
Other Ingredients	73.00%
Total:	100.0%
PREVIEW 2.1 HERBICIDE contains 2.43 pounds active ingrand 0.81 pounds sulfentrazone	edient per gallon: 1.62 pounds metribuzin,

\*4-amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4H)-one

# **KEEP OUT OF REACH OF CHILDREN**

# **CAUTION**

### FIRST AID

**If Swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

**If inhaled**: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical assistance, contact Rocky Mountain Poison and Drug Safety at 1-866-673-6671.

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

630 Freedom Business Center, Suite 402	
King of Prussia, PA 19406 U.S.A. EPA Est. No	

<sup>\*\*</sup>N-[2,4 dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]phenyl]methanesulfonamide

Net Contents: \_\_\_\_ gallons

# PRECAUTIONARY STATEMENTS

# **Hazards to Humans and Domestic Animals**

**Caution.** Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Wear long-sleeved shirt and long pants, socks, shoes, chemical-resistant (barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, neoprene  $\geq$  14 mils, polyvinyl chloride  $\geq$  14 mils, or viton  $\geq$  14 mils) gloves. Remove and wash contaminated clothing before reuse.

# **Personal Protective Equipment (PPE)**

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves.
- Shoes plus socks.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separate from other laundry.

# **User Safety Recommendations:**

Users should:

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

# **Environmental Hazards**

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

# **Groundwater Advisory**

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

<u>Groundwater advisory:</u> This product contains ingredients which are known to leach through soil into groundwater under certain conditions as a result of label use. Use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination **Do not use on coarse soils classified as sand, which have less than 1.0% organic matter.** 

<u>Surface water advisory:</u> PREVIEW 2.1 HERBICIDE contains sulfentrazone, which can contaminate surface water through spray drift. Under some conditions, PREVIEW 2.1 HERBICIDE may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several to many

months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-lying tile drainage systems that drain to surface waters.

# 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. These requirements only apply to uses of this product that are covered by the Worker Protection Standard.

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: Coveralls over long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material, and shoes plus socks.

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.

**DO NOT** apply 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 State or Tribe, consult the Agency responsible for pesticide regulation.

# **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 through any type of irrigation system.

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

# **Resistance-Management Recommendations**

For resistance management, please note that PREVIEW 2.1 HERBICIDE contains both a Group 5 (metribuzin) and a Group 14 (sulfentrazone) herbicide. Any weed population may contain plants naturally resistant to Group 5 or Group 14 herbicides. The resistant individuals may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

- Rotate the use of PREVIEW 2.1 HERBICIDE or other Group 5 or 14 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where
  information on resistance in target weed species is available, use the less resistance-prone
  partner at a rate that will control the target weed(s) equally as well as the more resistance-prone
  partner. Consult your local extension service or certified crop advisor if you are unsure as to
  which active ingredient is currently less prone to resistance.

- Adopt an integrated weed-management program for herbicide use that includes scouting and
  uses historical information related to herbicide use and crop rotation, and that considers tillage (or
  other mechanical control methods), cultural (e.g. higher crop seeding rates; precision fertilizer
  application method and timing to favor the crop and not the weeds), biological (weed-competitive
  crops or varieties) and other management practices.
- Scout before application to identify the weed species present and their growth stage to determine if the intended application will be effective. Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of noncontrolled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist, certified crop advisors, and/or manufacturer for additional
  herbicide resistance management and/or integrated weed management recommendations for
  specific crops and resistant weed biotypes. Report any incidence of non-performance of this
  product against a particular weed species to your local extension specialist, retailer or UPL NA
  INC. representative. If resistance is suspected, treat weed escapes with a herbicide having a
  different mechanism of action and/or use non-chemical means to remove escapes, as practical,
  with the goal of preventing further weed seed production.

# **Best Management Practices**

- Plant into weed-free fields and keep fields as weed-free as possible.
- Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action or different management practices.
- Apply this herbicide at the correct timing and rate needed to control the most difficult weed in the field.

# PRODUCT INFORMATION

PREVIEW 2.1 HERBICIDE is a soluble concentrate formulation to be mixed with water and sprayed for selective preemergence or preplant incorporated weed control in labeled crops. When applied according to the instructions on this label, PREVIEW 2.1 HERBICIDE will control listed broadleaf and sedge weeds, and provide suppression of grasses.

The mode of action of PREVIEW 2.1 HERBICIDE involves uptake by weed roots and shoots, and preemergence and preplant incorporated applications of PREVIEW 2.1 HERBICIDE require rainfall or irrigation to activate the herbicide. The amount of rainfall or irrigation required for activation after application depends on existing soil moisture, organic matter content and soil texture. If 1/2" to 1" of moisture is not received within 7 to 10 days after PREVIEW 2.1 HERBICIDE is applied, a shallow cultivation may be needed to obtain desired weed control. When sufficient moisture is received after dry conditions, PREVIEW 2.1 HERBICIDE will provide control of susceptible germinating weeds.

<u>Proper handling instructions:</u> This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pads or properly diked mixing/loading areas. Operations that involve mixing, loading rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or

moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity 100% of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operation containment.

# **APPLICATION INSTRUCTIONS**

# **MIXING**

When using PREVIEW 2.1 HERBICIDE, 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.

Keep any tank mix containing PREVIEW 2.1 HERBICIDE agitated and spray out immediately. **DO NOT** allow tank mixes to stand for prolonged periods of time.

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

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

Water or liquid fertilizer must be used as the carrier for PREVIEW 2.1 HERBICIDE, when applied alone, or when tank mixed with other herbicides on any labeled crops. A jar test for compatibility of liquid fertilizer and PREVIEW 2.1 HERBICIDE tank mix is recommended if the compatibility of the liquid fertilizer and PREVIEW 2.1 HERBICIDE is unknown.

Continuous agitation during application is required. Avoid overlap. Shut off spray booms while turning, slowing, or stopping, as over application may result. **DO NOT** store the sprayer overnight or for any extended period of time with the PREVIEW 2.1 HERBICIDE spray mixture remaining in the tank.

# SPRAY DRIFT REDUCTION PRECAUTIONS

# **SPRAY DRIFT**

Use best practices to avoid drift to all other crops and non-target areas. **DO NOT** apply when conditions favor drift from target areas. The interaction of many equipment and weather-related factors determine the potential for spray drift. Avoiding spray drift at the application site is the responsibility of the applicator. The applicator must follow the most restrictive use precautions to avoid drift, including those found in this labeling as well as applicable state and local regulations and ordinances. A drift control agent may reduce drift, however, it may also decrease weed control.

# Ground boom applications:

- When using ground application equipment, apply with nozzle height no more than 4 feet above the ground or crop canopy.
- Ground applications must use a minimum finished spray volume of 10 gallons per acre.
- This this product is tank mixed with a contact burndown herbicide, ground applicators must use a minimum spray volume of 15 gallons per acre.

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1). Do not apply droplets smaller than medium.
- Select coarse to very coarse droplet size when this product is used as a preemergent/ preplant application.
- Select medium to very coarse droplet size when this product is used postemergence with a contact burndown herbicide.
- Applicators may spray only when wind speed is between 3 and 10 mph.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

# Aerial applications:

- Aerial application is allowed only when environmental conditions prohibit ground application.
- When applying aerially to crops, do not release spray at a height greater than 10 ft. above the crop canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- When this product is allowed to be applied by air, applicator must use a minimum finished spray volume of 5 gallons per acre.
- When applying to crops via aerial application equipment, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor blade vortices. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- When applying to crops via aerial application equipment, applicators must use ½ swath displacement upwind at the downwind edge of the field.
- The distance of the outermost nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

# **SPRAY DRIFT ADVISORIES**

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

# IMPORTANCE OF 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. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.

# **Controlling Droplet Size - Ground Boom**

<u>Volume</u> - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

<u>Pressure</u> - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.

<u>Nozzle Type</u> - 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.

# **Controlling Droplet Size – Aircraft**

Number of Nozzles - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.

<u>Nozzle Orientation</u> - Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations. AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

<u>Volume</u> - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

<u>Pressure</u> - 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.

<u>Nozzle Type</u> - Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.

<u>Boom Length</u> - Longer booms increase drift potential. Therefore a shorter boom length is recommended. <u>Application Height</u> - Application more than 10 ft. above the canopy increases the potential for spray drift.

#### **BOOM HEIGHT**

Setting the boom at the lowest referenced height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. 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.

For ground equipment, the boom should remain level with the crop and have minimal bounce.

# **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 downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

# **DRIFT REDUCTION TECHNOLOGY (DRT)**

The EPA Drift Reduction Technology (DRT) Program was developed to encourage the manufacture, marketing, and use of spray technologies scientifically verified to significantly reduce pesticide drift. The use of DRTs should result in significantly less pesticide from spray applications drifting and being deposited in areas not targeted by those applications, compared to spray technologies that do not meet the minimum DRT standard. EPA-verified drift reduction technologies (DRTs) and their ratings will be added to the following webpage as they become available: <a href="https://www.epa.gov/reducing-pesticide-drift/epa-verified-and-rated-drift-reduction-technologies">https://www.epa.gov/reducing-pesticide-drift/epa-verified-and-rated-drift-reduction-technologies</a>

# **SENSITIVE AREAS**

The pesticide 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).

### **WIND**

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS. Note: Local terrain can influence wind patterns. Every applicator needs to be familiar be familiar with local wind patterns and how they affect spray drift.

# **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature 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.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

# **OFF-TARGET MOVEMENT OF PREVIEW 2.1 HERBICIDE**

Drift of spray mixtures containing PREVIEW 2.1 HERBICIDE must be prevented. Observation of the preceding environmental conditions, correct application equipment design, calibration and application practices will significantly diminish the risk of off-target spray drift. PREVIEW 2.1 HERBICIDE can cause significant symptomology by drift onto sensitive crops and other plants. This symptomology may manifest initially as discreet, localized spots where contacted by PREVIEW 2.1 HERBICIDE drift mixtures. Depending on concentration of the spray solution and droplets size (effectively determining the dosage of sulfentrazone) and also depending on the inherent sensitivity of the plants involved, these spots or lesions may or may not coalesce. These effects will usually not have lasting effects on plant growth, but will likely reduce the value of affected fruit or foliage where grade or quality are associated with appearance. In severe drift instances with particularly sensitive crops, defoliation of affected foliage could result. Failure to follow these guidelines and environmental prohibitions that then result in off-target movement or drift of PREVIEW 2.1 HERBICIDE onto unintended crops or plants, irrespective of severity, constitutes misapplication of this product.

# BAND TREATMENT APPLICATIONS

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

Band Width (Inches) Row Width (Inches)	Χ	Broadcast Rate Per Acre	=	Band Rate
Band Width (Inches) Row Width (Inches)	X	Broadcast Volume Per Acre	=	Band Volume

# **MIXING & LOADING INSTRUCTIONS**

Always ensure that equipment is clean and free of existing pesticide deposits before applying PREVIEW 2.1 HERBICIDE. Follow the spray tank cleanout procedures specified on the label of the product previously applied before adding PREVIEW 2.1 HERBICIDE to the tank.

For best results, fill spray tank with one half the volume of clean water or liquid fertilizer solution needed for the field to be treated. Start agitation system. When mixing PREVIEW 2.1 HERBICIDE in a spray tank with anything other than clean water (fertilizer, previous herbicide mixtures, etc.), mix PREVIEW 2.1 HERBICIDE in a separate container with clean water to create a slurry before adding it to the spray tank.

Slowly add the slurry to the spray tank. Carefully rinse the mixing container, adding the rinsate to the spray tank. Complete filling the spray tank to the desired level. Continuous spray tank agitation is required

at all times to maintain a uniform spray solution. Refer to rate tables for the proper application rate. Make sure PREVIEW 2.1 HERBICIDE is thoroughly mixed before application or before adding another product to the spray tank.

For tank mixtures with other herbicide(s) labeled for the same uses as PREVIEW 2.1 HERBICIDE, conduct a jar test to ensure product compatibility before full-scale mixing. If the jar test indicates the mixture to be compatible, prepare the tank mixture as follows:

- Fill the spray tank one fourth full with clean water.
- With agitator operating, add the specified amounts of ingredients using the following order: dry granules first, liquid suspensions (flowables) second.
- Add EC products followed by remaining adjuvants and/or carrier to tank as agitation continues and tank is filled with liquid carrier. All applicable directions, restrictions, and precautions for the tank mixture herbicide(s) must be followed.

Apply PREVIEW 2.1 HERBICIDE spray mixtures immediately after mixing. Do not store mixture. Do not store the sprayer overnight or for any extended period for time with PREVIEW 2.1 HERBICIDE spray mixture remaining in the tank. Do not premix PREVIEW 2.1 HERBICIDE spray solutions in nurse tanks. If PREVIEW 2.1 HERBICIDE was tank mixed with other herbicides, all additional directions, restrictions, and precautions for the additional herbicides must also be followed.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

# SPRAYER EQUIPMENT CLEAN-OUT

As soon as possible after spraying PREVIEW 2.1 HERBICIDE and before using sprayer equipment for any other applications, the sprayer must be thoroughly cleaned to avoid potential crop affects using the following procedure. Residues left in mixing equipment, spray tanks, hoses, spray booms and nozzles can cause crop effects if they are not properly cleaned. In addition, users must take appropriate steps to ensure proper equipment clean-out for any other products mixed with PREVIEW 2.1 HERBICIDE as required on the other product labels.

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

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

Do not store the sprayer overnight or for any extended period of time with PREVIEW 2.1 HERBICIDE spray solution remaining in the tank, spray lines, spray boom plumbing, spray nozzles or strainers.

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

Should small quantities of PREVIEW 2.1 HERBICIDE remain in inadequately cleaned mixing, loading and/or spray equipment, they may be released during subsequent applications potentially causing effects to certain crops and other vegetation. UPL NA INC. accepts no liability for any effects due to inadequately cleaned equipment.

Do not drain or flush equipment on or near desirable or susceptible trees or plants.

Do not contaminate any body of water including irrigation water that may be used on other crops.

# **WEEDS CONTROLLED**

When applied in accordance with the Application Instructions and the specific crop use directions, PREVIEW 2.1 HERBICIDE applied alone or in specified tank mixtures will provide control of the following weeds. Refer to the specific crop section for detailed application information, restrictions, and precautions.

BROADLEAVES			
Common Name	Scientific Name		
Amaranth, Palmer	Amaranthus palmeri		
Amaranth, spiny	Amaranthus spinosus		
Anoda, spurred	Anoda cristata		
Beggarweed, Florida	Desmodium tortuosum		
Carpetweed	Mollugo verticillata		
Copperleaf, hop hornbeam	Acalypa ostryifolia		
Croton, tropic	Croton glandulosus		
Daisy, American	Eclipta alba		
Galinsoga, hairy	Galinsoga ciliata		
Ground cherry, clammy	Physalis heterophylla		
Ground cherry, cutleaf	Physalis angulata		
Jimsonweed	Datura stramonium		
Kochia	Kochia scoparia		
Ladys thumb	Polygonum persicaria		
Lambsquarters, common	Chenopodium album		
Morning glory, entireleaf	Ipomoea integriuscula		
Morning glory, ivyleaf	Ipomoea hederacea		
Morning glory, palmleaf	Ipomoea wrightii		
Morning glory, purple	Ipomoea turbinata		
Morning glory, red	Ipomoea coccinea		
Morning glory, smallflower	Jacquemontia tamnifolia		
Morning glory, tall	Ipomoea purpurea		
Nightshade, eastern black	Solanum ptycanthum		
Nightshade, hairy	Solanum sarrachoides		
Nightshade, silverleaf	Solanum elaeagnifolicum		

BROADLEAVES		
Common Name	Scientific Name	
Pigweed, redroot	Amaranthus retroflexus	
Pigweed, smooth	Amaranthus hybridus	
Poorjoe	Diodia teres	
Purslane, common	Portulaca oleracea	
Senna, coffee	Cassia occidentalis	
Sida, prickly (Teaweed)	Sida spinose	
Smartweed, Pennsylvania	Polygonum pensylvanicum	
Smell melon	Cucumis melo	
Spurge, spotted	Euphorbia maculata	
Starbur, bristly	Acanthospermum hispidum	
Velvetleaf	Abutilon theophrasti	
Waterhemp, common	Amaranthus rudis	
Waterhemp, tall	Amaranthus tuberculatos	

GRASSES (Suppression Only)		
Common Name	Scientific Name	
Broadleaf signalgrass	Brachiaria platyphylla	
Crabgrass, large	Digitaria sanguinalis	
Crabgrass, smooth	Digitaria ischaemum	
Goosegrass	Eleusine indica	
Green Foxtail	Setaria viridis	
Johnsongrass, seedling	Sorghum halepense	
Orchardgrass	Dactylis glomerata	
Panicum, fall	Panicum dichotomiflorum	
Panicum, Texas	Panicum texanum	

SEDGES		
Common Name	Scientific Name	
Nutsedge, purple	Cyperus rotundus	
Nutsedge, yellow	Cyperus esculentus	
Sedge, annual	Cyperus compressus	

For winter annual weeds, such as those listed below, and/or other emerged weeds, add the appropriate rate of 2,4-D, or glyphosate-based product to PREVIEW 2.1 HERBICIDE applications.			
Chickweed, common	Stellaria media		
Deadnettle, purple	Lamium purpureum		
Field pennycress	Thlaspi arvense		

For winter annual weeds, such as those listed below, and/or other emerged weeds, add the appropriate rate of 2,4-D, or glyphosate-based product to PREVIEW 2.1 HERBICIDE applications.			
Henbit Lamium amplexicaule			
Marestail	Hippuris vulgaris		
Mustard spp.	Brassica spp.		
Prickly Lettuce	Lactuca serriola		
Shepherd's purse	Capsella bursa pastoris		
Speedwell spp. Veronica spp.			
Virginia pepperweed	Lepidium virginicum		

# **CROP ROTATION**

Waiting Period After PREVIEW 2.1 HERBICIDE Application				
Anytime	Tomatoes (Transplanted only)	Soybeans	Sugarcane	
4 Months	Barley	Wheat	Field Corn <sup>1</sup> (Fall application only)	
10 Months	Rice			
12 Months	Alfalfa Dry Beans	Asparagus Sunflower	Peanuts Tobacco	
	Potato	Sorghum (2)	Cotton (5)	
18 Months	Cotton (3) And all other crops not listed on the label (3)	Sorghum	Sweet Corn (3)	
24 Months	Canola (3)	Sugarbeets (3) (4)		

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

- Medium and fine soils
- pH <7.2
- Rainfall or irrigation must exceed 15" after application of PREVIEW 2.1 HERBICIDE to rotate to cotton

# SOIL CLASSIFICATION CHART

COARSE	MEDIUM	FINE
Sand	Sandy clay loam	Silty clay loam
Loamy sand	Sandy clay	Silty clay
Sandy loam	Loam	Clay loam
	Silt loam	Clay
	Silt	

<sup>&</sup>lt;sup>2</sup> Sorghum may be planted after 12 months where PREVIEW 2.1 HERBICIDE was applied at 34 fl.oz./acre or less in the previous cropping season.

<sup>&</sup>lt;sup>3</sup> Crops that have rotational intervals greater than 12 months after a PREVIEW 2.1 HERBICIDE application are the result of crop injury concerns.

<sup>&</sup>lt;sup>4</sup> A rotation interval of 24 months is allowed with a successful bioassay.

<sup>&</sup>lt;sup>5</sup> Cotton may be planted after 12 months where PREVIEW 2.1 HERBICIDE was applied at rates 28 fl.oz./acre or less and meets the following conditions:

MAXIMUM USE RATE CHART
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Crop	Maximum Use Rate (FL OZ)	LB Al Metribuzin	LB Al Sulfentrazone
Asparagus	59	0.75	0.37
Field Corn	20	0.25	0.13
Potatoes	39	0.49	0.25
Soybeans	36	0.46	0.23
Sugarcane	59	0.75	0.37
Tomatoes	36	0.46	0.23

# **ASPARAGUS**

# **Spring Pre-emergence Applications**

Apply PREVIEW 2.1 HERBICIDE as a broadcast treatment to crowns established for one or more years.

Apply in the spring before the crop and weeds emerge. Apply using rate chart below, in 10 to 40 gallons of finished spray per acre. PREVIEW 2.1 HERBICIDE may be applied with other pesticides registered for use on asparagus.

USE RATE TABLE FOR ASPARAGUS			
	Broadcast Rate – Fl. Oz. per Acre  % Organic Matter		
Soil Texture	<1.5	1.5 - 3.0	>3.0
Coarse	22 - 30	30 - 40	40
Medium	30 - 40	40 - 50	50
Fine	40 - 50	50 - 59	59

Within the rate ranges indicated, use higher rates for soils of pH less than 7.0 and lower rates for pH greater than 7.0.

#### **Precautions**

These Crop Specific Use directions are based upon the interactive effects of PREVIEW 2.1 HERBICIDE (metribuzin and sulfentrazone) and the primary soil and environmental factors, which affect its activity on various weed species and tolerance among crops. Not all varieties or cultivars of a given crop species have been evaluated under treatment with PREVIEW 2.1 HERBICIDE. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on PREVIEW 2.1 HERBICIDE under specific local conditions.

# Restrictions

• Pre-Harvest Interval (PHI): 14 days

- Retreatment Interval (RTI): 12 months
- **DO NOT** apply by air.
- **DO NOT** apply more than 59 fluid ounces PREVIEW 2.1 HERBICIDE (0.75 lb metribuzin + 0.37 lb sulfentrazone) per acre per 12-month period.
- **DO NOT** make more than one PREVIEW 2.1 HERBICIDE application per acre per 12-month period. The twelve-month period is considered to begin upon the initial PREVIEW 2.1 HERBICIDE application.
- **DO NOT** use on soils classified as sand, which have less than 1% organic matter.
- DO NOT use on newly seeded asparagus or on young plants during the first growing season after setting crowns.
- Use of low-pressure, high volume hand wand equipment is prohibited.

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

# **Fall Application Only**

# **Preplant (Fall Applications)**

Apply PREVIEW 2.1 HERBICIDE in the fall as a residual treatment before corn planting the following spring.

PREVIEW 2.1 HERBICIDE can be used alone or in a tank mixture with other herbicides to control susceptible broadleaves, sedges and grasses in corn. Apply in conventional tillage or conservation tillage (reduced tillage or no-tillage) cropping systems using the rates specified. PREVIEW 2.1 HERBICIDE should be applied to the stubble or soil surface to allow moisture from rainfall or snow to move the product into the soil. **DO NOT** mechanically incorporate in the fall or spring as this operation can destroy the herbicide barrier allowing weed escapes to occur.

Apply PREVIEW 2.1 HERBICIDE after September 30 and October 15 for areas north of Interstate 90 and Interstate 40, respectively. Apply when soil temperatures are below 55°F but do not apply to frozen soils or existing snow cover to prevent runoff from rain or snowmelt that may occur following application. PREVIEW 2.1 HERBICIDE may be tank mixed with other burndown herbicides to control emerged weeds in the fall or residual soil herbicides that are labeled for fall use on corn. Select the appropriate use rate for corn for your soil type and organic matter. Due to the extended period of time between the fall application and corn planting, the use rate of PREVIEW 2.1 HERBICIDE should be the mid to high rate within the appropriate rate range.

USE RATE TABLE FOR FIELD CORN			
	Broadcast Rate – Fl. Oz. per Acre		
	% Organic Matter		
Soil Texture	1.5 – 2%	2 – 4 %	
Coarse	12	12 - 14	
Medium	12 - 14	14 - 16	
Fine	14 - 16	16 – 20	

Refer to the use rate information on soil types under the COARSE, MEDIUM, and FINE categories.

Within the ranges indicated, use higher rates for soils of pH less than 7.0 and lower rates for pH greater than 7.0.

### Restrictions

- Pre-Harvest Interval (PHI): not applicable for fall applications
- Retreatment Interval (RTI): 12 months

- **DO NOT** apply more than 20 fluid ounces of PREVIEW 2.1 HERBICIDE (0.25 lb metribuzin + 0.13 lb sulfentrazone) per twelve-month period.
- DO NOT make more than one PREVIEW 2.1 HERBICIDE application per acre per 12-month period. The twelve-month period is considered to begin upon the initial PREVIEW 2.1 HERBICIDE application.
- **DO NOT** apply to coarse soils classified as sand, which have less than 1% organic matter.
- **DO NOT** apply to frozen soils or existing snow cover to prevent runoff from rain or snowmelt that may occur following application.
- **DO NOT** use low-pressure, high volume hand wand equipment to apply PREVIEW 2.1 HERBICIDE.

# **POTATOES**

# **Pre-emergence Application**

# **Ground and Aerial Applications**

Apply PREVIEW 2.1 HERBICIDE by air as a preemergence treatment following planting and after dragoff, but before potato emergence. For best results, apply to the soil surface and use either rainfall or overhead irrigation to activate the product. If no moisture is received within 7 days following application in areas without irrigation, a shallow incorporation (less than 2 inches) may be needed to activate the product before weed and potato emergence. Choose the appropriate use rate from the use rate table based on soil texture and organic matter. For control of emerged weeds at the time of the PREVIEW 2.1 Herbicide application, an appropriate burndown herbicide and adjuvants labeled for potatoes may be tank mixed with PREVIEW 2.1 HERBICIDE to control them. **DO NOT** apply PREVIEW 2.1 HERBICIDE if the potatoes have emerged from the soil as undesirable crop response may occur. PREVIEW 2.1 HERBICIDE may be tank mixed with other soil-applied herbicides labeled for use on potatoes to improve weed management and increase weed control spectrum.

Apply PREVIEW 2.1 HERBICIDE in a minimum of 10 gallons of spray by ground application and minimum of 5 gallons of spray by air.

Note: irrigation with highly alkaline water (high pH) following a PREVIEW 2.1 HERBICIDE soil application may significantly increase the amount of sulfentrazone available in soil solution. Irrigation with water having a pH greater than 7.5 could result in adverse crop response. This response will ultimately depend on initial PREVIEW 2.1 HERBICIDE application rate, application timing, amount and pH of irrigation water; the sensitivity of the crop and the crop growth stage when irrigated. The risk of adverse crop response will lessen as the crop matures.

USE RATE TABLE FOR POTATOES			
	Broadcast Rate - Fl. Oz. per Acre  % Organic Matter		
Soil Texture	<1.5	1.5 - 3.0	>3.0
Coarse	15 - 22	15 - 22	19 - 26
Medium	15 - 22	19 - 30	22 – 30
Fine	22 - 30	26 – 34	30 – 39

Refer to the use rate information on soil types under the COARSE, MEDIUM, and FINE categories.

Within the ranges indicated, use higher rates for soils of pH less than 7.0 and lower rates for pH greater than 7.0.

# **Precautions**

- DO NOT apply PREVIEW 2.1 HERBICIDE after potato emergence from the soil as undesirable crop response may occur.
- These Crop Specific Use directions are based upon the interactive effects of PREVIEW 2.1 HERBICIDE and the primary soil and environmental factors, which affect its activity on various weed species and tolerance among crops. Note that not all varieties or cultivars of a given crop species have been evaluated under treatment with PREVIEW 2.1 HERBICIDE. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on PREVIEW 2.1 HERBICIDE under specific local conditions. When using PREVIEW 2.1 HERBICIDE on an untested variety always determine the crop tolerance before planting.

# Restrictions

- Pre-Harvest Interval (PHI): not applicable for pre-emergence application
- Retreatment Interval (RTI): 12 months
- Use of low-pressure, high volume wand equipment is prohibited.
- DO NOT use on soils classified as sand, which have less than 1% organic matter.
- **DO NOT** apply more than 39 fluid ounces PREVIEW 2.1 HERBICIDE (0.49 lb metribuzin + 0.25 lb sulfentrazone) per acre per twelve-month period.
- **DO NOT** make more than one PREVIEW 2.1 HERBICIDE application per acre per 12-month period. The twelve-month period is considered to begin upon the initial PREVIEW 2.1 HERBICIDE application.
- DO NOT use on potatoes in Kern County, CA.
- Pre-Harvest Interval (PHI): 60 days.
- **DO NOT** apply with an airblast sprayer.
- **DO NOT** apply to sweet potatoes or yams.

# **SOYBEANS (Except in CA)**

Apply PREVIEW 2.1 HERBICIDE as a preemergence or preplant incorporated treatment for the control of weeds in soybeans.

# **SOYBEAN TOLERANCE**

The active ingredients in PREVIEW 2.1 HERBICIDE have been known to show some level of injury to soybean plants when used according to label guidelines.

Do not use PREVIEW 2.1 HERBICIDE on any soybean varieties that are known to be sensitive to injury from metribuzin or sulfentrazone. Information regarding herbicide tolerance of soybean varieties can be obtained from the seed company providing the seed or from University or Extension weed management specialists.

If cool/cold weather or heavy rainfall occurs immediately following a PREVIEW 2.1 HERBICIDE application, soybean stunting or stand loss could occur, although yields have not been affected where early season stunting has occurred. Injury to soybeans can also occur under the following conditions: (1) excessive rate for soil type, (2) boom overlap, (3) improper sprayer calibration, (4) error in mixing procedures, (5) when soils have a calcareous surface area or pH greater than 7.5, (6) soil incorporation deeper than specified, (7) when applied with organophosphate pesticides, (8) when heavy rains occur after application, especially in poorly drained areas, (9) when soybeans are planted less than 1 1/2 inches deep, (10) on any soil with less than 0.5% organic matter.

#### **APPLICATION INFORMATION**

# **Ground Application**

Use a boom and nozzle ground sprayer equipped with the appropriate nozzles, spray tips and screens and adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures. Utilize nozzles that produce minimal amounts of fine spray droplets to avoid spray drift or inadequate

foliar and/or soil coverage. Apply a minimum of 10 gallons of finished spray per acre by ground. Be aware that overlaps and slower ground speeds while starting, stopping or turning while spraying may result in excessive application and subsequent crop response.

**DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

# **Aerial Application**

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

**DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

# **FALL APPLICATIONS**

Apply PREVIEW 2.1 HERBICIDE as a fall treatment to the stubble of harvested crops for the burndown of existing vegetation and preemergence control of labeled weeds the following spring in no-till and conservation tillage production systems. PREVIEW 2.1 HERBICIDE can be applied in no-till or to the soil surface of conservation tillage fields after harvest when the sustained soil temperature is 55 degrees F and falling at a soil depth of 4 inches. Apply after September 30 in those areas North of Interstate 90 and after October 15 in those areas North of Interstate 40. To obtain adequate weed control in all areas soils must have sustained temperature of 55 degrees F or lower. Applications to ridge till production systems must be made after the formation of ridges or beds.

If weeds are emerged at the time of application, use a tank mixture with a registered burndown herbicide at labeled rates. Make fall applied burndown treatments with a minimum of 15 gallons per acre to ensure adequate coverage of the weeds being treated, Increase spray volume (gallons per acre) where weed density is high or heavy crop residue levels are present. When making burndown applications to emerged weeds, adjuvants such as crop oil concentrate (COC) or methylated seed oil (MSO) to the spray mixture to enhance the burndown activity of the application. Refer to product labels for use rates and instructions. For PREVIEW 2.1 HERBICIDE application rates refer to **RATE TABLE** for standard rate programs.

### **SPRING APPLICATIONS**

#### **EARLY PRE-PLANT**

Apply PREVIEW 2.1 HERBICIDE up to 30-45 days prior to planting (Early Preplant) in no-till or minimum till cropping systems. For applications earlier than 30 days prior to planting, the high rate in the rate range may be needed for extended residual control. PREVIEW 2.1 HERBICIDE provides limited burndown of small weeds. PREVIEW 2.1 HERBICIDE applied early pre-plant must be applied in combination with the appropriate burndown herbicide such as those containing glyphosate, glufosinate, gramoxone, and/or 2,4-D to achieve acceptable control of existing weeds during application. The addition of crop oil concentrate at 1 quart per acre or non-ionic surfactant at 0.25% will increase burndown effectiveness. For PREVIEW 2.1 HERBICIDE application rates refer to **RATE TABLE** for standard rate programs.

# PREPLANT INCORPORATED

Apply PREVIEW 2.1 HERBICIDE preplant incorporated before planting soybeans. PREVIEW 2.1 HERBICIDE may be applied alone or in combination with other preplant incorporated herbicides labeled for soybeans. Do not incorporate deeper than 2 inches. Improper soil incorporation may result in erratic weed control and/or crop injury. PREVIEW 2.1 HERBICIDE may be followed by labeled postemergence soybean herbicides for increased control of grass and broadleaf weeds. Always follow the most restrictive label when tank mixing. For PREVIEW 2.1 HERBICIDE application rates refer to **RATE TABLE** for standard rate programs.

# **PREEMERGENCE**

Apply PREVIEW 2.1 HERBICIDE from 30 days before planting to up to 3 days after planting, but before the crop seed germinates, to prevent injury to emerging crop seedlings. PREVIEW 2.1 HERBICIDE

applied after crop emergence will cause severe injury to the crop. Please see below for more information regarding soybean tolerance.

PREVIEW 2.1 HERBICIDE can be applied alone or in combination with other labeled soybean herbicides for preemergence grass control. It can be applied preemergence following the use of a preplant incorporated grass herbicide labeled for use on soybeans. If weeds are present at the time of PREVIEW 2.1 HERBICIDE application, also apply with labeled burndown herbicides for improved control of existing weeds. Refer to product labels for use rates and instructions.

Properly closed planter seed furrows are required before PREVIEW 2.1 HERBICIDE application to avoid crop injury. For PREVIEW 2.1 HERBICIDE application rates refer to RATE TABLE for standard rate programs.

USE RATE TABLE FOR SOYBEANS			
Fall, Early Pre-Plant, Pre-Plant Incorporated, Preemergence Conservation or Conventional Tillage			
	Broadcast Rate - Fl. Oz. per Acre*  % Organic Matter***		
Soil Texture**	2.0%	2.0 - 4.0%	
Coarse	19	19 – 24	
Medium	19 – 24	24 - 28	
Fine	24 – 36	28 – 36	

<sup>\*</sup> Use the higher rate for suppression of grasses and sedges.

Adverse crop response can occur on soils with pH greater than 7.5. To reduce adverse crop response, use a maximum of 12.5 fl.oz. of PREVIEW 2.1 HERBICIDE on soils with pH greater than 7.5.

# REPLANTING INSTRUCTIONS

If initial planting of soybeans fails to produce a stand due to adverse environmental conditions, only soybeans may be replanted in fields treated with PREVIEW 2.1 HERBICIDE when used according to directions in Soybean section. **DO NOT** retreat field with a second application of PREVIEW 2.1 HERBICIDE unless specifically allowed in other sections of the label or crop injury may occur. When replanting another crop than soybeans, observe the intervals found in the Rotational Crop Guidelines on this label for PREVIEW 2.1 HERBICIDE. When specified tank mix combinations are used, consult the product label for replanting and re-cropping instructions and observe the directions that are the most restrictive.

# **RESTRICTIONS**

- Pre-Harvest Interval (PHI): not applicable for fall or pre-emergence applications
- Retreatment Interval (RTI): 12 months
- **DO NOT** apply more than 36 fluid ounces (0.46 lb metribuzin + 0.23 lb sulfentrazone) per acre of PREVIEW 2.1 HERBICIDE per twelve-month period.
- DO NOT make more than one PREVIEW 2.1 HERBICIDE application per acre per 12-month period. The twelve-month period is considered to begin upon the initial PREVIEW 2.1 HERBICIDE application.
- DO NOT apply to sand soils, or sandy loam or loamy sand soils containing less than 2% organic matter
- **DO NOT** apply PREVIEW 2.1 HERBICIDE after soybeans have emerged.

<sup>\*\*</sup> Refer to the previous information on soil types under the SOIL CLASSIFICATION CHART.

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

- DO NOT apply PREVIEW 2.1 HERBICIDE to frozen soil.
- DO NOT incorporate deeper than 2 inches.
- Not for use in California.
- DO NOT graze treated soybean or harvest for forage or hay.
- Use of low-pressure, high volume hand wand equipment is prohibited.

# SUGARCANE

# **Planting Time and Lay-by Applications**

# **Planting Time Application**

Apply PREVIEW 2.1 HERBICIDE to newly planted or ratoon sugarcane as a broadcast or banded preemergent soil applied treatment for the control of broadleaf weeds, grasses and sedges. Use the higher rate on clay soils and/or soils with organic matter content higher than 2 percent. Apply either by air in a minimum of 5 gallons of spray per acre or by ground equipment in a minimum of 10 gallons of spray per acre. PREVIEW 2.1 HERBICIDE may be applied with other herbicides registered for use in sugarcane.

For aerial application, and to assure that spray does not adversely affect adjacent sensitive non-target crops, apply PREVIEW 2.1 HERBICIDE at a minimum upwind distance of 400 feet from sensitive plants.

USE RATE TABLE FOR SUGARCANE			
Fluid company / A crest	Broadcast Rate	- Fl. Oz. per Acre	
Fluid ounces / Acre*	% Orga	nic Matter	
Soil Texture**	2.0%	2.0 - 4.0%	
Coarse	28 - 36	36 - 46	
Medium	36 - 46	46 - 53	
Fine	46 - 53	53 – 59	

<sup>\*</sup> Within the ranges indicated, use the higher rates for soils of pH less than 7.0. Use the lower rates for pH greater than 7.0.

# **RESTRICTIONS**

- Pre-Harvest Interval (PHI): 120 days
- Retreatment Interval (RTI): 12 months
- **DO NOT** apply more than 59 fluid ounces (0.75 lb metribuzin + 0.37 lb sulfentrazone) per acre of PREVIEW 2.1 HERBICIDE per twelve-month period.
- DO NOT make more than one PREVIEW 2.1 HERBICIDE application per acre per 12-month period. The twelve-month period is considered to begin upon the initial PREVIEW 2.1 HERBICIDE application.
- **DO NOT** graze treated sugarcane or harvest for forage or hay.
- To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply this product by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.
- Use of low-pressure, high volume hand wand equipment is prohibited.
- DO NOT apply to sand soils, or sandy loam or loamy sand soils containing less than 2% organic matter.

# **TOMATOES (Transplanted Only)**

**Preplant Incorporated Applications (PPI)** 

<sup>\*\*</sup> Refer to the previous information on soil types under the SOIL CLASSIFICATION CHART.

# **Preplant Incorporated (PPI)**

Apply PREVIEW 2.1 HERBICIDE preplant incorporated (1" - 2" deep) as a broadcast application. Applications must be made prior to transplanting.

These Crop Specific Use directions are based upon the interactive effects of PREVIEW 2.1 HERBICIDE (sulfentrazone + metribuzin) and the primary soil and environmental factors, which affect its activity on various weed species and tolerance among crops. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on PREVIEW 2.1 HERBICIDE.

When transplanting tomatoes, place the root system of the plants below the herbicide incorporation zone or injury may occur.

Apply by ground in a minimum of 10 gallons per acre of spray.

USE RATE TABLE FOR TOMATO (TRANSPLANTED ONLY)				
Fluid conces / A cre	Broadcast Rate - Fl. oz. per Acre			
Fluid ounces / Acre		% Organic Matter		
Soil Texture	<1.5	1.5 - 3.0	>3.0	
Coarse	15 - 20	20 – 34	20 – 36	
Medium	20 – 36	36	36	
Fine	20 – 36	36	36	

Refer to the previous information on soil types under the COARSE, MEDIUM, and FINE categories.

Use higher rates for soils of pH less than 7.0 and lowest rate listed per soil type and organic matter for pH greater than 7.0.

### Restrictions

- Pre-Harvest Interval (PHI): not applicable for preplant incorporated applications
- Retreatment Interval (RTI): 12 months
- DO NOT apply more than 36 fluid ounces of PREVIEW 2.1 HERBICIDE (0.46 lb metribuzin + 0.23 lb sulfentrazone) per twelve-month period.
- **DO NOT** make more than one PREVIEW 2.1 HERBICIDE application per acre per 12-month period. The twelve-month period is considered to begin upon the initial PREVIEW 2.1 HERBICIDE application.
- DO NOT apply by air.
- DO NOT make postemergence applications of other herbicides containing metribuzin to transplanted tomatoes within 14 days of applying PREVIEW 2.1 HERBICIDE.
- DO NOT use on soils classified as sand, which have less than 1% organic matter.
- Use of low-pressure, high volume hand wand equipment is prohibited.

# STORAGE AND DISPOSAL

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

# **Pesticide Storage**

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

# To confine spill

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

# **Pesticide Disposal**

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional office for guidance.

# **Container Handling**

**Nonrefillable container**. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows:

(For containers greater than 5 gallons) Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

(For containers 5 gallons or less) Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Then offer for recycling if available, or reconditioning if appropriate, or, if allowed by state and local authorities, puncture and dispose of in a sanitary landfill or incineration, or by burning. If burned, stay out of smoke.

Returnable/Refillable Containers - Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or reconditioning if appropriate, or, if allowed by state and local authorities, puncture and dispose of in a sanitary landfill or incineration, or by burning. If burned, stay out of smoke.

# IMPORTANT INFORMATION READ BEFORE USING PRODUCT

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**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.

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