

# MOUNTAINEER® 6 MAX

## Non-Selective Herbicide

### ACTIVE INGREDIENTS:

Glyphosate, N-(phosphonomethyl) glycine, in the form of its isopropylamine salt*	30.94%
Glyphosate, N-(phosphonomethyl) glycine, in the form of its potassium salt**	22.99%
<b>OTHER INGREDIENTS:</b>	<b>46.07%</b>
<b>TOTAL:</b>	<b>100.00%</b>

\* Contains 400 grams per liter or 3.33 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its isopropylamine salt. Equivalent to 297 grams per liter or 2.5 pounds per U.S. gallon glyphosate acid.

\*\* Contains 297 grams per liter or 2.5 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its potassium salt. Equivalent to 243 grams per liter or 2.0 pounds per U.S. gallon glyphosate acid. Equivalent to 540 grams per liter or 4.5 pounds per U.S. gallon glyphosate acid.

## KEEP OUT OF REACH OF CHILDREN CAUTION

SEE INSIDE BOOKLET FOR FIRST AID AND  
ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300  
For Medical Emergencies Only, Call (800) 222-1222

EPA REG. No.: 89167-47-91395



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

Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing.

**FIRST AID**

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

**HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-222-1222 for emergency medical treatment information.

**DOMESTIC ANIMALS:** This product is considered to be relatively nontoxic to dogs and other domestic animals; however, ingestion of this product or large amounts of freshly sprayed vegetation may result in temporary gastrointestinal irritation (vomiting, diarrhea, colic, etc.). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration. Call a veterinarian if symptoms persist for more than 24 hours.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):**

**Mixers, Loaders, Other Handlers and Applicators, when handling this concentrated product or its application solutions of 30 percent concentration or greater, must wear:** long-sleeved shirt and long pants, shoes, socks, any waterproof gloves.

**Applicators, when handling spray solutions where concentration of this product of this product is less than 30 percent, must wear:** long-sleeved shirt and long pants, shoes, and socks.

Follow manufacturer's instructions for cleaning/maintaining PPE (Personal Protective Equipment). 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 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**

**Users Should:**

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

**ENVIRONMENTAL HAZARDS**

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

**PHYSICAL OR CHEMICAL HAZARDS**

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers. **DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL), CONTAINERS OR SPRAY TANKS.** This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in any manner inconsistent with its labeling. This product can only be used in accordance with the Directions for Use on this label or in separately published Supplemental 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 regulations.

**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 4 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, wear: coveralls, shoes plus socks and waterproof gloves.

**NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.  
Keep people and pets off treated areas until spray solution has dried.

**PRODUCT INFORMATION (HOW THIS PRODUCT WORKS)**

**Product Description:** This product is a post-emergent, systemic herbicide with no soil residual activity. It is generally non-selective and gives broad-spectrum control of many annual weeds, perennial weeds, woody brush and trees. It is formulated as a water-soluble liquid. It may be applied through most standard industrial or field-type sprayers after dilution and thorough mixing with water or other carriers according to label instructions.

Do not add surfactants, additives containing surfactants, buffering agents or pH adjusting agents to the spray solution when this product is the only pesticide used unless otherwise directed. See the "MIXING" section of this label for instructions regarding other additives.

**Time to Symptoms:** This product moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 2 to 4 days, but on most perennial weeds may not occur for 7 days or more. Extremely cool or cloudy weather following treatment may slow activity of this product and delay development of visual symptoms. Visible effects are a gradual wilting and yellowing of the plant, which advances to complete browning of above-ground growth and deterioration of underground plant parts.

**Stage of Weeds:** Annual weeds are easiest to control when they are small. Best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity. Refer to the "ANNUAL WEEDS", "PERENNIAL WEEDS" and "WOODY BRUSH AND TREES RATE TABLES" for recommendations for specific weeds.

Always use the higher rate of this product per acre within the listed range when weed growth is heavy or dense or weeds are growing in an undisturbed (non-cultivated) area. Do not treat weeds with disease or insect damage, as reduced weed control may result. Reduced results may also occur when treating weeds under poor growing conditions or that are heavily covered with dust.

**Cultural Considerations:** Reduced control may result when applications are made to annual or perennial weeds that have been mowed, grazed or cut, and have not been allowed to regrow to the indicated stage for treatment.

**Rainfastness:** Heavy rainfall soon after application may wash this product off of the foliage and a repeat application may be required for adequate control.

**Spray Coverage:** For best results, spray coverage should be uniform and complete. Do not spray weed foliage to the point of run-off.

**Mode of Action:** The active ingredient in this product inhibits an enzyme found only in plants and microorganisms that is essential to formation of specific amino acids.

**No Soil Activity:** Weeds must be emerged at the time of application to be controlled by this product. Weeds germinating from seed after application will not be controlled. Unemerged plants arising from unattached underground rhizomes or root stocks of perennials will not be affected by the herbicide and will continue to grow.

**Biological Degradation:** Degradation of this product is primarily a biological process carried out by soil microbes.

**Tank Mixing:** This product does not provide residual weed control. For subsequent residual weed control, follow a label-approved herbicide program. Read and carefully observe the

cautionary statements and all other information appearing on the labels of all herbicides used. Use according to the most restrictive label directions for each product in the mixture. When this label indicates a tank mixture with a generic active ingredient such as diuron, atrazine, 2,4-D or dicamba, the user is responsible for ensuring that the mixture product's label allows the specific application.

To the extent consistent with applicable law, buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are not expressly mentioned in this labeling. Mixing this product with herbicides or other materials may result in reduced performance.

**Annual Maximum Use Rate:** Except as otherwise specified in a crop section of this label, the combined total of all treatments must not exceed 5.3 quarts of this product per acre per year. For applications in noncrop sites or in tree, vine or shrub crops, the combined total of all treatments must not exceed 7 quarts of this product per acre per year. The maximum use rates stated throughout this product's labeling apply to this product combined with the use of all other herbicides containing glyphosate or sulfosate as the active ingredient, whether applied as mixtures or separately. Calculate the application rates and ensure that the total use of this and other glyphosate or sulfosate containing products does not exceed stated maximum use rate.

**NOTE:** Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences.

### WEED RESISTANCE MANAGEMENT

Any weed population may contain plants that are naturally resistant to glyphosate, the active ingredient in this product, and to other herbicides with the same mode of action. ATTENTION: These resistant weed biotypes will not be controlled by this product. Consult advisors such as your local agricultural extension service for agronomic management practices to minimize the occurrence of glyphosate resistance and considerations for supplemental control measures.

#### Weed Management

To minimize the occurrence of glyphosate-resistant biotypes, observe the following weed management recommendations:

- Scout your fields before and after herbicide applications.
- Start with a clean field, using either a burndown herbicide application or tillage.
- Control weeds early when they are relatively small.
- Add other herbicides (e.g. a selective and/or a residual herbicide) and cultural practices (e.g. tillage or crop rotation) where appropriate.
- One method for adding other herbicides into a continuous Roundup Ready system is to rotate to other Roundup Ready crops.
- Utilize the recommended label rate for the most difficult to control weed in your field. Avoid tank mixtures with other herbicides that reduce this product's efficacy (through antagonism), or tank mixture recommendations that encourage application rates of this product below the label recommendations.
- Control weed escapes and prevent weeds from setting seeds.
- Clean equipment before moving from field to field to minimize the spread of weed seed or plant parts.
- Use new commercial seed that is as free of weed seed as possible.
- Report any incidence of repeated non-performance of this product on a particular weed to your Agriculture representative, local retailer, or county extension agent.

#### Management of Glyphosate-Resistant Biotypes

Since the occurrence of new glyphosate-resistant weeds cannot be determined until after product use and scientific confirmation, manufacturer is not responsible for any losses that may result from the failure of this product to control glyphosate-resistant weed biotypes.

The following good agronomic practices are recommended to reduce the spread of confirmed glyphosate-resistant biotypes:

- If a naturally occurring resistant biotype is present in your field, this product should be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g. crop rotation or tillage) may also be used as appropriate.
- One method for adding other herbicides into a continuous Roundup Ready system to rotate to other Roundup Ready crops.
- Scout treated fields after herbicide applications and control escaping weeds including resistant biotypes before they set seed.

- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.

### MIXING

Clean sprayer parts immediately after using this product by thoroughly flushing with water. **NOTE: REDUCED RESULTS MAY OCCUR IF WATER CONTAINING SOIL IS USED, SUCH AS VISIBLY MUDDY WATER OR WATER FROM PONDS AND DITCHES THAT IS NOT CLEAR.**

### MIXING WITH WATER

This product mixes readily with water. Mix spray solutions of this product as follows: Fill the mixing or spray tank with the required amount of water. Add the required amount of this product near the end of the filling process and mix well. Use caution to avoid siphoning back into the carrier source. Use approved anti-back-siphoning devices where required by State or local regulations. During mixing and application, foaming of the spray solution may occur. To prevent or minimize foam, avoid the use of mechanical agitators, terminate by-pass and return lines at the bottom of the tank and, if needed, use an approved anti-foam or defoaming agent.

### TANK MIXING PROCEDURE

Mix labeled tank mixtures of this product with water as follows:

- Place a 20- to 35-mesh screen or wetting basket over filling port.
- Through the screen, fill the spray tank one-half full with water and start agitation.
- If ammonium sulfate is used add it slowly through the screen into the tank. Continue agitation. Ensure that any ammonium sulfate is completely dissolved in the spray tank before adding other products.
- If a wettable powder is used, make a slurry with the water carrier, and add it SLOWLY through the screen into the tank. Continue agitation.
- If a flowable formulation is used, premix one part flowable with one part water. Add diluted mixture SLOWLY through the screen into the tank. Continue agitation.
- If an emulsifiable concentrate formulation is used, premix one part emulsifiable concentrate with two parts water. Add diluted mixture slowly through the screen into the tank. Continue agitation.
- Continue filling the spray tank with water and add the required amount of this product near the end of the filling process.
- Add individual formulations to the spray tank as follows: wettable powder, flowable, emulsifiable concentrate, drift reduction additive and water soluble liquid.

Maintain good agitation at all times until the contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed.

Keep by-pass line on or near the bottom of the tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50 mesh. Always predetermine the compatibility of labeled tank mixtures of this product with water carrier by mixing small proportional quantities in advance. Ensure that the specific tank mixture product is registered for application at the desired site.

Refer to the "Tank Mixing" section of "PRODUCT INFORMATION" for additional precautions.

### MIXING FOR HAND-HELD SPRAYERS

Prepare the desired volume of spray solution by mixing the amount of this product in water as shown in the following table:

SPRAY SOLUTION						
Desired Volume	Amount of this product					
	0.4%	0.7%	1%	1.5%	4%	7%
1 gal	0.5 oz	1 oz	1.3 oz	2 oz	5 oz	9 oz
25 gal	0.8 pt	0.7 qt	1 qt	1.5 qt	4 qt	7 qt
100 gal	1.6 qt	2.8 qt	1 gal	1.5 gal	4 gal	7 gal

2 tablespoons = 1 fluid ounce

For use in knapsack sprayers, it is suggested that the listed amount of this product be mixed with water in a larger container. Fill sprayer with the mixed solution.

### AMMONIUM SULFATE

The addition of 1 to 2 percent dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this product, particularly under hard water conditions, drought conditions or when tank mixed with certain residual herbicides, on annual and perennial weeds. The equivalent rate of ammonium sulfate in a liquid formulation may also be used. Ensure that dry ammonium sulfate is completely dissolved in the spray tank before adding herbicides. Thoroughly rinse the spray system with clean water after use to reduce corrosion.

**NOTE:** When using ammonium sulfate, apply this product at rates listed in this label. Lower rates will result in reduced performance.

### COLORANTS OR DYES

Agriculturally approved colorants or marking dyes may be added to this product. Colorants or dyes used in spray solutions of this product may reduce performance, especially at lower rates or dilutions. Use colorants or dyes according to the manufacturer's recommendations.

### DRIFT REDUCTION ADDITIVES

Drift reduction additives may be used with all equipment types, except wiper applicators, sponge bars and Controlled Droplet Applicator (CDA) equipment. When a drift reduction additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label. The use of drift reduction additives can affect spray coverage which may result in reduced performance.

### APPLICATION EQUIPMENT AND TECHNIQUES

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

Apply this product with the following application equipment:

**Aerial**—Fixed Wing and Helicopter

**Ground Broadcast Spray**—Boom or boomless systems, pull-type sprayer, floaters, pick-up sprayers, spray coupes and other ground broadcast equipment.

**Hand-Held or High-Volume Spray Equipment**—Knapsack and backpack sprayers, pump-up pressure sprayers, handguns, handwands, mistblowers\*, lances and other hand-held and motorized spray equipment used to direct the spray onto weed foliage.

\*This product is not registered in California or Arizona for use in mistblowers.

**Selective Equipment**—Recirculating sprayers, shielded and hooded sprayers, wiper applicators and sponge bars.

**Injection Systems**—Aerial or ground injection sprayers.

**Controlled Droplet Applicator (CDA)**—Hand-held or boom-mounted applicators which produce a spray consisting of a narrow range of droplet sizes.

**APPLY THESE SPRAY SOLUTIONS IN PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING DESIRED VOLUMES.**

### AERIAL EQUIPMENT

#### FOR AERIAL APPLICATION IN ARKANSAS ONLY

Use the listed rate of this product in 3 to 15 gallons of water per acre.

Use sufficient carrier volume and appropriate equipment set-up to form droplets large enough to avoid drift potential. Coarse droplets in the 300 to 500 (VMD) micron range are recommended.

Applications should typically be made with the nozzle release point at 8 to 15 feet above the top of the target plants unless a greater height is required for aircraft safety.

The distance of the outermost nozzles on the boom must not exceed 75 percent of the length of the wingspan or rotor. In many cases, reducing this distance to 65 percent of the length of the wingspan or rotor will improve drift control without affecting the swath width.

Nozzles must always discharge backward parallel with the air stream and never discharge downwards more than 45 degrees on fixed wing aircraft or forward of the prevailing airflow on rotary winged aircraft. Avoid the use of nozzles with wide-angle discharge. Do not apply this product when winds are in excess of 10 miles per hour.

Do not apply when there is a low-level inversion where fine spray particles could be suspended in still air and move outside the target area when the inversion layer moves. These conditions may occur when wind speeds are less than 2 miles per hour.

Use the following guidelines when applications are made near crops or other desirable vegetation:

1. Do not apply within 100 feet of any desirable vegetation or crops.
2. If wind up to 5 miles per hour is blowing toward desirable vegetation or crops, do not apply within 500 feet upwind of the desirable vegetation or crops.
3. Winds blowing from 6 to 10 miles per hour toward desirable vegetation or crops will likely require buffer zones in excess of 500 feet. Do NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT EXCEPT UNDER CONDITIONS AS SPECIFIED

**WITHIN THIS LABEL.** Use the listed rates of this herbicide in 3 to 15 gallons of water per acre unless otherwise specified on this label. Unless otherwise specified, do not exceed 22 fluid ounces per acre. Refer to the individual use area sections of this label for listed volumes, application rates, and further instructions.

This product plus dicamba tank mixtures must not be applied by air in California. Ensure uniform application—To avoid streaked, uneven or overlapped application, use appropriate marking devices.

### AERIAL SPRAY DRIFT MANAGEMENT

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops:

1. The distance of the outermost 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. Where states have more stringent regulations, they must be observed.

### 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. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see the "Wind", "Temperature and Humidity" and "Temperature Inversions" sections of this label).

### Controlling Droplet Size

- **Volume:** Use high/low rate nozzles to apply the highest practical spray volume. Nozzles with the higher rated flows produce larger droplets.
- **Pressure:** 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 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 backwards, parallel to the air stream, will produce larger droplets than other orientations. Significant deflection from the 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 larger droplets than other nozzle types.
- **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 the exposure of the droplets to evaporation and wind.

### Swath Adjustment

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

### Wind

Drift potential is lowest between wind speeds of 2 to 10 miles per hour. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 miles per hour 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 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 must not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by

increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### **Sensitive Areas**

The product must 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).

Avoid direct application to any body of water.

#### **Aircraft Maintenance**

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. **PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. LANDING GEAR IS MOST SUSCEPTIBLE.** The maintenance of an organic coating (paint), which meets aerospace specification MIL-C-38413, may prevent corrosion.

### **GROUND BROADCAST EQUIPMENT**

Use the listed rates of this product in 3 to 40 gallons of water per acre as a broadcast spray unless otherwise specified. As density of weeds increases, spray volume should be increased within the listed range to ensure complete coverage. Carefully select proper nozzles to avoid spraying a fine mist. For best results with ground application equipment, use flat spray nozzles. Check for even distribution of spray droplets.

### **HAND-HELD OR HIGH-VOLUME EQUIPMENT**

Apply to foliage of vegetation to be controlled. For applications made on a spray-to-wet basis, spray coverage should be uniform and complete.

Do not spray to the point of runoff. Use coarse sprays only. For listed rates and timing, refer to the "Annual Weeds—Hand-Held or High-Volume Equipment" section of this product label.

### **SELECTIVE EQUIPMENT**

This product may be applied through recirculating spray systems, shielded applicators, hooded sprayers, wiper applicators or sponge bars, after dilution and thorough mixing with water, to listed weeds growing in any noncrop site specified on this label.

In cropping systems, hooded sprayers, shielded sprayers, and wipers may be used in row-middles (in between rows of crop plants) where any dripping or leaking will not contact crop foliage. Such equipment must be capable of preventing air contact with herbicide solutions and operated without leakage of spray mists or dripping onto crop. Wipers over-the-top of crops may be used only when specifically indicated in this product's labeling.

#### **AVOID CONTACT OF HERBICIDE WITH DESIRABLE VEGETATION**

Contact of the herbicide solution with desirable vegetation may result in damage or destruction. Application equipment used above desirable vegetation should be adjusted so that the lowest spray stream or wiper contact point is at least 2 inches above the desirable vegetation. Droplets, mist, foam or splatter of the herbicide solution settling on desirable vegetation may result in discoloration, stunting or destruction.

Applications made above the crops should be made when the weeds are a minimum of 6 inches above the desirable vegetation. Better results may be obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. This may occur in dense clumps, severe infestations or when the height of the weeds varies so that not all weeds are contacted. In these instances, repeat treatment may be necessary.

#### **Recirculating Spray System**

A recirculating spray system directs the spray solution onto weeds growing above desirable vegetation, while spray solution not intercepted by weeds is collected and returned to the spray tank for reuse.

#### **Shielded and Hooded Applicators**

When applied under the conditions described in the following paragraphs for shielded and hooded applications, this product at listed rates will control those weeds listed in the "ANNUAL WEEDS" and "PERENNIAL WEEDS RATE TABLES" sections of this label. A hooded sprayer is a type of shielded applicator where the spray pattern is fully enclosed including top, sides, front and back, thereby shielding the crop from the spray solution. Keep shields on these sprayers adjusted to protect desirable vegetation. When applying to crops grown

on raised beds, ensure that the hood is designed to completely enclose the spray solution. If necessary, extend the front and rear flaps of the hoods to reach the ground in deep furrows. **EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF HERBICIDE WITH DESIRABLE VEGETATION.**

This equipment must be set up and operated in a manner that avoids bouncing or raising the hoods off the ground in any way. If the hoods are raised, spray particles may escape and come into contact with the crop, causing damage or destruction of the crop. Avoid operation on rough or sloping ground where the spray hoods might be raised off the ground.

Use hoods designed to minimize excessive dripping or run-off down the insides of the hoods. A single, low pressure/low drift flat fan nozzle with an 80 to 95 degree spray angle positioned at the top center of the hood is recommended. Spray volume should be 20 to 30 gallons per acre.

These procedures will reduce the potential for crop injury:

- The spray hoods must be operated on the ground or skimming across the ground.
- Leave at least an 8 inch untreated strip over the drill row. For example, if the crop row width is 38 inches, the maximum width of the spray hood should be 30 inches.
- Maximum tractor speed: 5 miles per hour to avoid bouncing of the spray hoods.
- Maximum wind speed: 10 miles per hour.
- Use low-drift nozzles that provide uniform coverage within the treated area.

Crop injury may occur when the foliage of treated weeds comes into direct contact with leaves of the crop. Do not apply this product when the leaves of the crop are growing in direct contact with weeds to be treated. Droplets, mist, foam or splatter of the herbicide solution may contact the crop and cause discoloration, stunting or destruction.

#### **Wiper Applicators**

When applied under the conditions described in the following paragraphs, this product **CONTROLS** many weeds, including volunteer corn, Texas panicum, common rye, shatter cane, sicklepod, spanishneedles and bristly starling, and **SUPPRESSES** many weeds including Florida beggarweed, Bermudagrass, hemp dogbane, dogfennel, guineagrass, Johnson grass, milkweed, silverleaf nightshade, reedroot pigweed, giant ragweed, smutgrass, sunflower, Canada thistle, musk thistle, vasegrass and velvetleaf.

Wiper applicators are devices that physically wipe appropriate amounts of this product directly onto the weed.

Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting desirable vegetation. Operate this equipment at ground speeds no greater than 5 miles per hour. Performance may be improved by reducing speed in areas of heavy weed infestations to ensure adequate wiper saturation. Better results may be obtained if two applications are made in opposite directions.

Avoid leakage or dripping onto desirable vegetation. Adjust height of applicator to ensure adequate contact with weeds. Keep wiper surfaces clean. Be aware that, on sloping ground, the herbicide solution may migrate, causing dripping on the lower end and drying of the wicks on the upper end of a wiper applicator.

Do not use wiper equipment when weeds are wet.

Mix only the amount of solution to be used during a 1-day period, as reduced activity may result from use of leftover solutions. Clean wiper parts immediately after using this product by thoroughly flushing with water.

Do not add surfactant to the herbicide solution.

**For Rope or Sponge Wick Applicators**—Solutions ranging from 33 to 75 percent of this product in water may be used. Apply this solution to weeds listed above in this section.

**For Panel Applicators**—Solutions ranging from 33 to 100 percent of this product in water may be used in panel wiper applicators.

### **INJECTION SYSTEMS**

This product may be used in aerial or ground injection spray systems. It may be used as a liquid concentrate or diluted prior to injecting into the spray stream. Do not mix this product with the concentrate of other products when using injection systems.

### **CDA EQUIPMENT**

The rate of this product applied per acre by vehicle-mounted CDA equipment must not be less than the amount indicated in this label when applied by conventional broadcast equipment. For vehicle-mounted CDA equipment, apply 2 to 15 gallons of water per acre.

For the control of annual weeds with hand-held CDA units, apply a 20-percent solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 1.5 miles per hour (1 quart per acre). For the control of perennial weeds, apply a 20- to 30-percent solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of

0.75 mile per hour (2 to 3 quarts per acre).

Controlled droplet application equipment produces a spray pattern that is not easily visible. Extreme care must be exercised to avoid spray or drift contacting the foliage or any other green tissue of desirable vegetation, as damage or destruction may result.

#### **ANNUAL AND PERENNIAL CROPS (ALPHABETICAL)**

**NOTE:** THIS SECTION GIVES DIRECTIONS THAT APPLY TO ALL LISTED CROPS WITHIN THIS SECTION GROUPED ALPHABETICALLY BELOW. SEE THE INDIVIDUAL CROP CATEGORIES FOR SPECIFIC INSTRUCTIONS, PREHARVEST INTERVALS, AND ADDITIONAL PRECAUTIONS AND RESTRICTIONS.

See the "ROUNDUP READY CROPS" section of this label or separately published Supplemental Labeling for instructions for treating Roundup Ready crops.

**TYPES OF APPLICATIONS:** Chemical Fallow, Preplant Fallow Beds, Preplant, Pre emergence, At-Planting, Hooded Sprayers in Row-Middles, Shielded Sprayers in Row-Middles, Wiper Applications in Row-Middles, Post-Harvest treatments.

**PRODUCT USE INSTRUCTIONS:** Apply this product during fallow intervals preceding planting, prior to planting or transplanting, at-planting, or preemergent to annual and perennial crops listed in this label, except where specifically limited. For any crop not listed in this label, applications must be made at least 30 days prior to planting. Unless otherwise specified, weed control applications may be made according to the rates listed in the "ANNUAL WEEDS", "PERENNIAL WEEDS" and "WOODY BRUSH AND TREES RATE TABLES" in this label. Repeat applications may be made up to a maximum of 5.3 quarts per acre per year.

Post-directed hooded sprayers and wiper equipment capable of preventing all crop contact with herbicide solutions may be used in mulched or unmulched row-middles after crop establishment. Where specifically noted below, wipers may also be used above certain crops to control tall weeds. Refer to the "Selective Equipment" section of this label for essential precautions when using hooded sprayers or wipers to avoid crop injury caused by leakage of spray mists or dripping onto crops. Crop injury is possible with these applications and shall be the sole responsibility of the applicator.

The maximum use rates stated throughout this product's labeling apply to this product combined with the use of all other herbicides containing glyphosate or sulfosate as the active ingredient, whether applied as mixtures or separately. Calculate the application rates and ensure that the total use of this and other glyphosate or sulfosate containing products does not exceed stated maximum use rate.

**PRECAUTIONS:** Avoid contact of herbicide with foliage, green shoots or stems, bark, exposed roots (including those emerging from plastic mulch), or fruit of crops because severe injury or destruction may result. Take care to avoid drift or spray outside the target area for the same reason. When making preemergence and at-planting applications, applications must be made before crop emergence to avoid severe crop injury. Broadcast applications made at emergence will result in injury or death to emerged seedlings. Apply before seed germination in coarse sandy soils to further minimize the risk of injury.

**RESTRICTIONS:** Unless otherwise specified in this product's labeling, treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest. Post-harvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop. See "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for additional information.

In crops where spot treatments are allowed, do not treat more than 10 percent of the total field to be harvested. The crop receiving spray in treated area will be killed.

For broadcast post-emergent treatments, do not harvest or feed treated vegetation for 8 weeks following application, unless otherwise specified.

#### **CEREAL AND GRAIN CROPS**

**LABELED CROPS:** Barley, Buckwheat, Millet (pearl, proso), Oats, Rice, Rye, Quinoa, Teff, Teosinte, Triticale, Wheat (all types), Wild rice.

**RESTRICTIONS:** Do not treat rice fields or levees when field contains water.

**TYPES OF APPLICATIONS:** Those listed in the "ANNUAL AND PERENNIAL CROPS" section plus the following: Red Rice Control Prior to Planting Rice, Spot Treatment (except Rice), Over-the-Top Wiper Applications (Feed Barley and Wheat Only), Preharvest (Feed Barley and Wheat Only).

#### **Preplant, Preemergence, At-Planting**

**USE INSTRUCTIONS:** This product may be applied before, during or after planting of cereal crops. Applications must be made prior to emergence of the crop.

#### **Red Rice Control Prior to Planting Rice**

**USE INSTRUCTIONS:** Apply 32 fluid ounces of this product in 5 to 10 gallons of water per acre. Flush fields prior to application to obtain uniform germination and stand of red rice. Make application when the majority of the red rice plants are in the 2-leaf stage and no more than 4 inches tall. Red rice plants with less than 2 true leaves may be only partially controlled.

**PRECAUTIONS:** Avoid spraying during low humidity conditions, as reduced control may result. **RESTRICTIONS:** Do not treat rice fields or levees when the fields contain floodwater. Do not re-flood treated fields for 8 days following application.

#### **Spot Treatment (Except Rice)**

**USE INSTRUCTIONS:** This product may be applied as a spot treatment in cereal crops. Apply this product before heading in small grains.

**PRECAUTIONS:** The crop receiving spray in the treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.

**RESTRICTIONS:** Do not treat more than 10 percent of the total field area to be harvested.

#### **Over-the-Top Wiper Applications (Feed Barley and Wheat Only)**

**USE INSTRUCTIONS:** Wiper applications may be used in wheat and feed barley. To control common rye or cereal rye, apply after the weeds have headed and achieved maximum growth and when the rye is at least 6 inches above the wheat crop.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow at least 35 days between application and harvest. Do not use wiper applicators.

#### **Preharvest (Feed Barley and Wheat Only)**

**USE INSTRUCTIONS:** This product provides weed control when applied prior to harvest of wheat or feed barley. For wheat, apply after the hard-dough stage of grain (30 percent or less grain moisture). For feed barley, apply after the hard-dough stage and when the grain contains 20 percent moisture or less. Stubble may be grazed immediately after harvest.

This product may be applied using either aerial or ground spray equipment. For ground applications, apply this product in 10 to 20 gallons of water per acre. For aerial applications, apply this product in 3 to 10 gallons of water per acre.

**PRECAUTIONS:** Preharvest application is not recommended for wheat or barley grown for seed, as a reduction in germination or vigor may occur.

**RESTRICTIONS:** Do not apply more than 22 fluid ounces of this product per acre. **Pre-harvest Interval (PHI):** Allow 7 days between application and harvest or grazing.

#### **Post-Harvest**

**USE INSTRUCTIONS:** This product may be applied after harvest of cereal crops. Higher rates may be required for control of large weeds which were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.

**RESTRICTIONS:** For any crop not listed on this label, applications must be made at least 30 days prior to planting the next crop. **Pre-harvest Interval (PHI):** Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.

## CORN

**TYPES OF CORN:** Field corn, Seed corn, Silage corn, Sweet corn, Popcorn.

**TYPES OF APPLICATIONS:** Those listed in the "ANNUAL AND PERENNIAL CROPS" section plus the following: Spot Treatment, Preharvest. For Roundup Ready corn, see the "ROUNDUP READY CROPS" section of this label.

### Preplant, Preemergence, At-Planting

**USE INSTRUCTIONS:** This product may be applied alone or in a tank mixture before, during or after planting corn. Applications must be made prior to emergence of the crop.

**TANK MIXTURES:** This product may be tank-mixed with the following products provided that the specific product is registered for application prior to planting corn. Apply these tank mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre.

2,4-D	Bullet®	FulTime®	Marksman®
Aim®	Degree®	Guardsman®/Leadoff®	Micro-Tech®
Atrazine	Degree Xtra®	Harness®	Prowl®
Axiom®	Distinct®	Harness Xtra	Python®
Balance®	Dual MAGNUM®	Harness Xtra 5.6L	Simazine
Banvel/Clarity®	Dual II MAGNUM®	Lariat®	TopNotch®
Bicep MAGNUM®	Epic®	Lasso®/Alachlor	
Bicep II MAGNUM®	Frontier®/Outlook®	Linex®/Lorox®	

For difficult-to-control annual weeds such as fall panicum, barnyardgrass, crabgrass, shattercan and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 22 fluid ounces per acre in these tank mixtures. For other labeled annual weeds, apply 16 to 22 fluid ounces of this product per acre when weeds are less than 6 inches tall, and 22 to 32 fluid ounces when weeds are over 6 inches tall. When using nitrogen solutions as the carrier, use rate may need to be increased for acceptable weed control.

**RESTRICTIONS:** Applications of 2,4-D or dicamba must be made at least 7 days prior to planting corn.

For Southern states, do not apply in nitrogen solutions to tough-to-control grasses such as barnyardgrass, fall panicum, broadleaf signalgrass, annual grass and any perennial weeds. The area covered by these rates include from Route 50 South in Illinois and Indiana and the following states: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, New Jersey, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.

### Hooded Sprayers

**USE INSTRUCTIONS:** This product may be used through hooded sprayers for weed control between the rows of corn. Only hooded sprayers that completely enclose the spray pattern may be used. See additional instructions for the use of hooded sprayers in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

**PRECAUTIONS:** Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage. Such damage shall be the sole responsibility of the applicator.

**RESTRICTIONS:** Corn must be at least 12 inches tall, measured without extending leaves. Do not apply more than 22 fluid ounces of this product per acre for each application and no more than 64 fluid ounces per acre per year for hooded sprayer applications.

### Spot Treatment

**USE INSTRUCTIONS:** For spot treatments, apply this product prior to silking of corn.

**PRECAUTIONS:** The crop receiving spray in the treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.

**RESTRICTIONS:** Do not treat more than 10 percent of the total field area to be harvested.

### Preharvest

**USE INSTRUCTIONS:** Make applications at 35 percent grain moisture or less. Ensure that maximum kernel fill is complete and the corn is physiologically mature (black layer formed). For ground applications, apply up to 64 fluid ounces of this product per acre. For aerial applications, apply up to 44 fluid ounces of this product per acre.

**PRECAUTIONS:** Preharvest application is not recommended for corn grown for seed, as a reduction in germination or vigor may occur.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between application and harvest.

## Post-Harvest

**USE INSTRUCTIONS:** This product may be applied after harvest of corn. Higher rates may be required for control of large weeds, which were growing in the drop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.

## COTTON

**TYPES OF APPLICATIONS:** Those listed in the "ANNUAL AND PERENNIAL CROPS" section plus the following: Selective Equipment, Spot Treatment, Preharvest.

For Roundup Ready cotton, see the "ROUNDUP READY CROPS" section of this label.

### Preplant, Preemergence, At-Planting

**USE INSTRUCTIONS:** This product may be applied before, during or after planting cotton. Applications must be made prior to emergence of the crop.

**TANK MIXTURES:** This product may be tank mixed with the following products provided that the specific product is registered for application prior to planting cotton. Apply these tank mixtures in 10 to 20 gallons of water per acre.

Caporal®	Cotton-Pro®	Karmex®	Zorial®
Clarity®	Direx®	Meturon®	2,4-D
Command®	Dual MAGNUM	Prowl	
Cotaran®	Dual II MAGNUM	Staple®	

**RESTRICTIONS:** Refer to individual product labels for rates, restrictions, precautionary statements and preplant intervals.

### Hooded Sprayers, Selective Equipment

**USE INSTRUCTIONS:** This product may be applied through hooded sprayers, recirculating sprayers, shielded applicators or wiper applicators in cotton. Allow at least 7 days between application and harvest.

**PRECAUTIONS:** See the "Selective Equipment" part of the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information on proper use and calibration of this equipment.

### Spot Treatment

**USE INSTRUCTIONS:** For spot treatments, apply this product prior to boll opening of cotton. **PRECAUTIONS:** The crop receiving spray in treated area will be killed. Take care to avoid drift of spray outside target area for the same reason.

**RESTRICTIONS:** Do not treat more than 10 percent of the total field area to be harvested.

### Preharvest

**USE INSTRUCTIONS:** This product provides weed control and cotton regrowth inhibition when applied prior to harvest of cotton. For weed control, apply at rates given in the "ANNUAL WEEDS", "PERENNIAL WEEDS" and "WOODY BRUSH AND TREES RATE TABLES" sections of this label. For cotton regrowth inhibition, apply 11 to 44 fluid ounces of this product per acre.

Up to 44 fluid ounces of this product may be applied using either aerial or ground spray equipment. Apply after sufficient bolls have developed to produce the desired yield of cotton. Applications made prior to this time could affect maximum yield potential.

**TANK MIXTURES:** This product may be tank mixed with DEF® 6, Dropp®, Folex®, Ginstar®, or Prep™ to provide additional enhancement of cotton leaf drop.

**PRECAUTIONS:** Preharvest application is not recommended for cotton grown for seed, as a reduction in germination or vigor may occur.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between application and harvest of cotton.

## FALLOW SYSTEMS

**LABELLED CROPS:** This product may be applied during the fallow period prior to planting or emergence of any crop on this label.

**TYPES OF APPLICATIONS:** Chemical Fallow, Preplant Fallow Beds, Aid-to-Tillage.

### Chemical Fallow

**USE INSTRUCTIONS:** This product may be applied during the fallow period prior to planting or emergence of any crop listed on this label. This product may be used as a substitute for tillage to control annual weeds in fallow fields. Also, broadcast or spot treatments will control or suppress many perennial weeds in fallow fields. Ground or aerial application equipment

may be used. Tank mixtures with 2,4-D and dicamba may be used. Applications up to 44 fluid ounces per acre may be made by aerial application in fallow sites where there is sufficient buffer to prevent injury due to drift onto adjacent crops.

**PRECAUTIONS:** Some crop injury may occur if dicamba is applied within 45 days of planting. **RESTRICTIONS:** For any crop not listed on this label, applications must be made at least 30 days prior to planting. Do not apply dicamba tank mixtures by air in California.

Refer to the specific product labels for crop rotation restrictions and cautionary statements of all products used in tank mixtures.

#### Preplant Fallow Beds

**USE INSTRUCTIONS:** This product may be applied to fallow beds prior to planting or emergence of any crop listed on this label. For any crop not listed on this label, applications must be made at least 30 days prior to planting. This product will control weeds listed in the "ANNUAL WEEDS", "PERENNIAL WEEDS" and "WOODY BRUSH AND TREES RATE TABLES" sections of this label.

**TANK MIXTURES:** In addition, 8 fluid ounces of this product plus 2 to 3 fluid ounces of Goal<sup>®</sup> 2XL per acre will control the following weeds with the maximum height or length indicated: 3 inches—common cheeseweed, chickweed, groundsel; 6 inches—London rocket, shepherd's-purse.

11 fluid ounces of this product plus 2 to 3 fluid ounces of Goal 2XL per acre will control the following weeds with the maximum height or length indicated: 6 inches—common cheeseweed, groundsel, marestalk (*Coryza canadensis*), 12 inches—chickweed, London rocket, shepherd's-purse.

#### Aid-to-Tillage

**USE INSTRUCTIONS:** This product may be used in conjunction with tillage practices in fallow systems or preplant to labeled crops to control downy brome, cheat, volunteer wheat, tansy mustard and foxtail. Apply 8 fluid ounces of this product in 3 to 10 gallons of water per acre. Make applications before weeds are 6 inches in height. Application must be followed by conventional tillage practices no later than 15 days after treatment and before regrowth occurs. Allow at least 1 day after application before tillage.

**PRECAUTIONS:** Tank mixtures with residual herbicides may result in reduced performance.

### GRAIN SORGHUM (MILO)

**TYPES OF APPLICATIONS:** Those listed in the "ANNUAL AND PERENNIAL CROPS" section plus the following: Spot Treatment, Over-the-Top Wiper Applications, Preharvest.

#### Preplant, Preemergence, At-Planting

**USE INSTRUCTIONS:** This product may be applied alone or in tank mixture before, during or after planting grain sorghum. Applications must be made prior to emergence of the crop. **TANK MIXTURES:** This product may be tank-mixed with the following products provided that the specific product is registered for application prior to planting grain sorghum. Apply these tank mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre.

Atrazine	Bullet	Lariat	Micro-Tech
Bicep II MAGNUM	Dual II MAGNUM	Lasso	

For difficult-to-control annual weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 22 fluid ounces per acre. In these tank mixtures. For other labeled annual weeds, apply 16 to 22 fluid ounces of this product per acre when weeds are less than 6 inches tall, and 22 to 32 fluid ounces when weeds are over 6 inches tall. When using nitrogen solutions as the carrier, the use rate may need to be increased for acceptable weed control.

#### Spot Treatment, Over-the-Top Wiper Applications

**USE INSTRUCTIONS:** This product may be applied as a spot treatment in grain sorghum. Make spot treatments before heading of milo. This product may be applied with wiper applicators to control or suppress the weeds listed under "Wiper Applicators" in the "Selective Equipment" section of this label.

**PRECAUTIONS:** The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.

**RESTRICTIONS:** For spot treatment, do not treat more than 10 percent of the total field area to be harvested. For wiper applicators, allow at least 40 days between application and harvest. Do not use roller applicators. Do not feed or graze treated milo fodder. Do not ensile treated vegetation.

#### Hooded Sprayers

**USE INSTRUCTIONS:** This product may be used through hooded sprayers for weed control between the rows of milo. Only hooded sprayers that completely enclose the spray pattern may be used. See additional instruction for the use of hooded sprayers in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

Crop injury may occur when the foliage of treated weeds comes into direct contact with leaves of the crop. Do not apply this product when the leaves of the crop are growing in direct contact with weeds to be treated. Droplets, mist, foam or splatter of the herbicide solution may contact the crop and cause discoloration, stunting or destruction.

**PRECAUTIONS:** Treat before milo sends tillers between the drill rows. If such tillers are contacted with the spray solution, the main plant may be killed. Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage. Such damage shall be the sole responsibility of the applicator.

**RESTRICTIONS:** Milo must be at least 12 inches tall, measured without extending leaves. Treat before milo sends tillers between the drill rows. Do not graze or feed milo forage or fodder following applications of this product through hooded sprayers. Do not apply more than 22 fluid ounces of this product per acre per application and no more than 64 fluid ounces per acre per year for hooded sprayer applications.

#### Preharvest

**USE INSTRUCTIONS:** Make applications at 30 percent grain moisture or less.

**PRECAUTIONS:** As with other herbicides that cause sudden plant death, avoid preharvest applications of this product to milo infected with charcoal rot as lodging can occur. Preharvest application is not recommended for sorghum grown for seed, as a reduction in germination or vigor may occur.

**RESTRICTIONS:** Do not apply more than 44 fluid ounces of this product per acre. **Pre-harvest Interval (PHI):** Allow a minimum of 7 days between application and harvest of sorghum. The use of this product for preharvest grain sorghum (milo) is not registered in California.

#### Post-Harvest

**USE INSTRUCTIONS:** This product may be applied after harvest of grain sorghum. Higher rates may be required for control of large weeds which were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.

This product may be applied to grain sorghum (milo) stubble following harvest to suppress or control regrowth. Apply 22 fluid ounces of this product per acre for control, or 16 fluid ounces of this product per acre for suppression.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.

### HERBS AND SPICES

**LABELED CROPS:** Allspice, Angelica, Star anise, Anatto (seed), Balm, Basil, Borage, Burnet, Camomile, Caper buds, Caraway, Black caraway, Cardamom, Cassia bark, Cassia buds, Catnip, Celery seed, Chervil (dried), Chive, Chinese chive, Cinnamon, Clary, Clove buds, Coriander leaf (cilantro or chinese parsley), Coriander seed (cilantro), Costmary, Culantro (leaf), Culantro (seed), Cummin, Curry (leaf), Dill (dillweed), Dill (seed), Epazote, Fennel seed (common and Florence), Fenugreek, White ginger flower, Grains of paradise, Horehound, Hyssop, Juniper berry, Lavender, Lemongrass, Lovage (leaf and seed), Mace, Marigold, Marjoram (including oregano), Mexican oregano, Mioga flower, Mustard (seed), Nasturtium, Nutmeg, Parsley (dried), Pennyroyal, Pepper (black and white), Pepper leaves, Peppermint, Perilla, Poppy (seed), Rosemary, Rue, Saffron, Sage, Savory (summer and winter), Spearmint, Stevia leaves, Sweet bay, Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff, Wormwood.

**TYPES OF APPLICATIONS:** Those listed in the "ANNUAL AND PERENNIAL CROPS" section plus the following: Over-the-Top Wiper Applications (Peppermint and Spearmint Only), Spot Treatment (Peppermint and Spearmint Only).

**PRECAUTIONS:** When applying this product prior to transplanting or direct-seeding crops into plastic mulch, care must be taken to remove residues of this product, which could cause crop injury, from the plastic prior to planting. Residues can be removed by a single 0.5-inch application of water, either by natural rainfall or via a sprinkler system. Care should be taken to ensure that the washwater flushes off the plastic mulch and does not enter the transplant holes.

**Over-the-Top Wiper Applications or Spot Treatment (Peppermint and Spearmint Only)**

**USE INSTRUCTIONS:** This product may be used as a spot treatment or wiper application in



spearmint and peppermint. Apply spot treatments on a spray-to-wet basis with handheld equipment, such as backpack and knapsack sprayers, pump-up pressure sprayers, handguns, handwands or any other hand-held or motorized spray equipment used to direct the spray solution to a limited area. In wiper applications, the applicator should be adjusted so that the wiper contact point is at least 2 inches above the crop. Weeds should be a minimum of 6 inches taller than the crop.

**PRECAUTIONS:** The crop receiving spray in the treated area will be killed. Take care to avoid drift or spray outside the target area for this reason. In wiper applications, contact of the herbicide solution with the crop may result in damage or destruction.

**RESTRICTIONS - Pre-harvest Interval (PHI):** Allow at least 7 days between application and harvest. Further applications may be made in the same area at 30-day intervals. In spot treatment applications, no more than 10 percent of the total field area to be harvested may be treated at one time.

#### OIL SEED CROPS

**LABELED CROPS:** Borage, Buffalo gourd (seed), Canola, Crambe, Flax, Jojoba, Lesquerella, Meadowfoam, Mustard (seed), Rape, Safflower, Sesame, Sunflower.

**TYPES OF APPLICATIONS:** Those listed in the "ANNUAL AND PERENNIAL CROPS" section. **USE INSTRUCTIONS:** This product may be applied before, during or after planting oil seed crops. Broadcast applications must be made prior to emergence of the listed oil seed crops. Wiper applicators or hooded sprayers may be used between the rows once the crop is established.

**TANK MIXTURES:** For sunflowers, a tank mixture with Prowl may be applied before, during or after planting in conventional tillage systems, into a cover crop, established sod or in previous crop residue.

**RESTRICTIONS:** Do not apply more than 44 fluid ounces of this product per acre on canola. Do not apply more than 22 fluid ounces of this product per acre for sunflowers as a single preplant or preemergent application per year. Do not feed or graze sunflower forage following application of this product.

#### SOYBEANS

**TYPES OF APPLICATIONS:** Those listed in the "ANNUAL AND PERENNIAL CROPS" section plus the following: Spot Treatment, Preharvest, Selective Equipment.

For Roundup Ready soybeans, see the "ROUNDUP READY CROPS" section of this label.

#### Preplant, Preemergence, At-Planting

**USE INSTRUCTIONS:** This product may be applied alone or in a tank-mixture before, during or after planting soybeans. Applications must be made prior to emergence of the crop.

**TANK MIXTURES:** Apply these tank mixtures in 10 to 20 gallons of water per acre.

Aim	Command Xtra	Gauntlet®	Pursuit Plus
Amplify™	Domain®	Lasso	Reflex®
Assure® II	Dual MAGNUM	Linex	Seopter®
Authority®	Dual II MAGNUM	Lorox/Linuron	Sencor®/Lexone®
Boundary®	FirstRate®	Lorox Plus™	Squadron®
Canopy®	Flexstar™	Micro-Tech	Steel®
Canopy® XL	Frontier/Outlook	Prowl	Valor®
Command	Fusion®	Pursuit®	

This product may be tank-mixed with 2,4-DB or 2,4-DB, provided that the specific product is registered for application prior to planting soybeans.

For difficult-to-control annual weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 22-fluid ounces per acre in these tank mixtures. For other labeled annual weeds, apply 16 to 22 fluid ounces of this product per acre when weeds are less than 6 inches tall, and 22 to 32 fluid ounces when weeds are over 6 inches tall.

**PRECAUTIONS:** Tank mixtures with some of the above listed herbicides may result in reduced weed control due to antagonism.

**RESTRICTIONS:** Read and carefully observe the cautionary statements and all other information appearing on the product labels, supplemental labeling or fact sheets published separately for all herbicides used. Use according to the most restrictive directions for each product in the mixture.

#### Spot Treatment

**USE INSTRUCTIONS:** For spot treatments, apply this product prior to initial pod set in soybeans.

**PRECAUTIONS:** The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.

**RESTRICTIONS:** Do not treat more than 10 percent of the total field area to be harvested.

#### Preharvest

**USE INSTRUCTIONS:** This product provides weed control when applied prior to harvest of soybeans.

Apply at rates given in the "ANNUAL WEEDS," "PERENNIAL WEEDS," and "WOODY BRUSH AND TREES RATE TABLES." This product may be applied using either aerial or ground spray equipment. Apply after pods have set and lost all green color. Care should be taken to avoid excessive seed shatter loss due to ground application equipment.

**PRECAUTIONS:** Preharvest application is not recommended for soybeans grown for seed, as a reduction in germination or vigor may occur.

**RESTRICTIONS:** Do not apply more than 3½ quarts per acre of this product for preharvest applications. Do not apply more than 44 fluid ounces per acre of this product by air. **Pre-harvest Interval (PHI):** Allow a minimum of 7 days between application and harvest of soybeans. Do not graze or harvest treated hay or fodder for livestock feed within 25 days of last preharvest application. (If the application rate is 22 fluid ounces per acre or lower, the grazing restriction is reduced to 14 days after last preharvest application.)

#### Selective Equipment

**USE INSTRUCTIONS:** This product may be applied through recirculating sprayers, shielded applicators, hooded sprayers, wiper applicators or sponge bars in soybeans. Allow at least 7 days between application and harvest.

**PRECAUTIONS, RESTRICTIONS:** See the "Selective Equipment" part of the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information on proper use and calibration of this equipment.

#### SUGARCANE

**TYPES OF APPLICATIONS:** Those listed in the "ANNUAL AND PERENNIAL CROPS" section plus Spot treatment.

#### Preplant, Preemergence, At-Planting

**USE INSTRUCTIONS:** This product may be applied in or around sugarcane fields or in fields prior to the emergence of plant cane.

**RESTRICTIONS:** Do not apply to vegetation in or around ditches, canals or ponds containing water to be used for irrigation.

#### Spot Treatment

**USE INSTRUCTIONS:** This product may be applied as a spot treatment in sugarcane. For control of volunteer or diseased sugarcane, make a 1 percent solution of this product in water and spray-to-wet the foliage of vegetation to be controlled. Volunteer or diseased sugarcane should have at least 7 new leaves.

**RESTRICTIONS:** Avoid spray contact with healthy cane plants since severe damage or destruction may result.

**PRECAUTIONS:** Do not feed or graze treated sugarcane foliage following application.

#### Fallow Treatments

**USE INSTRUCTIONS:** This product may be used as a replacement for tillage in fields that are lying fallow between sugarcane crops.

This product may also be used to remove the last stubble of ratoon cane. For removal of last stubble of ratoon cane, apply 2.5 to 3.3 quarts of this product in 10 to 40 gallons of water per acre to new growth having at least 7 new leaves. Allow 7 or more days after application before tillage. Ground or aerial application equipment may be used. Applications up to 64 fluid ounces per acre may be made by aerial application in fallow sites where there is sufficient buffer to prevent injury due to drift onto adjacent crops. Tank mixtures with 2,4-D and dicamba may be used.

#### Hooded Sprayers

**USE INSTRUCTIONS:** This product may be used through hooded sprayers for weed control between the rows of sugarcane. See the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for additional use instructions.

**PRECAUTIONS:** Do not allow treated weeds to come into contact with the crop. Droplets, mist, foam or splatter of the herbicide solution settling on the crop may result in discoloration, stunting or destruction. Such damage shall be the sole responsibility of the applicator.

## FOR AID IN SUGARCANE RIPENING (FLORIDA, HAWAII, LOUISIANA, PUERTO RICO AND TEXAS)

This product is a foliar-applied plant growth regulator to hasten ripening and increase the level of sucrose in sugarcane. It is effective in both low and high-tonnage sugarcane. When applied as directed under the conditions described, this product will hasten ripening and extend the period of high sucrose level in sugarcane.

As a result of leaf desiccation, improved trash burn can be expected.

Most of the sucrose increase is concentrated in the top nodes of the treated cane stalk. In order to recover the maximum sugar where topping is practiced during harvest, top at the base of the fourth leaf.

Prior to application, consult your state sugarcane authority or local Altitude representative regarding the degree of sucrose response anticipated from the variety of sugarcane to be treated. Do not plant subsequent crops in treated fields other than the following for 30 days after application: alfalfa or other forage legumes, beans (all types), corn (all types), cotton, melons (all types), pasture grasses, peanuts, potatoes (Irish or sweet), sorghum (milo), soybeans, squash (all types) or wheat.

**PRECAUTIONS:** Application of this product may initiate development of shooting eyes. This product may not increase the sucrose content of sugarcane under conditions of good natural ripening. Within 2 to 3 weeks after application, this product may produce a slight yellowing to pronounced browning and drying of leaves, and a shortening of upper internodes. Spindle death may occur.

Rainfall within 6 hours after application may reduce effectiveness.

Application is not recommended for sugarcane grown for seed, as a reduction in germination or vigor may occur.

**RESTRICTIONS:** Do not feed or graze treated sugarcane forage following application.

Do not apply for enhanced ripening to any crops other than sugarcane. Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences.

### APPLICATION RATES:

Use the following application rates and timing instructions according to the State in which the sugarcane is grown.

**NOTE:** Use the higher rate within the listed range when treating sugarcane under adverse ripening conditions or when less responsive varieties are to be treated.

**FLORIDA** - Apply 5 to 12 fluid ounces of this product per acre 3 to 6 weeks before harvest of LAST RATOON CANE ONLY.

**HAWAII** - Apply 9 to 21 fluid ounces of this product per acre 4 to 10 weeks before harvest.

**LOUISIANA** - Apply 3.5 to 12 fluid ounces of this product per acre 3 to 7 weeks before harvest of RATOON CANE ONLY.

**PUERTO RICO** - Apply 5 fluid ounces of this product per acre 3 to 5 weeks before harvest of RATOON CANE ONLY.

**TEXAS** - Apply 5 to 12 fluid ounces of this product per acre 3 to 5 weeks before harvest of RATOON CANE ONLY.

## VEGETABLE CROPS

**NOTE:** THIS "VEGETABLE CROPS" SECTION GIVES DIRECTIONS THAT APPLY TO ALL LISTED VEGETABLE CROPS WITHIN THIS SECTION GROUPED ALPHABETICALLY BELOW. SEE THE INDIVIDUAL CROP CATEGORIES FOR SPECIFIC INSTRUCTIONS, PREHARVEST INTERVALS, PRECAUTIONS AND RESTRICTIONS.

**TYPES OF APPLICATIONS:** Chemical Fallow, Preplant Fallow, Beds, Preplant, Preemergence, Prior to Transplanting Vegetables, At-Planting, Hooded Sprayers in Row-Middles, Shilded Sprayers in Row-Middles, Wiper Applications in Row-Middles, Post-Harvest Directed Applications (Non-Bearing Gingseng), Over-the-Top Wiper Applications. (See pages 09).

**PRECAUTIONS:** When applying this product prior to transplanting or direct-seeding crops into plastic mulch, care must be taken to remove residues of this product, which could cause crop injury. From the plastic prior to planting. Residues can be removed by a single 0.5-inch application of water, either by natural rainfall or via a sprinkler system. Care should be taken to insure that the washwater flushes off the plastic mulch and does not enter transplant holes. Applications made at emergence will result in injury or death to emerged seedlings.

Avoid contact of herbicide with foliage, green shoots or stems, bark, exposed roots (including those emerging from plastic mulch), or fruit of crops because severe injury or destruction may result. When making preemergence and at planting applications, applications must be made before crop emergence to avoid severe crop injury. Apply before seed germination

in coarse sandy soils to further minimize the risk of injury. In crops with vines, hooded sprayer, shielded sprayer and wiper applications to row-middles should be made prior to vine development otherwise severe injury or destruction may result.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Unless otherwise specified in this product's labeling, treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest. Post-harvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop. See "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for additional information.

## BRASSICA VEGETABLES

**LABELED CROPS:** Broccoli, Chinese Broccoli (gai lan), Broccoli raab (rapini), Brussels sprouts, Cabbage, Chinese cabbage (bok choy), Chinese cabbage (napa), Chinese mustard cabbage (gai choy), Cauliflower, Gayalo Broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens.

## BULB VEGETABLES

**LABELED CROPS:** Garlic, Great-headed garlic, Leek, Onion (dry bulb and green), Welsh onion, Shallot.

## CUCURBIT VEGETABLES AND FRUITS

**LABELED CROPS:** Chayote (fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cucumber, Gherkin, Edible gourd (includes hyotan, cucuzza, hechima, Chinese okra), Melons (all), *Momordica* spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucurbit, Muskmelon, (includes cantaloupe, casaba, crenshaw melon, golden pershaw, melon, honeydew, melon, honey ball melon, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon), Pumpkin, Summer squash (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini), Winter squash (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash), Watermelon.

**RESTRICTIONS:** For Cantaloupe, Casaba melon, Crenshaw melon, Cucumber, Gherkin, Gourds, Honeydew melon, Honey ball melon, Mango melon, Melons (all), Muskmelon, Persian melon, Pumpkin, Squash (summer, winter), and Watermelon, allow at least 3 days between application and planting.

## LEAFY VEGETABLES

**LABELED CROPS:** Amaranth (Chinese spinach), Arugula (rockette), Beet greens, Cardoon, Celery, Chinese celery, Celtuce, Chaya, Chervil, Edible-leaved chrysanthemum, Garland chrysanthemum, Corn salad, Cress (garden and upland), Dandelion, Dock (sorrel), Dokudami, Endive (escarole), Florence fennel, Gow kee, Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chichu), Rhubarb, Spinach, New Zealand spinach, Swiss chard, Vine spinach, Watercress (upland), Water spinach.

**PRECAUTIONS:** For Watercress, avoid applications within 3 days prior to seeding and during the period between seeding and emergence to minimize the risk of injury.

## FRUITING VEGETABLES

**LABELED CROPS:** Eggplant, Groundcherry (*Physalis* spp), Pepino, Pepper (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper), Tomatillo, Tomato.

**RESTRICTIONS:** For Eggplant, Ground cherry, Pepper (all), and Tomatillo, allow at least 3 days between application and planting. For Tomato and Tomatillo, do not make hooded or shielded sprayer applications in row-middles because of the potential for crop injury.

## LEGUME VEGETABLES (SUCULENT OR DRIED)

**LABELED CROPS:** Bean (*Lupinus*): includes grain lupin, sweet lupin, white lupin, and white sweet lupin), Bean (*Phaseolus*): includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean), Bean (*Vigna*): includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean), Broad bean (fava), Chickpea (garbanzo), Guar, Jackbean, Lablab bean, Lentil, Pea (*Pisum*): includes dwarf pea, edible-podded pea, English pea, field pea, garden pea, green pea, snowpea, sugar snap pea), Pigeon pea, Soybean (immature seed), Sword bean.

## PREHARVEST AND SPOT TREATMENTS OF WEEDS IN DRY BEANS

### Broadcast Spray

**USE INSTRUCTIONS:** This product may be applied as an over-the-top broadcast spray to control labeled weeds prior to the harvest of dry beans. Apply up to 22 fluid ounces in 3 to 20 gallons of water per acre at the hard dough stage of the legume seed (30 percent grain moisture or less). Either ground broadcast or aerial applications may be made.

**PRECAUTIONS:** Preharvest application is not recommended for dry beans grown for seed, as a reduction in germination or vigor may occur.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Apply at least 7 days before harvest. Only one application per year may be made; do not combine a preharvest spray with a spot treatment on the same crop area. Employ at least a 30-day plant-back interval between treatment and replanting for any crop not listed in this label. Do not feed treated vines and hay from these crops to livestock. Do not apply this product through any type of irrigation system. Do not treat cowpeas, since this crop is considered to be grown as livestock feed.

### Spot Treatment

**USE INSTRUCTIONS:** This product may be applied as a spot treatment to control troublesome weeds such as Canada thistle, quackgrass, mayweed (dog fennel), and milkweed in dry beans. Apply up to 22 fluid ounces in 10 to 20 gallons of water through ground spray equipment or use a 2 percent solution in a hand-held sprayer. For best results, applications should be made at or beyond the bud stage of growth. The crop receiving spray in treated areas will be killed.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Apply at least 7 days before harvest. Only one application per year may be made; do not combine spot treatments with a preharvest broadcast spray on the same crop area. Employ at least a 30-day plant-back interval between treatment and replanting for any crop not listed in this product's label. Do not feed treated vines and hay from these crops to livestock. Do not treat cowpeas, since this crop is considered to be grown as livestock feed.

## PREHARVEST AND SPOT-TREATMENTS OF WEEDS IN DRY PEAS, LENTILS, AND CHICKPEAS

### Broadcast Spray

**USE INSTRUCTIONS:** This product may be applied as an over-the-top broadcast spray to control labeled weeds prior to the harvest of dry peas, lentils, and chickpeas. Apply up to 64 fluid ounces in 3 to 20 gallons of water per acre at the hard dough stage of the legume seed (30 percent grain moisture or less). Either ground broadcast or aerial applications may be made.

**PRECAUTIONS:** Preharvest application is not recommended for peas, lentils, or chickpeas grown for seed, as a reduction in germination or vigor may occur.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Apply at least 7 days before harvest. Only one application per year may be made; do not combine a preharvest spray with a spot treatment on the same crop area. Employ at least a 30-day plant-back interval between treatment and replanting for any crop not listed in this product's label. Do not feed treated vines and hay from these crops to livestock. Do not apply this product through any type of irrigation system. Do not treat field (feed) peas, since these are considered to be grown as livestock feed.

### Spot Treatment

**USE INSTRUCTIONS:** This product may be applied as a spot treatment to control troublesome weeds such as Canada thistle, quackgrass, mayweed (dog fennel), and milkweed in peas, lentils, and chickpeas. Apply up to 64 fluid ounces in 10 to 20 gallons of water per acre through ground spray equipment or use a 2 percent solution in a hand-held sprayer. For best results, applications should be made at or beyond the bud stage of growth. The crop receiving spray in treated areas will be killed.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Apply at least 7 days before harvest. Only one application per year may be made; do not combine spot treatments with a preharvest broadcast spray on the same crop area. Employ at least a 30-day plant-back interval between treatment and replanting for any crop not listed in this product's label. Do not feed treated vines and hay from these crops to livestock. Do not treat field (feed) peas, since these are considered to be grown as livestock feed.

## ROOT AND TUBER VEGETABLES

**LABELED CROPS:** Arracacha, Arrowroot, Chinese artichoke, Jerusalem artichoke, Beet (garden), Burdock, Canna, Carrot, Cassava (bitter and sweet), Celeric, Chayote (root), Chervil (turnip rooted), Chicory, Chufa, Dasheen (taro), Galangal, Ginger, Ginseng, Horseradish, Leren, Kava (turnip-rooted), Parsley (turnip rooted), Parsnip, Potato, Radish,

Oriental radish, Rutabaga, Salsify, Black salsify, Spanish salsify, Skirret, Sweet potato, Tanier, Turmeric, Turnip, Wasabi, Yacon, Yam bean, True yam.

### Directed Applications (Non-Bearing Ginseng Only)

**USE INSTRUCTIONS:** This product may be used for weed control in established non-bearing ginseng. Applications may be made with boom equipment, CDAI shielded sprayers, hand-held and high-volume wands, lances, and orchard guns or with wiper application equipment.

**RESTRICTIONS:** Direct applications should be made at least one contact of this product with the ginseng plant. Applications must be made at least one year prior to harvest.

### Over-the-Top Wiper Applications (Rutabagas Only)

**USE INSTRUCTIONS:** Wiper applicators may be used over the top of rutabagas.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow at least 14 days between application and harvest of rutabagas.

## MISCELLANEOUS CROPS

**LABELED CROPS:** Aloe vera, Asparagus, Bamboo shoots, Globe artichoke, Okra, Peanut (ground nut), Pineapple, Strawberry, Sugar beet.

**TYPES OF APPLICATIONS:** Those listed in the "ANNUAL AND PERENNIAL CROPS" section plus the following: Weed Control, Site Preparation, Spot Treatment (Asparagus), Post-Harvest (Asparagus).

For Roundup Ready sugar beets, see the "ROUNDUP READY CROPS" section of this label.

**PRECAUTIONS:** Avoid contact of herbicide with foliage, green shoots or stems, bark, exposed roots (including those emerging from plastic mulch), or fruit of crops because severe injury or destruction may result. When making preemergence and at planting applications, applications must be made before crop emergence to avoid severe crop injury. Apply before seed germination in coarse sandy soils to further minimize the risk of injury. In crops with vines, hooded sprayer, shielded sprayer and wiper applications to row-middles should be made prior to vine development otherwise severe injury or destruction may result.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Unless otherwise specified in this product's labeling, treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest. Post-harvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop. See "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for additional information.

### Weed Control, Site Preparation

**USE INSTRUCTIONS:** This product may be applied for weed control or for site preparation prior to planting or transplanting crops listed in this section.

**PRECAUTIONS:** When applying this product prior to transplanting or direct-seeding crops into plastic mulch, care must be taken to remove residues of this product, which could cause crop injury, from the plastic prior to planting. Residues can be removed by a single 0.5-inch application of water, either by natural rainfall or via a sprinkler system. Care should be taken to insure that the washwater flushes off the plastic mulch and does not enter transplant holes. Allow at least 21 days between residue removal and transplanting. Applications made at emergence will result in injury or death to emerged seedlings.

**RESTRICTIONS:** Do not apply within a week before the first asparagus spears emerge. Do not feed or graze treated pineapple forage following application.

### Spot Treatment (Asparagus)

**USE INSTRUCTIONS:** This product may be applied immediately after cutting, but prior to the emergence of new spears.

**RESTRICTIONS:** Do not treat more than 10 percent of the total field area to be harvested. Do not harvest within 5 days of treatment.

### Post-Harvest (Asparagus)

**USE INSTRUCTIONS:** This product may be applied after the last harvest and all spears have been removed. If spears are allowed to regrow, delay application until ferns have developed. Applied delays treatments as a directed or shielded spray in order to avoid contact of the spray with ferns, stems or spears.

**PRECAUTIONS:** Direct contact of the spray with the asparagus may result in serious crop injury. Select and use listed types of spray equipment for postemergence post-harvest applications. A directed spray is any application where the spray pattern is aligned in such a way as to avoid direct contact of the spray with the crop. A shielded spray is any application where a physical barrier is positioned and maintained between the spray and the crop to prevent contact of spray with the crop.

#### **FOR CONTROL OF ANNUAL AND PERENNIAL WEEDS IN SUNFLOWER AND SAFFLOWER LABELED CROPS:** Safflower, Sunflower.

**TYPES OF APPLICATIONS:** Chemical Fallow, Preplant Fallow Beds, Preplant, Preemergence, At-Planting, Hooded Sprayers in Row Middles, Shielded Sprayers in Row Middles, Wiper Applications in Row Middles, Preharvest, and Post-Harvest treatments.

#### **Chemical Fallow, Preplant Fallow Beds, Preplant, Preemergence, At-Planting**

**USE INSTRUCTIONS:** This product may be applied before, during or after planting sunflower or safflower crops. Broadcast applications must be made prior to emergence.

**TANK MIXTURES:** For sunflowers, a tank mixture with Prowl® may be applied before, during or after planting in conventional tillage systems, into a cover crop, established sod or in previous crop residue.

**RESTRICTIONS:** In safflower, the total combined application rate of all preemergence and hooded/shielded sprayer treatments must not exceed 2 quarts of this product per acre per year. In sunflower, the total combined application rate of all preemergence and hooded/shielded sprayer treatments must not exceed 22 fluid ounces of this product per acre per year.

#### **Hooded or Shielded Sprayers in Row Middles, Wiper Applications in Row Middles**

**USE INSTRUCTIONS:** Wiper applicators or hooded/shielded sprayers may be used between the rows once the crop is established. See the "SELECTIVE EQUIPMENT" part of the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this product's label for information on proper use and calibration of this equipment.

**RESTRICTIONS:** In safflower, the total combined application rate of all preemergence and hooded/shielded sprayer treatments must not exceed 2 quarts of this product per acre per year. In sunflower, the total combined application rate of all preemergence and hooded/shielded sprayer treatments must not exceed 22 fluid ounces of this product per acre per year.

#### **Preharvest**

**USE INSTRUCTIONS:** This product provides weed control when applied as a harvest aid to a physiologically mature crop prior to harvest of sunflower or safflower. For safflower, apply when seed has lost its opaque character, approximately 20 to 30 days after the end of flowering of the secondary branches. For sunflower, apply when the backside of sunflower heads are yellow and bracts are turning brown and seed moisture content is less than 35%.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between treatment and harvest or livestock feeding. Apply no more than 2 quarts of this product at a preharvest timing to safflower. Apply no more than 22 fluid ounces of this product at a preharvest timing to sunflower. Applications must be made at least 30 days prior to planting any crop not listed on this product's label booklet.

#### **Post-Harvest**

**USE INSTRUCTIONS:** This product may be applied after harvest of safflower or sunflower. Higher rates may be required for control of large weeds, which were growing in the crops at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation. Applications must be made at least 30 days prior to planting any crop not listed on this product's label booklet.

#### **TREE, VINE AND SHRUB CROPS (ALPHABETICAL)**

**NOTE:** THIS SECTION GIVES DIRECTIONS THAT APPLY TO ALL LISTED TREE, VINE, AND SHRUB CROPS WITHIN THIS SECTION GROUPED ALPHABETICALLY BELOW. SEE THE INDIVIDUAL CROP CATEGORIES FOR SPECIFIC INSTRUCTIONS, PREHARVEST INTERVALS, PRECAUTIONS AND RESTRICTIONS.

**TYPES OF APPLICATIONS:** Preplant (site preparation) Broadcast Sprays, Weed Control, Middles (between rows of trees, vines or bushes), Strips (within rows of trees, vines or bushes), Selective Equipment (Shielded Sprayers, wiper applications), Directed Sprays, Spot Treatment, Perennial Grass Suppression, Out Stump.

Applications may be made with boom equipment, CDA equipment, shielded sprayers, hand-held and high-volume wands, lances, orchard guns or with wiper applicator equipment, except as directed.

**PRODUCT USE INSTRUCTIONS:** This product may be applied in middles (between rows of trees or vines), strips (within rows of trees or vines), and for weed control or perennial grass suppression in established tree fruit and nut groves, orchards, berries and vineyards. It may also be used for site preparation prior to planting or transplanting these crops. Apply 11 fluid ounces to 3.3 quarts per acre according to the "ANNUAL WEEDS" and "PERENNIAL WEEDS

RATE TABLES" sections of this label. Utilize rates at the higher end of the rate range when weeds are stressed, growing in dense populations or are greater than 12 inches tall. Repeat applications may be made up to a maximum of 7 quarts per acre per year.

The maximum use rates stated throughout this product's labeling apply to this product combined with the use of all other herbicides containing glyphosate or sulfosate as the active ingredient, whether applied as mixtures or separately. Calculate the application rates and ensure that the total use of this and other glyphosate or sulfosate containing products does not exceed stated maximum use rate.

**PRECAUTIONS:** Extreme care must be exercised to avoid contact of herbicide solution, spray, drift or mist with foliage or green bark of trunks, branches, suckers, fruit or other parts of trees, canes and vines. Avoid applications when recent pruning wounds or other mechanical injury has occurred. Contact of this product with other than matured brown bark can result in serious crop damage or destruction.

**RESTRICTIONS:** Only shielded or directed sprayers may be used in crops with potential for crop contact, and then only where there is sufficient clearance. For applications in strips (within rows of trees), only selective equipment (directed sprays, hooded sprayers, shielded applicators, or wipers) may be used to minimize the potential for leakage or drift of herbicide sprays onto crop. For berry crops, hooded or shielded sprayers must be fully enclosed including top, sides, front and back. Only wipers or shielded applicators capable of preventing all contact with crop may be used. See "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for additional directions and precautions. Allow a minimum of 3 days between application and transplanting.

#### **Middles (between rows)**

**USE INSTRUCTIONS:** This product will control or suppress annual and perennial weeds and ground covers growing between the rows of labeled tree and vine crops. If weeds are under drought stress, irrigate prior to application. Reduced control may result if weeds have been mowed prior to application.

**TANK MIXTURES:** A tank mixture of this product plus Goal 2XL may be used for annual weeds in middles between rows of citrus crops, tree fruits, tree nuts and vine crops. Use this mixture when weeds are stressed or growing in dense populations. 11 to 22 fluid ounces per acre of this product plus 3 to 12 fluid ounces per acre of Goal 2XL will control annual weeds with a maximum height or diameter of 6 inches, including crabgrass, common groundsel, jungle rice, common lambsquarters, redroot pigweed, London rocket, common fleagrass, shepherd's-purse, annual sowthistle, filaree (suppression), horseweed/marestail, stinging nettle and common purslane (suppression). 11 to 22 fluid ounces per acre of this product plus 3 to 12 fluid ounces per acre of Goal 2XL will control common cheeseweed (mature) or hairy fleabane with a maximum height or diameter of 3 inches.

#### **Strips (in rows)**

**TANK MIXTURES:** This product may be applied in rows of tree or vine crops in tank mixtures with the following products:

Devrinol® 50-DF	Prowl	Solicam® DF
Direx 4L®	Princep® Caliber 90®	Surflan® AS
Goal 2XL	Simazine 4L	Surflan 75W
Karmex DF	Simazine 80W	
Krovar® I	Sim-Trol® 4L	

Do not apply these tank mixtures in Puerto Rico. Refer to the individual product labels for specific crops, rates, geographic restrictions and precautionary statements.

#### **Perennial Grass Suppression**

This product will suppress perennial grasses such as bahiagrass, Bermudagrass, tall fescue, orchardgrass, Kentucky bluegrass, and quackgrass that are grown as ground covers in tree and vine crops.

For suppression of tall fescue, fine fescue, orchardgrass and quackgrass, apply 4 fluid ounces of this product in 10 to 20 gallons of water per acre.

For suppression of Kentucky bluegrass crops, apply 4 fluid ounces of this product per acre. Do not add ammonium sulfate.

For best results, mow cool-season grass covers in the spring to even their height and apply this product 3 to 4 days after mowing. For suppression of vegetative growth and seedhead inhibition of bahiagrass for approximately 45 days, apply 4 fluid ounces of this product in 10 to 25 gallons of water per acre. Apply 1 to 2 weeks after full green-up or

after mowing to a uniform height of 3 to 4 inches. This application must be made prior to seedhead emergence.

For suppression up to 120 days, apply 3 fluid ounces of this product per acre, followed by an application of 2 to 3 fluid ounces per acre about 45 days later. Make no more than 2 applications per year.

For burndown of Bermudagrass, apply 22 to 44 fluid ounces of this product in 3 to 20 gallons of water per acre. Use this treatment only if reduction of the Bermudagrass stand can be tolerated. When burndown is required prior to harvest, allow at least 21 days to ensure sufficient time for burndown to occur.

For suppression of Bermudagrass, apply 4 to 11 fluid ounces of this product per acre east of the Rocky Mountains and 11 fluid ounces of this product per acre west of the Rocky Mountains. Apply in a total spray volume of 3 to 20 gallons per acre, no sooner than 1 to 2 weeks after full green-up. If the Bermudagrass is mowed prior to application, maintain a minimum of 3 inches in height. Sequential applications may be made when regrowth occurs and Bermudagrass injury and stand reduction can be tolerated. East of the Rocky Mountains, rates of 4 to 7 fluid ounces of this product per acre should be used in shaded conditions or where a lesser degree of suppression is desired.

#### Cut Stump

**USE INSTRUCTIONS:** Cut stump applications of this product may be made during site preparation or site renovation, prior to transplanting tree crops. This product will control regrowth of cut stumps and sprouts of many types of tree species, some of which are listed below.

**Citrus Trees:** Calamondin, Chironja, Citron, Citrus hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Orange (all), Pummelo, Tangelo (ugli), Tangor.

**Fruit Trees:** Apple, Apricot, Cherry (sweet, sour), Crabapple, Loquat, Mayhaw, Nectarine, Olive, Peach, Pear, Plum/Prune (all), Quince.

**Nut Trees:** Almond, Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia, Pecan, Pistachio, Walnut (black, English).

Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut trees or sprouts close to the soil surface. Apply a 50- to 100-percent solution of this product to the freshly cut surface immediately after cutting. Delays in application may result in reduced performance. For best results, applications should be made during periods of active growth and full leaf expansion.

**PRECAUTIONS:** DO NOT MAKE CUT STUMP APPLICATIONS WHEN THE ROOTS OF ADJACENT DESIRABLE TREES MAY BE GRAFTED TO THE ROOTS OF THE CUT STUMP. INJURY RESULTING FROM ROOT GRAFTING MAY OCCUR IN ADJACENT TREES. Some sprouts, stems, or trees may share the same root system. Adjacent trees having a similar age, height and spacing may signal shared roots. Whether grafted or shared, injury is likely to occur to non-treated stems/trees when one or more trees sharing common roots are treated.

#### BERRY CROPS

**LABELED CROPS:** Blackberry (including bingelberry, black spinn berry, boysenberry, Cherokee blackberry, cheslerberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, julyberry, lugeberry, yayacaberry, lowberry, lucretiaberry, marionberry, nectarberry, ocellberry, Oregon greengreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, and youngberry), Blueberry, Cranberry, Currant, Elderberry, Gooseberry, Huckleberry, Loganberry, Salal.

**TYPES OF APPLICATIONS:** those listed in the "TREE, VINE AND SHRUB CROPS" section plus Spot Treatment in Cranberry Production and Post-Harvest Treatments in Cranberry Production.

**PRECAUTIONS:** To avoid damage, herbicide sprays must not be allowed to contact desirable vegetation, including green shoots, bases, or foliage.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 30 days between last application and harvest in cranberries. Allow a minimum of 14 days between last application and harvest in other berry crops. Do not make directed sprays within the cranberry bush areas prior to berry harvest.

#### Spot Treatment in Cranberry Production

**USE INSTRUCTIONS:** Spot treatments may be used to control weeds growing in dry ditches (interior and perimeter) of cranberry production areas. Hand-held sprayers or other appropriate application equipment listed under "APPLICATION EQUIPMENT AND TECHNIQUES" in this label may be used. Drop water level to remove standing water in ditches prior to application. In hand-held sprayers, use 1- to 1.5-percent solution of this product. Spray-to-wet vegetation, not to run-off.

**PRECAUTIONS:** For treatments after draw down of water in dry ditches, allow 2 or more days after treatment before reintroduction of water to achieve maximum weed control. Apply this product within 1 day after draw down to ensure application to actively growing weeds.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 30 days between last application and harvest of cranberries. Do not apply this material through the irrigation system. Do not make applications by air. Do not apply directly to water. Use nozzles that emit medium- to large-sized droplets to minimize drift in order to avoid crop injury.

#### Post-Harvest Treatments in Cranberry Production

**USE INSTRUCTIONS:** Application of this product may be made after the harvest of cranberries to control weeds growing within the field. Best results will be obtained if applications are made to vines that appear dormant (after they have turned red). Hand-held sprayers, wipers, or other appropriate application equipment listed under "APPLICATION EQUIPMENT AND TECHNIQUES" in this label may be used. If using hand-held sprayers, use a 0.4- to 0.7-percent solution of this product. Spray-to-wet vegetation, not to run-off. If using hand-held boom sprayers, apply 44 to 86 fluid ounces of this product per acre.

**PRECAUTIONS:** Even though vines appear dormant, contact of the herbicide solution with desirable vegetation may result in damage or severe plant injury. Cranberry plants that are directly sprayed may be killed.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 6 months after last application and next harvest of cranberries. Do not apply this product through the irrigation system. Do not make applications by air. Do not apply directly to water. Make applications only after cranberries have been harvested. Do not treat more than 10 percent of the total bog.

#### CITRUS

**LABELED CROPS:** Calamondin, Chironja, Citron, Citrus Hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Orange (all), Pummelo, Satsuma Mandarin, Tangelo (ugli), Tangor.

**TYPES OF APPLICATIONS:** Those listed in the "TREE, VINE AND SHRUB CROPS" section.

**USE INSTRUCTIONS:** Florida and Texas): For burndown or control of the weeds listed below, apply the rates of this product in 3 to 30 gallons of water per acre. Where weed foliage is dense, use 10 to 30 gallons of water per acre.

For goatweed, apply 44 to 64 fluid ounces of this product per acre. Apply in 20 to 30 gallons of water per acre when plants are actively growing. Use 44 fluid ounces per acre when plants are less than 8 inches tall and 64 fluid ounces per acre when plants are greater than 8 inches tall. If goatweed is greater than 8 inches tall, the addition of Krovat I or Karmex may improve control. Refer to the individual product labels for specific crops, rates, geographic restrictions and precautionary statements.

#### PERENNIAL WEEDS:

Weed Species	PERENNIAL WEEDS:			
	S=Suppression	PC=Partial Control	B=Burndown	C=Control
	THIS PRODUCT RATE PER ACRE			
	0.7 QT	1.3 QT	2 QT	3.3 QT
Bermudagrass		—	PC	C
Guineagrass				
Texas and Florida Ridge	B	C	C	C
Florida Flatwoods	—	B	C	C
Paragrass	B	C	C	C
Torpedograss	S	—	PC	C

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 1 day between last application and harvest in citrus crops. For citron groves, apply as directed sprays only.

## MISCELLANEOUS TREE FOOD CROPS

**LABELED CROPS:** Cactus (fruit and pads), Palm (heart, leaves), Palm (oil).

**TYPES OF APPLICATIONS:** Those listed in the "TREE, VINE AND SHRUB CROPS" section.

## NON-FOOD TREE CROPS

**LABELED CROPS:** Pine, Poplar, Eucalyptus, Christmas trees. Other non-food tree crops.

**TYPES OF APPLICATIONS:** Those listed in the "TREE, VINE AND SHRUB CROPS" section.

### Directed Sprays, Spot Treatment, Wiper Applications

**USE INSTRUCTIONS:** This product may be used as a post-directed spray and spot treatment around established poplar, eucalyptus, Christmas trees and other non-food tree crops.

**PRECAUTIONS:** Care must be exercised to avoid contact of spray, drift or mist with foliage or green bark of established Christmas trees and other pine trees. Desirable plants may be protected from the spray solution by using shields or coverings made of cardboard or other impermeable material.

**RESTRICTIONS:** THIS PRODUCT IS NOT FOR USE AS AN OVER-THE-TOP BROADCAST SPRAY IN CHRISTMAS TREES AND OTHER PINE TREES.

### Site Preparation

**USE INSTRUCTIONS:** This product may be used prior to planting.

**PRECAUTIONS:** Precautions should be taken to protect non-target plants during site preparation applications.

## POME FRUIT

**LABELED CROPS:** Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince.

**TYPES OF APPLICATIONS:** Those listed in the "TREE, VINE AND SHRUB CROPS" section.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 1 day between last application and harvest in pome crops.

## STONE FRUIT

**LABELED CROPS:** Apricot, Cherry (sweet, tart), Nectarine, Olive, Peach, Plum/Prune (all types), Plumcot.

**TYPES OF APPLICATIONS:** Those listed in the "TREE, VINE AND SHRUB CROPS" section.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 17 days between last application and harvest in stone fruit crops. For olive groves, apply as directed sprays only.

### Restrictions on Application Equipment

For cherries, any application equipment listed in the "TREE, VINE AND SHRUB CROPS" section may be used in all states. Any application equipment listed in the "TREE, VINE AND SHRUB CROPS" section may be used in apricots, nectarines, peaches and plums/prunes growing in Arizona, California, Colorado, Idaho, Kansas, Kentucky, New Jersey, North Dakota, Oklahoma, Oregon, Texas, Utah and Washington, except for peaches grown in the states specified in the following paragraph. In all other states, use wiper equipment only.

For PEACHES grown in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee only, apply with a shielded boom sprayer or shielded wiper applicator, which prevents any contact of this product with the foliage or bark of trees. Apply no later than 90 days after first bloom. Applications made after this time may result in severe damage. Remove suckers and low-hanging limbs at least 10 days prior to application. Avoid applications near trees with recent pruning wounds or other mechanical injury. Apply only near trees that have been planted in the orchard for 2 or more years. EXTREME CARE MUST BE TAKEN TO ENSURE NO PART OF THE PEACH TREE IS CONTACTED.

## TREE NUTS

**LABELED CROPS:** Almond, Beechnut, Betailnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Coconut, Filbert (hazelnut), Hickory nut, Macadamia, Pecan, Pine nut, Pistachio, Walnut (black, English).

**TYPES OF APPLICATIONS:** Those listed in the "TREE, VINE AND SHRUB CROPS" section.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 3 days between last application and harvest of tree nuts, except coconut. Allow 14 days between application and harvest in coconut.

## TROPICAL AND SUBTROPICAL TREES AND FRUITS

**LABELED CROPS:** Ambarella, Atemoya, Avocado, Banana, Barbados cherry (acerola), Biriba, Blimbe, Breadfruit, Cacao (cocoa bean), Canistel, Carambola (starfruit), Cherimoya, Coffee, Custard apple, Dates, Durian, Feijoa, Figs, Governor's plume, Guava, llama, lime, Imbe, Jaboticaba, Jackfruit, Longan, Lychee, Mamey apple, Mango, Mangosteen, Marmaladebox (genip), Mountain papaya, Papaya, Pawpaw, Plantain, Persimmon, Pomegranate, Pulasan, Rambutan, Rose apple, Sapodilla, Sapote (black, mamey, white), Spanish lime, Soursoop,

Star apple, Sugar apple, Surinam cherry, Tamarind, Tea, Ti (roots and leaves), Wax jambu.

**TYPES OF APPLICATIONS:** Those listed in the "TREE, VINE AND SHRUB CROPS" section plus Bananacide (Banana Only).

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 1 day between last application and harvest in banana, guava, papaya, and plantain crops. Allow a minimum of 14 days between last application and harvest for any other tropical or subtropical tree fruit. Allow a minimum of 28 days between last application and harvest in coffee crops. In coffee and banana, delay applications 3 months after transplanting to allow the new coffee or banana plant to become established.

### Bananacide (Banana Only)

**USE INSTRUCTIONS:** This product may be used to destroy banana plants infected with the Banana Bunchy Top Virus as well as non-infected banana plants to establish disease free buffers around plantations. Remove all fruit from the plants within the treatment area prior to treatment. Inject 0.04 fluid ounce (1 milliliter) of this product's concentrate per 2 to 3 inches of pseudostem diameter. Make the injection at least one foot above the ground, except for very small plants, which should be injected vertically into the top. Any subsequent regrowth must also be destroyed. All plants and mats (or units) adjacent (within a 4-foot radius) to a treated mat shall be mechanically destroyed.

For control of the Banana Bunchy Top Virus, it is critical that the grower follow a strict control program involving monitoring for diseased plants, spraying to control the aphid vector, and destruction of all infected mats (or units). An infected plant may not show symptoms of the Banana Bunchy Top Virus for up to 125 days, therefore it is critical that the entire mat (or unit) containing the diseased plant be destroyed immediately.

**RESTRICTIONS:** Do not apply more than 0.5 fluid ounce (15 milliliters) of this product's concentrate per mat (or unit). Remove all fruit from plants and mats (or units) prior to treatment. Do not harvest any fruit of plant materials from treated mats (or units) following injection. Do not allow livestock to consume treated plant materials. Following transplant of new banana plants into treated areas, allow plants to become established for 3 months before applying this product for weed control.

## VINE CROPS

**LABELED CROPS:** Grapes (raisin, table, wine), Hops, Kiwi, Passion fruit.

**TYPES OF APPLICATIONS:** Those listed in the "TREE, VINE AND SHRUB CROPS" section.

**USE INSTRUCTIONS:** Applications should not be made when green shoots, canes or foliage are in the spray zone. In the northeast and Great Lakes regions, applications must be made prior to the end of bloom stage of grapes to avoid injury, or make applications with shielded sprayers or wiper equipment.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 14 days between last application and harvest in vine crops. Do not use selective equipment in kiwi.

## PASTURE GRASSES, FORAGE LEGUMES AND RANGELANDS ALFALFA, CLOVER, AND OTHER FORAGE LEGUMES

**LABELED CROPS:** Alfalfa, Clover, Kenaf, Kudzu, Lespedeza, Leucaena, Lupin, Sainfoin, Trefoil, Velvet bean, Vetch (all types).

**TYPES OF APPLICATIONS:** Preplant, Preemergence, At-Planting, Preharvest (except Kenaf and Leucaena), Spot Treatment, Over-the-Top Wiper Applications, Renovation.

### Preplant, Preemergence, At-Planting

**USE INSTRUCTIONS:** This product may be applied before, during or after planting crops listed in this section. Applications must be made prior to emergence of the crop.

**RESTRICTIONS:** Remove domestic livestock before application. The crop may be fed or grazed as soon as it reaches sufficient maturity.

### Preharvest (except Kenaf and Leucaena)

**USE INSTRUCTIONS:** This product may be used in declining stands or any stand where severe crop injury or destruction is acceptable. This product will control annual and perennial weeds, including quackgrass, when applied prior to crop harvest. Applications may be made at any time of the year. For control of quackgrass, apply in the spring, late summer or fall when quackgrass is actively growing. Treatments for quackgrass must be followed by deep tillage for complete control.

**PRECAUTIONS:** This application may destroy an alfalfa stand and may severely injure or destroy other labeled crops such as clover. Preharvest application is not recommended for alfalfa grown for seed, as a reduction in germination or vigor may occur.

**RESTRICTIONS:** Make only one application to an existing crop stand per year. The treated crop and weeds can be harvested and fed to livestock according to the intervals below.

	Maximum Single Application Rate (per acre)	Minimum Interval (between application and harvest/grazing)
Alfalfa	44 fluid ounces	36 hours
All other labeled legumes above	32 fluid ounces	3 days

### Spot Treatment, Over-the-Top Wiper Applications

**USE INSTRUCTIONS:** This product may be applied as a spot treatment or with wiper applicators. For wipers, see the "Wiper Applicators" in the "Selective Equipment" section of this label. Applications may be made in the same area at 30-day intervals.

**RESTRICTIONS:** For spot treatment and wiper applications, apply in areas where the movement of domestic livestock can be controlled. No more than 10 percent of the total field area may be treated at one time. Remove domestic livestock before application and wait 3 days after application before grazing livestock or harvesting.

### Renovation

**USE INSTRUCTIONS:** This product may be applied as a broadcast spray to renovate existing stands of alfalfa, clover, and other labeled forage legumes. If the crop is to be grazed or harvested for feed, use up to 44 fluid ounces per acre in alfalfa and up to 32 fluid ounces per acre in other labeled legumes. For complete removal of established stands of clover, it may be necessary to use the higher treatment rates listed in the "PERENNIAL WEEDS RATE TABLE" section.

**RESTRICTIONS:** When treatment rates of 44 fluid ounces per acre for alfalfa or 32 fluid ounces per acre for other forage legumes are used, remove domestic livestock before application and wait 3 days after application before reintroduction. If treatment rates above these levels are necessary, do not graze or harvest treated foliage for livestock feed. Crops listed for treatment in this label may be planted into the treated area at any time; for other crops, wait 30 days between application and planting.

### CONSERVATION RESERVE PROGRAM (CRP)

**TYPES OF APPLICATIONS:** Renovation (Rotating out of CRP), Site Preparation, Postemergence Weed Control in Dormant CRP Grasses, Over-the-Top Wiper Applications.

#### Renovation (Rotating out of CRP), Site Preparation

**USE INSTRUCTIONS:** This product may be used to prepare CRP land for crop production. Refer to Federal, State or local use guides for CRP renovation. For any crop not listed for treatment in this label, applications must be made at least 30 days prior to planting.

#### Postemergence Weed Control in Dormant CRP Grasses, Over-the-Top Wiper Applications

**USE INSTRUCTIONS:** This product may be used to suppress competitive growth and seed production of undesirable vegetation in CRP acres. Such applications may be made with wiper application equipment or as a broadcast or spot treatment to dormant CRP grasses. For selective applications with broadcast spray equipment, apply 8 to 11 fluid ounces of this product per acre in early spring before desirable CRP grasses, such as crested and tall wheatgrass, break dormancy and initiate green growth. Late fall applications can be made after desirable perennial grasses have reached dormancy.

**PRECAUTIONS:** Some stunting of CRP perennial grasses will occur if broadcast applications are made when plants are not dormant.

**RESTRICTIONS:** No waiting period is required between application and grazing or harvesting for feed. Do not apply more than 2 quarts per acre per year onto CRP grasses.

### GRASS SEED OR SOD PRODUCTION

**LABELLED CROPS:** Any grass (*Gramineae* family) except Corn, Sorghum, Sugarcane and those listed in this label under "Cereal and Grain Crops".

**TYPES OF APPLICATIONS:** Preplant, Preemergence, At-Planting, Renovation, Site Preparation, Shielded Sprayers, Over-the-Top Wiper Applications, Spot Treatment, Creating Rows in Annual Ryegrass.

#### Preplant, Preemergence, At-Planting, Renovation, Site Preparation

**USE INSTRUCTIONS:** This product controls most existing vegetation prior to renovating turf or forage grass seed areas or establishing turf grass grown for sod. Make applications before, during, or after planting or for renovation. For maximum control of existing vegetation, delay planting to determine if any regrowth from escaped underground plant

parts occurs. Where existing vegetation is growing under mowed turfgrass management, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the spray. Where repeat treatments are necessary, sufficient regrowth must be attained prior to application. For warm-season grasses, such as Bermudagrass, summer or fall applications provide best control. Broadcast equipment may be used to control sod remnants or other unwanted vegetation after sod is harvested.

**PRECAUTIONS:** Do not disturb soil or underground plant parts before treatment. Tillage or renovation techniques such as vertical mowing, coring or slicing should be delayed for 7 days after application to allow proper translocation into underground plant parts. Applications must be made prior to the emergence of the crop to avoid crop injury.

**RESTRICTIONS:** If application rates total 2 quarts per acre or less, no waiting period between treatment and feeding or livestock grazing is required. If the rate is greater than 2 quarts per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting. For any crop not listed for treatment in this label, applications must be made at least 30 days prior to planting.

### Shielded Sprayers

**USE INSTRUCTIONS:** Apply 22 to 64 fluid ounces of this product in 10 to 20 gallons of water per acre to control weeds between grass seed rows. Uniform planting in straight rows aid in shielded sprayer applications. Best results are obtained when the grass seed crop is small enough to easily pass by the protective shields. For additional instructions, see "Shielded and Hooded Applicators" in the "Selective Equipment" section.

**PRECAUTIONS:** Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage. Such damage shall be the sole responsibility of the applicator.

### Over-the-Top Wiper Applications

**USE INSTRUCTIONS:** Applicators should be adjusted so that the wiper contact point is at least 2 inches above the desirable vegetation. Weeds should be a minimum of 6 inches above the desirable vegetation. Better results may be obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. This may occur in dense clumps, severe infestations, or when height of weeds varies so that not all weeds are contacted. In these instances, repeat treatments may be necessary. For additional instructions, see "Wiper Applicators" in the "Selective Equipment" section.

**PRECAUTIONS:** Contact of the herbicide solution with desirable vegetation may result in damage or destruction.

### Spot Treatment

**USE INSTRUCTIONS:** Use a 1.0-percent solution.

**PRECAUTIONS:** Apply this product prior to heading of grasses grown for seed. The crop receiving the spray in the treated area will be killed. Take care to avoid drift or spray outside the target area for the same reason. Hand-held equipment may be used to control sod remnants or other unwanted vegetation after sod is harvested.

### Creating Rows in Annual Ryegrass

**USE INSTRUCTIONS:** Use 11 to 22 fluid ounces of this product per acre. Use the higher rate when the ryegrass is greater than 6 inches tall. Best results are obtained when applications are made before the ryegrass reaches 6 inches in height.

**PRECAUTIONS:** Set nozzle heights to allow the establishment of the desired row spacing while preventing spray droplets, spray fines, or drift to contact the ryegrass plants not treated. Use low-pressure nozzles, or drop nozzles designed to target the application over a narrow band.

**Grower assumes all responsibility for crop losses from misapplication.**

## FOR THE CONTROL OF ANNUAL WEEDS IN COASTAL BERMUDAGRASS PASTURES PRIOR TO SPRING GROWTH OR IMMEDIATELY AFTER FIRST CUTTING

This product may be applied at 11 fluid ounces per acre to control the weeds listed below and most other winter annual grass and broadleaf weeds in established coastal Bermudagrass pastures:

Annual bluegrass	Oats
Cheat	Ryegrass, Italian
Crabgrass	Sandbur, field
Henbit	Sunflower
Johnson grass, seedling	Wheat
Little barley	Wild mustard

### TIMING OF APPLICATION

**Applications prior to spring growth:** Apply this product in the late winter or early spring but before new coastal Bermudagrass growth begins in the spring. Applications to new growth can damage the Bermudagrass.

Remove domestic livestock from the pasture before making the application. Wait 60 days after making this application before grazing or harvesting the treated area.

**Applications following the first cutting:** Apply this product after the first Bermudagrass cutting when the Bermudagrass has not yet begun to regrow. Applications made after regrowth has begun can damage the Bermudagrass.

Remove domestic livestock from the pasture before making the application. Wait 28 days after making this application before grazing or harvesting the treated area.

### PASTURES

**LABELED CROPS:** Any grass (Gramineae family) except Corn, Sorghum, Sugar cane and those listed in this label under "Cereal and Grain Crops", including Bahiagrass, Bermudagrass, Bluegrass, Brome, Fescue, Guinea grass, Kikuyugrass, Orchardgrass, Pangola grass, Ryegrass, Timothy, Wheatgrass.

**TYPES OF APPLICATIONS:** Preplant, Preemergence, Pasture Renovation, Spot Treatment, Over-the-Top Wiper Applications, Post-emergent Weed Control (broadcast treatments).

#### Preplant, Preemergence, Pasture Renovation

**USE INSTRUCTIONS:** This product may be applied prior to planting or emergence of forage grasses. In addition, this product may be used to control perennial pasture species listed on this label prior to replanting.

**RESTRICTIONS:** If application rates total 2 quarts per acre or less, no waiting period between treatment and feeding or livestock grazing is required. If the rate is greater than 2 quarts per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting. Crops listed for treatment in this label may be planted into the treated area at any time; for other crops, wait 30 days between application and planting.

#### Spot Treatment, Over-the-Top Wiper Applications

**USE INSTRUCTIONS:** This product may be applied as a spot treatment or with wiper applicators in pastures. Applications may be made in the same area at 30-day intervals.

**RESTRICTIONS:** For spot treatments or wiper application methods using rates of 2 quarts per acre or less, the entire field or any portion of it may be treated. When spot treatments or wiper application are made using rates above 2 quarts per acre, no more than 10 percent of the total pasture may be treated at any one time. To achieve maximum performance, remove domestic livestock before application and wait 7 days after application before grazing livestock or harvesting.

#### Post-emergent Weed Control (Broadcast Treatments)

**USE INSTRUCTIONS:** This product may be used to suppress competitive growth and seed production of annual weeds and undesirable vegetation in pastures. For selective applications with broadcast spray equipment, apply 8 to 11 fluid ounces of this product per acre in early spring before desirable perennial grasses break dormancy and initiate green growth. Late fall applications can be made after desirable perennial grasses have reached dormancy.

**PRECAUTIONS:** Some stunting of perennial grasses will occur if broadcast applications are made when plants are not dormant. Use of higher application rates will cause stand reductions.

**RESTRICTIONS:** No waiting period is required between application and grazing or harvesting for feed. Do not apply more than 2 quarts per acre per year onto pasture grasses except for renovation uses (see instructions above). If replanting is needed due to severe

stand reduction, applications must be made at least 30 days prior to planting any crop not listed for treatment in this label.

### RANGELANDS

#### TYPES OF APPLICATIONS: Postemergence.

This product will control or suppress many annual weeds growing in perennial cool- and warm-season grass rangelands.

Preventing viable seed production is key to the successful control and invasion of annual grassy weeds in rangelands. Follow-up applications in sequential years should eliminate most of the viable seeds.

Grazing of treated areas should be delayed to encourage growth of desirable perennials. Allowing desirable perennials to flower and reseed in the treated area will encourage successful transition.

**USE INSTRUCTIONS:** Apply 8 to 11 fluid ounces of this product per acre to control or suppress many weeds, including downy brome, cheatgrass, cereal rye and jointed goatgrass in rangelands. Apply when most brome plants are in early flower and before the plants, including seed heads, turn color. Allowing for secondary weed flushes to occur in the spring following rain events further depletes the seed reserve and encourages perennial grass conversion on weedy sites. Fall applications are possible, where as spring moisture is usually limited and fall germination allows for good weed growth.

For medushead, apply 11 fluid ounces of this product per acre at the 3-leaf stage. Delaying applications beyond this stage will result in reduced or unacceptable control. Controlled burning may be useful in eliminating the thatch layer produced by slow decaying culms prior to application. Allow new growth to occur before spraying after a burn. Repeat applications in subsequent years may be necessary to eliminate the seed-bank before reestablishing desirable perennial grasses in medushead-dominated rangelands.

**PRECAUTIONS:** Slight discoloration of the desirable grasses may occur, but they will regreen and regrow under most soil conditions as effects of this product wear off.

**RESTRICTIONS:** Do not use ammonium sulfate when spraying rangeland grasses with this product. No waiting period between treatment and feeding or livestock grazing is required. Do not apply more than 2 quarts per acre per year.

### ROUNDUP READY® CROPS

The following instructions or those separately published on Altitude Supplemental labeling include all applications which can be made onto the specified Roundup Ready crops during the complete cropping season. Do NOT combine these instructions with others for crop varieties that do not contain a Roundup Ready gene, in the "ANNUAL AND PERENNIAL CROPS (Alphabetical)" section of this label.

USE THIS PRODUCT FOR POSTEMERGENCE APPLICATION ONLY ON CROP VARIETIES DESIGNATED AS CONTAINING A ROUNDUP READY GENE.

Applying this product to crop varieties that are not designated as Roundup Ready will result in severe crop injury and yield loss. Avoid contact with foliage, green stems, or fruit of crops, or any desirable plants that do not contain a Roundup Ready gene, since severe injury or destruction will result.

The Roundup Ready designation indicates that the crop variety contains a patented gene that provides tolerance to this product. Information on Roundup Ready crop varieties may be obtained from your seed supplier or Altitude representative. Roundup Ready crop varieties must be purchased from an authorized licensed seed supplier.

**For ground applications** with broadcast equipment, apply this product in 5 to 20 gallons of spray solution per acre. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results with ground application equipment use flat spray nozzles. Check for even distribution of spray droplets.

**For aerial applications** apply this product in 3 to 15 gallons of water per acre. See the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for procedures to avoid spray drift that may cause injury to any vegetation not intended for treatment. Use of appropriate buffer zones will help prevent injury to adjacent vegetation.

**ATTENTION: AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS WHICH DO NOT CONTAIN A ROUNDUP READY GENE.**

See the "MIXING AND APPLICATION EQUIPMENT AND TECHNIQUES" sections of this label for additional directions and restrictions on the application of this product.

Tank mixtures with other herbicides, insecticides, fungicides, micronutrients or foliar fertilizers may result in reduced weed control or crop injury and are NOT for over-the-top applications of this product unless otherwise noted in this product label, supplemental labeling or fact sheets published separately.



Ammonium sulfate may be mixed with this product for applications to Roundup Ready crops. Refer to the "MIXING" section for instructions for ammonium sulfate.

**Sprayer Preparation:** It is important that sprayer and mixing equipment be clean and free of pesticide residue before making applications of this product. Follow the cleaning procedures specified on the label of the product(s) previously used. THOROUGHLY CLEAN THE SPRAY TANK AND ALL LINES AND FILTERS TO ELIMINATE POTENTIAL CONTAMINATION FROM OTHER HERBICIDES PRIOR TO MIXING AND APPLYING THIS PRODUCT.

**NOTE:** The following recommendations are based on a clean start at planting by using a burndown application or tillage to control existing weeds before crop emergence. In no-till and stale seedbed systems, a preplant burndown treatment of this product is recommended to control existing weeds prior to crop emergence. Some weeds, such as black nightshade, broadleaf signalgrass, sicklepod, Texas panicum, sandbur, annual morningglory, woolly cupgrass, shattercane, wild proso millet, burcucumber, and giant ragweed with multiple germination times or suppressed (stunted) weeds may require a second application of this product for complete control. The second application should be made after some regrowth has occurred and at least 10 days after a previous application of this product.

### ROUNDUP READY® ALFALFA

**TYPES OF APPLICATIONS:** Preplant, At-Planting, Preemergence, Post-emergence (In-Crop)  
**USE INSTRUCTIONS:** Refer to the following table for the maximum application rates of this product.

Maximum Application Rates	
Combined total per year for all applications, including Preplant during year of establishment	5.3 quarts per acre
Combined total per year for in-crop applications for newly established and established stands	4.1 quarts per acre (132 fluid ounces per acre)
Preplant, At-Planting and Preemergence single applications	44 fluid ounces per acre

**PRECAUTIONS:** See label for precautionary instructions for use in Roundup Ready crops. Refer to other applicable sections of the label for more information on Maximum Application Rates.

#### Preplant, At-Planting, Preemergence

**USE INSTRUCTIONS:** This product may be applied before, during or after planting Roundup Ready alfalfa.

#### Postemergence (In-crop)

**USE INSTRUCTIONS:** Applications of this product may be made over the top of Roundup Ready alfalfa (in-crop) from emergence until 5 days prior to cutting. To maximize crop yield and quality potential of forage and hay, applications of this product should be made after weeds have emerged but before alfalfa growth or re-growth interferes with spray coverage of the target weeds.

Refer to the "Annual Weeds Rate Section" and "Perennial Weeds Rate Section" in the label for rate recommendations for specific weeds. When applied as directed, this product will control these annual and perennial grasses and broadleaf weeds. In addition to those weeds listed in these sections, this product will suppress or control the parasitic weed Dodder (*Cuscuta* spp.) in Roundup Ready alfalfa. Repeat applications may be necessary for complete control.

**New Stand Establishment (Seeding Year):** Due to the biology and breeding constraints of alfalfa, up to 10 percent of the seedlings may not contain a Roundup Ready gene and will not survive after the first application of this product. To eliminate the undesirable effects of stand gaps created by this loss of plants, a single application of at least 22 fluid ounces per acre of this product should be applied prior to the 4-trifoliolate growth stage. Refer to the following table for application rates during stand establishment (seeding year).

NEW STAND ESTABLISHMENT (SEEDING YEAR) Application Rates	
<b>Prior to First Cutting</b>	
From emergence up to 4 trifoliolate leaves	22 to 44 fluid ounces per acre
From 5 trifoliolate leaves up to 5 days before first cutting	Up to 44 fluid ounces per acre
<b>After First Cutting</b>	
In-crop application, per cutting up to 5 days before cutting	Up to 44 fluid ounces per acre

**PRECAUTIONS:** See label for precautionary instructions for use in Roundup Ready crops. Refer to other applicable sections of the label for more information on Maximum Application Rates.  
**Established Stands (Non-seeding Year):** Refer to the following table for directions and application rates for in-crop applications to established stands of alfalfa non-seeding year.

ESTABLISHMENT (NON-SEEDING YEAR) Application Rates	
In-crop application, per cutting up to 5 days before cutting	Up to 44 fluid ounces per acre

**PRECAUTIONS:** Where Roundup Ready alfalfa is grown with a companion or cover crop, or is overseeded with a second species, in-crop (over-the-top) applications of this product will eliminate the non-Roundup Ready (non-phosphosate tolerant) species.

**RESTRICTIONS:** Any single in-crop application of this product must not exceed 44 fluid ounces per acre. Sequential applications of this product should be at least 7 days apart. The combined total per year for all in-crop applications in both newly established (seeding year) and established stands (non-seeding year) must not exceed 4.1 quarts (132 fluid ounces) per acre. Remove domestic livestock before application. Wait a minimum of 5 days after last application before grazing, or cutting and feeding of forage and hay.

### ROUNDUP READY® CANOLA (SPRING VARIETIES)

Roundup Ready spring canola is defined as those Roundup Ready canola varieties that are seeded in the spring and harvested in the fall and do not enter a winter dormancy period. **DO NOT USE THIS PRODUCT ON SPRING CANOLA WITH A ROUNDUP READY GENE PLANTED IN THE FOLLOWING STATES:** ALABAMA, DELAWARE, FLORIDA, GEORGIA, KENTUCKY, MARYLAND, NEW JERSEY, NORTH CAROLINA, SOUTH CAROLINA, TENNESSEE, VIRGINIA AND WEST VIRGINIA, EXCEPT FOR USES IN WILDLIFE FOOD PLOTS THAT WILL NOT BE HARVESTED FOR HUMAN OR LIVESTOCK FOOD.

**TYPES OF APPLICATIONS:** Preplant, At-Planting, Preemergence, Postemergence (In-crop).  
**USE INSTRUCTIONS:** Refer to the following table for the maximum application rates for this product with Roundup Ready canola (spring varieties).

Maximum Application Rates	
Total of all Preplant, At-Planting, Preemergence applications	44 fluid ounces per acre
Total of all In-crop applications from emergence to 6-leaf stage	22 fluid ounces per acre

**PRECAUTIONS:** See label for precautionary instructions for use in Roundup Ready crops. Refer to other applicable sections of the label for more information on Maximum Application Rates.

#### Preplant, At-Planting, Preemergence

**USE INSTRUCTIONS:** This product may be applied before, during or after planting Roundup Ready spring canola.

**RESTRICTIONS:** Maximum quantity of this product that may be applied for all preplant, at-planting and preemergence applications combined is 44 fluid ounces per acre per season.

#### Postemergence (In-crop)

**USE INSTRUCTIONS:** This product may be applied postemergence to Roundup Ready spring canola from emergence through the 6-leaf stage of development. Applications made during bolting or flowering may result in crop injury and yield loss. To maximize yield potential, make applications early to eliminate competing weeds.

**Single Application:** Apply 11 to 16 fluid ounces of this product per acre no later than the 6-leaf stage for the control of annual weeds. Avoid overlapping applications as this may result in temporary yellowing, delayed flowering, and/or growth reduction. Similar crop injury may result when applications of more than 11 fluid ounces per acre are applied after the 4-leaf stage.

**Sequential Applications:** Apply 11 fluid ounces of this product per acre to 1 to 3 leaf canola followed by a sequential application at a minimum interval of 10 days, but no later than the 6-leaf stage. Sequential applications are recommended for early emerging annual weeds and perennial weeds such as Canada thistle and quackgrass, or when multiple applications are needed for adequate weed control.

**RESTRICTIONS:** No more than two in-crop (over-the-top) broadcast applications may be made from crop emergence through the 6-leaf stage of development, and the total of all in-crop applications must not exceed 22 fluid ounces of this product per acre. **Pre-harvest Interval (PHI):** Allow a minimum of 60 days between last application and canola harvest.

### ROUNDUP READY® CANOLA (WINTER VARIETIES)

Roundup Ready winter canola is defined as those Roundup Ready canola varieties that are seeded in early fall and harvested the following spring or summer. Winter canola varieties are intended to enter a cold period dormancy in the winter.

**TYPES OF APPLICATIONS:** Preplant, At-Planting, Preemergence, Postemergence (In-crop). **USE INSTRUCTIONS:** Refer to the following table for the maximum application rates for this product with Roundup Ready canola (winter varieties).

Maximum Application Rates	
Total of all Preplant, At-Planting, Preemergence applications	44 fluid ounces per acre
Total of all In-crop applications: from emergence to canopy closure or prior to bolting in the spring	44 fluid ounces per acre

**PRECAUTIONS:** See label for precautionary instructions for use in Roundup Ready crops. Refer to other applicable sections of the label for more information on Maximum Application Rates.

### Preplant, At-Planting, Preemergence

**USE INSTRUCTIONS:** This product may be applied before, during or after planting Roundup Ready winter canola.

**RESTRICTIONS:** Maximum quantity of this product that may be applied for all preplant, at-planting and preemergence applications combined is 44 fluid ounces per acre per season.

### Postemergence (In-crop)

**USE INSTRUCTIONS:** This product may be applied to Roundup Ready winter canola varieties from emergence to canopy closure in the fall and prior to bolting in the spring. Applications made during or after bolting may result in crop injury and yield loss. To maximize yield potential, make applications early to eliminate competing weeds.

Some weeds with multiple germination times, or suppressed (stunted) weeds, or weeds that have overwintered may require sequential applications of this product for control. The second application should be made after some regrowth has occurred and at least 60 days after a previous application of this product.

**Single Application:** Apply 16 to 22 fluid ounces of this product per acre in the fall. Applications in the fall should be made when weeds are small and actively growing. Use the higher rate in the recommended range when weed densities are high, when weeds have overwintered or when weeds become large and well established. Applications of greater than 16 fluid ounces per acre prior to the 6-leaf stage may result in reduced crop growth in the fall. Avoid spray overlaps. Spray overlaps may result in temporary yellowing and/or growth reduction.

**Sequential Applications:** Apply 11 to 22 fluid ounces of this product per acre to 2-leaf or larger canola in the fall, followed by a sequential application at the same rate and at a minimum interval of 60 days, but before bolting in the spring. Sequential applications are recommended for early emerging annual weeds and winter emerging weeds such as downy brome, jointed goatgrass and ryegrass, and for weeds that have overwintered. This product will control or suppress most perennial weeds. For some perennial weeds, sequential applications may be required to reduce competition with the crop.

**RESTRICTIONS:** No more than two over-the-top broadcast applications may be made from crop emergence up to the onset of bolting, and the total in-crop application must not exceed 44 fluid ounces of this product per acre. Applications of greater than 16 fluid ounces per acre prior to the 6-leaf stage may result in reduced crop growth in the fall. **Pre-harvest Interval (PHI):** Allow a minimum of 60 days between last application and harvest of canola grain. No waiting period is required between application and open grazing of livestock.

### ROUNDUP READY® CORN

**TYPES OF APPLICATIONS:** Preplant, Pre emergence, At-Planting, Postemergence (In-Crop), Spot Treatment, Preharvest, Post-Harvest.

Maximum Allowable Combined Application	Quantities Per Season
Combined total per year for all applications	5.3 quarts per acre
Total of Preplant, At-Planting, Preemergence applications	3.3 quarts per acre
Total in-crop applications from emergence through the V8 stage or 30 inches	44 fluid ounces per acre
Maximum Preharvest application rate after maximum kernel fill is complete and the crop is physiologically mature (black layer formation) until 7 days before harvest	22 fluid ounces per acre

### Preplant, Preemergence, At-Planting

**USE INSTRUCTIONS:** This product may be applied alone or in a tank mixture before, during or after planting corn.

**TANK MIXTURES:** This product may be tank mixed with Bullet, Degree, Degree Xtra, Harness, Harness Xtra, Harness Xtra 5.6L, Larat, Lasso or Micro-Tech at 50 to 100 percent of labeled rate. Refer to the specific product label and observe all precautions and limitations on the label for any preemergence herbicide application, including application timing restrictions, soil restrictions, minimum recropping interval and rotational guidelines—the more restrictive requirements apply.

**NOTE:** For maximum weed control, a postemergence (In-Crop) application of this product should be applied following the use of less than labeled rates of the preemergence residual products listed above.

### Postemergence (In-Crop)

**USE INSTRUCTIONS:** This product may be applied postemergence to Roundup Ready corn from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 30 inches, whichever comes first.

When applied as directed, this product controls labeled annual grass and broadleaf weeds in Roundup Ready corn. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more application of this product. The post-emergent application of 16 to 22 fluid ounces per acre of this product should be made before the weeds reach a height and/or density that the weeds become competitive with the crop, generally 4 inch tall weeds or less.

This product may be applied alone as a postemergence In-Crop application to provide control of emerged weeds listed on this label. If new flushes of weeds occur, a sequential application of this product at 16 to 22 fluid ounces per acre will control the labeled grasses and broadleaf weeds.

**TANK MIXTURES:** This product may be applied in tank mixture with Bullet, Degree, Degree Xtra, Harness, Harness Xtra, Harness Xtra 5.6L or Micro-Tech at 50 to 100 percent of labeled rate. This product may be applied in tank mixture with Permit® and atrazine at labeled rates. Refer to the specific product label and observe all precautions and limitations on the label for all products used in tank mixtures, including application timing restrictions, soil restrictions, minimum recropping interval and rotational guidelines—the more restrictive requirements apply.

Tank Mix Partner	Maximum Height of Corn For Application
Degree, Degree Xtra, Harness, Harness Xtra, Harness Xtra 5.6L	11 inches
Bullet*, Micro-Tech*	5 inches
Permit	30 inches
Atrazine	12 inches

\*Bullet and Micro-Tech are not registered for use as a post emergence application in Texas. **PRECAUTIONS, RESTRICTIONS:** See the "ROUNDUP READY CROPS" section of this label for precautionary instructions for use in Roundup Ready crops. Single In-Crop applications of this product are not to exceed 22 fluid ounces per acre. Sequential In-Crop applications of this product from emergence through the V8 stage or 30 inches must not exceed 44 fluid ounces per acre per growing season. Allow a minimum of 10 days between In-Crop applications of this product. Allow a minimum of 50 days between application of this product and harvest of corn forage.

## Preharvest

**USE INSTRUCTIONS:** In Roundup Ready corn, up to 22 fluid ounces per acre of this product can be applied preharvest. Make applications at 35 percent grain moisture or less. Ensure that maximum kernel fill is complete and the corn is physiologically mature (black layer formed).

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between application and harvest.

## Post-Harvest

**USE INSTRUCTIONS:** This product may be applied after harvest of corn. Higher rates may be required for control of large weeds that were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.

## POSTEMERGENCE TO ROUNDUP READY® CORN 2

### PRODUCT INFORMATION

**USE THIS PRODUCT ONLY ON CORN HYBRIDS DESIGNATED AS CONTAINING THE ROUNDUP READY GENE.**

Applying this product to corn hybrids which are not designated as Roundup Ready will result in severe crop injury and yield loss. The Roundup Ready designation indicates that the corn contains a patented gene which provides tolerance to this product.

**NOTE:** The instructions provided in this label are specific to, and should only be used with, Roundup Ready Corn 2 hybrids. Do Not combine the instructions in this label with any other Roundup Ready corn instructions on labeling for this or other glyphosate-containing product. See "Annual Maximum Use Rate" in the "PRODUCT INFORMATION" section of the label booklet, for additional information.

**The use of the higher in-crop over the top rates described in this label on other than Roundup Ready Corn 2 may cause crop injury and reduce yields.**

### Application Instructions

For Roundup Ready Corn 2 from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 30 inches, whichever comes first, this product may be applied over-the-top broadcast or with drop nozzles. When corn height is 24 to 30 inches (free standing), for optimum spray coverage and weed control, drop nozzles are recommended. For corn heights 30 to 48 inches (free standing), apply this product only using ground application equipment with drop nozzles adjusted to avoid spraying into the whorls of the corn plants.

Single in-crop applications of this product must not exceed 1 quart per acre.

Maximum Allowable Combined Application Quantities Per Season	
Combined total per year for all applications	5.3 quarts per acre
Total of Preplant, At-Planting, Preemergence applications	2.0 quarts per acre
Total in-crop applications from emergence through the 48 inches	44 fluid ounces per acre
Maximum Preharvest application rate after maximum kernel fill is complete and the crop is physiologically mature (black layer formation) with 35 percent grain moisture or less until 7 days before harvest	22 fluid ounces per acre

### See Precautions and Restrictions on preharvest applications.

**Cropping Season:** Combined total per year for all applications must not exceed 5.3 quarts per acre.

The addition of 1 to 2 percent dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this product under hard water conditions, drought conditions or when tank mixed with Bullet® or Micro-Tech® herbicides.

Ensure that ammonium sulfate is completely dissolved in the spray tank before adding herbicides. Thoroughly rinse the spray system with clean water after use to reduce corrosion. Do not use other additives, including fertilizers and micro-nutrients with this product since this may result in increased potential for crop injury.

**ATTENTION: AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS WHICH DO NOT CONTAIN THE ROUNDUP READY GENE.**

THOROUGHLY CLEAN THE SPRAY TANK AND ALL LINES AND FILTERS TO ELIMINATE POTENTIAL CONTAMINATION FROM OTHER HERBICIDES PRIOR TO MIXING AND APPLYING THIS PRODUCT.

**For ground applications:** Use the listed rates of this product in 5 to 20 gallons of spray solution per acre as a broadcast spray. Carefully select correct nozzles and spray pressure

to avoid spraying a fine mist. Check for even distribution of spray droplets.

**For aerial applications:** Use the listed rates of this product in 3 to 15 gallons of spray solution per acre. Do not exceed 22 fluid ounces per acre. See "WEEDS CONTROLLED" section on this label. **AVOID DRIFT - DO NOT APPLY DURING INVERSION CONDITIONS, WHEN WINDS ARE GLUSTY OR UNDER ANY OTHER CONDITIONS WHICH FAVOR DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. TO PREVENT INJURY TO ADJACENT VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.**

## Weed Control

Apply 16 to 22 fluid ounces of this product per acre for control of labeled grasses and broadleaf weeds in conventional and no-till corn production systems. This product applied at up to 1 quart per acre will control or suppress the growth of perennial weeds such as: Bermudagrass, Canada thistle, common milkweed, field bindweed, hemp dogbane, horse-nettle, nutsedge, quackgrass, rhizome johnson grass, redvine, trumpet creeper, swamp smartweed, and wirestem nuttall. For additional information on perennial weeds, see the "PERENNIAL WEED RATE TABLE" of the label booklet.

## Preplant, Pre-emergence, At-Planting

**USE INSTRUCTIONS:** This product may be applied alone or in a tank-mixture before, during or after planting corn.

**TANK MIXTURES:** This product may be tank mixed with Bullet, Degree®, Degree Xtra®, Harness®, Harness Xtra, Harness Xtra 5.6L, Lariat, Lasso or Micro-Tech herbicides at 50 to 100 percent of labeled rate. Refer to the specific product label and observe all precautions and limitations on the label for any preemergence herbicide application, including application timing restrictions, soil restrictions, minimum recropping interval and rotational guidelines, the more restrictive requirements apply.

**NOTE:** For maximum weed control, a postemergence (in-crop) application of this product should be applied following the use of less than labeled rates of the preemergence residual products listed above.

## Pre-emergence followed by Postemergence Weed Control Program

**USE INSTRUCTIONS:** This product may be applied post-emergence in-crop following any labeled pre-emergence herbicide application. The post application of this product should be made before the weeds reach a height and/or density that the weeds become competitive with the crop.

An in-crop application of this product at the listed rate will provide control of emerged weeds listed on the label. This product may be applied over-the-top broadcast or with drop nozzles post-emergence to Roundup Ready Corn 2 from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 30 inches (free standing), whichever comes first. When corn height is 24 to 30 inches drop nozzles are recommended for optimum spray coverage and weed control. For corn heights 30 to 48 inches (free standing), apply this product only using ground application equipment with drop nozzles and avoid spraying into the whorls of the corn plants.

## Post-emergence Only Weed Control Program

**USE INSTRUCTIONS:** This product may be applied alone as a postemergence in-crop application to provide control of emerged weeds listed on the label. The postemergence application of this product should be made before the weeds reach a height and/or density that the weeds become competitive with the crop. If new flushes of weeds occur, a sequential application of this product at 16 to 22 fluid ounces per acre will control the labeled grasses and broadleaf weeds. This product may be applied over-the-top broadcast or with drop nozzles post-emergence to Roundup Ready Corn 2 from emergence through the V8 stage or until corn height reaches 30 inches (free standing), whichever comes first. When corn height is 24 to 30 inches drop nozzles are recommended for optimum spray coverage and weed control. For corn height 30 to 48 inches (free standing), apply this product only using ground application equipment with drop nozzles and avoid spraying into the whorls of the corn plants.

**TANK MIXTURES:** This product may be applied in tank mixture with a labeled rate of Degree, Degree Xtra, Harness, Harness Xtra, Harness Xtra 5.6L, Micro-Tech and Bullet herbicides at 50 to 100 percent of labeled rate.

This product may be applied in tank mixture with Permit® and atrazine at labeled rates. Refer to the specific product label and observe all precautions and limitations on the label for all products used in tank mixtures, including application timing restrictions, soil restrictions, minimum re-cropping interval and rotational guidelines - the more restrictive

requirements apply. Tank mixtures with other products may result in increased potential for crop injury and/or weed antagonism. Refer to the table below for height limitation for tank mix partner.

Tank Mix Partner	Maximum Height of Corn For Application
Degree, Degree Xtra, Harness, Harness Xtra, Harness Xtra 5.6L	11 inches
Bullet*, Micro-Tech*	5 inches
Permit	30 inches
Atrazine	12 inches

\*Bullet and Micro-Tech are not registered for use as a postemergence application in Texas. **RESTRICTIONS:** Single in-crop applications of this product must not exceed 1 quart per acre. Allow a minimum of 10 days between in-crop applications of this product. Allow a minimum of 50 days between application of this product and harvest of corn forage or grain. For applications at preharvest timing allow a minimum of 7 days between application and harvest or feeding of corn stover or grain. There are no rotational crop restrictions following applications of this product.

#### Preharvest

**USE INSTRUCTIONS:** A single preharvest application of up to 22 fluid ounces per acre of this product may be made, if no more than a total of 44 fluid ounces of this product has been previously applied in over-the-top or drop nozzle applications. Make a preharvest application at 35 percent grain moisture or less. Ensure that maximum kernel fill is complete and the corn is physiologically mature (black layer formed).

**RESTRICTIONS:** Do not make a preharvest application of this product if more than a combined total of 44 fluid ounces of this product has been previously applied in over-the-top or drop nozzle applications. **Pre-harvest Interval (PHI):** Allow a minimum of 7 days between a preharvest application and harvest or feeding of corn stover or grain.

#### Postharvest

**USE INSTRUCTIONS:** This product may be applied after harvest of corn. Higher rates may be required for control of large weeds that were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.

#### CORN HYBRIDS WITH ROUNDUP READY® 2 TECHNOLOGY

(including ROUNDUP READY CORN 2 and products displaying the ROUNDUP READY 2 TECHNOLOGY LOGO)

These instructions are for use with corn hybrids with Roundup Ready 2 Technology, including Roundup Ready Corn 2 and products displaying the Roundup Ready 2 technology logo, alone or in combination with other traits. Corn hybrids with Roundup Ready 2 Technology contain a patented glyphosate tolerance gene.

**TYPES OF APPLICATIONS:** Preplant, At-Planting, Preemergence, Postemergence (In-crop), Spot Treatment, Preharvest, Post-Harvest.

Maximum Application Rates	
Combined total per year for all applications	5.3 quarts per acre
Total of Preplant, At-Planting, Preemergence applications	3.3 quarts per acre
Total in-crop applications from emergence through the 48 inch corn	64 fluid ounces per acre (32 fluid ounces per acre per acre)
Maximum preharvest application rate after maximum kernel fill is complete and the crop is physiologically mature (black layer formation) until 7 days before harvest*	22 fluid ounces per acre

\*See RESTRICTIONS section for Preharvest applications

The maximum combined total amount of this product that may be applied per year is 5.3 quarts per acre. **The use of the in-crop (over-the-top) rates described in these instructions on corn hybrids other than corn hybrids with Roundup Ready 2 Technology, including Roundup Ready Corn 2 and products displaying the Roundup Ready 2 Technology logo may cause crop injury and reduced yields.**

#### Preplant, At-Planting, Preemergence

**USE INSTRUCTIONS:** This product may be applied alone or in a tank mixture before, during or after planting.

**TANK MIXTURES:** This product may be tank-mixed with the products listed below. Ensure that the specific product being used is labeled for application prior to emergence of corn. Read and follow label directions for all products in the tank mixture. Apply these tank mixtures in 10 to 20 gallons of water, or 10 to 60 gallons of nitrogen solution, per acre.

Acetochlor	Clarity	Harness Xtra	Outlook
Aim	Define	Harness Xtra 5.6L	Pendimethalin
Aim EC	Degree	Hornet	Python
Alachlor	Degree Xtra	Keystone	Python II
Atrazine	Distinct	Keystone LA	Radius
Axiom	Dual II MAGNUM	Lariat	Resolve
Balance PRO	Epic	Leadoff	Resource
Banvel	Frontier	Linex	TopNotch
Bicep MAGNUM	FullTime	Lorox	2,4-D
Bicep II MAGNUM	Guardman	Marksman	
Bicep Lite II MAGNUM	Guardman MAX	Meflalachlor	
Bullet	Harness	Micro-Tech	

**RESTRICTIONS:** Maximum quantity of this product that may be applied for all preplant, at-planting and preemergence applications combined is 3.3 quarts per acre per season. Refer to individual tank mixture product label for restrictions and precautions; use according to the most restrictive precautionary statements for each product in the tank mixture.

**NOTE:** For maximum weed control, a postemergence (in-crop) application of this product should be applied following the use of the preemergence residual products listed above.

#### Postemergence (In-crop)

**USE INSTRUCTIONS:** This product may be applied alone or in tank mixtures over the top of corn hybrids with Roundup Ready 2 Technology from emergence through the V8 stage (8 leaves with collars), or until corn height reaches 30 inches (free standing), whichever comes first. Drop nozzles are recommended for optimum spray coverage and weed control when corn height is 24 to 30 inches. For corn heights 30 to 48 inches (free standing), apply this product **only** using ground application equipped with drop nozzles aligned to avoid spraying into the whorls of the corn plants. Single in-crop applications of this product up to 48 inch corn must not exceed 32 fluid ounces per acre. Sequential in-crop applications of this product from emergence through 48 inches in height must not exceed 64 fluid ounces per acre per growing season.

When applied as directed, this product will control annual grasses and broadleaf weeds listed on the label booklet. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more application of this product. A postemergence application of 16 to 22 fluid ounces of this product per acre should be made before weeds exceed 4 inches in height, or, generally, before they become competitive with the crop. If new flushes of weeds occur, a sequential application of this product at 16 to 22 fluid ounces per acre should be made before weeds exceed 4 inches in height.

**TANK MIXTURES:** This product may be tank-mixed with the following products. Ensure that the specific product being used in the tank mixture is registered for application postemergence (in-crop) to corn. Read and follow label directions of all products in the tank mixture.

Acetochlor	Basis Gold	Equip	Micro-Tech
Aim EC	Bullet	Harness	Option
Alachlor	Clarity	Harness Xtra	Resolve
Atrazine	Degree	Harness Xtra 5.6L	Resource
Banvel	Degree Xtra	Hornet	2,4-D
Basis	Distinct	Marksman	

Tank Mix Partner	Maximum Height of Corn for Application
Degree Degree Xtra Harness Harness Xtra Harness Xtra 5.6L	11 inches
Bullet* Micro-Tech*	5 inches
Atrazine	12 inches

\*Bullet and Micro-Tech are not registered for use as a postemergence application in Texas. **RESTRICTIONS:** Allow a minimum of 10 days between in-crop applications of this product. **Pre-harvest Interval (PHI):** Allow a minimum of 50 days between application of this product and harvest of corn forage or grain. Refer to individual tank mixture product label for restrictions and precautions, use according to the most restrictive precautionary statements for each product in the tank mixture.

#### Preharvest

**USE INSTRUCTIONS:** This product may be applied for annual and perennial weed control prior to harvest at use rates up to 22 fluid ounces per acre. Make applications at 35 percent grain moisture or less. Ensure that maximum kernel fill is complete and the corn is physiologically mature (black layer formed).

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between application and harvest or feeding of corn stover or grain. A preharvest application may only be made if the combined total of previously applied over-the-top or drop nozzle applications does not exceed 44 fluid ounces of this product per acre.

#### Post-Harvest

**USE INSTRUCTIONS:** This product may be applied for weed control after crop harvest. Higher rates may be required for control of large weeds that were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.

#### ROUNDUP READY® COTTON

In the Following States:

Alabama, Arkansas, Florida, Georgia, Louisiana, Missouri, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia

See Label Booklet for Arizona Only Roundup Ready® Cotton Use Instructions

**TYPES OF APPLICATIONS:** Preplant, At-Planting, Preemergence, Postemergence (In-crop), Selective Equipment (In-crop), Preharvest.

**USE INSTRUCTIONS:** Refer to the following table for maximum application rates of this product with Roundup Ready cotton.

Maximum Application Rates	
Combined total per year for all applications	5.3 quarts per acre
Total of all Preplant, At-Planting, Preemergence applications	3.3 quarts per acre
Total of all In-crop applications from ground cracking to layby	2.5 quarts per acre
Maximum preharvest application rate	44 fluid ounces per acre
Combined total of all In-crop applications from emergence through harvest	4.0 quarts per acre

**RESTRICTIONS:** See **ROUNDUP READY CROPS** section of the label booklet for precautionary instructions for use of this product in Roundup Ready crops. The combined total application of this product from cotton emergence through harvest must not exceed 4 quarts per acre. **Pre-harvest Interval (PHI):** Allow a minimum of 7 days between application and harvest. Refer to **PRODUCT INFORMATION (How This Product Works)** section of the label booklet for more information on Maximum Application Rates.

#### Preplant, At-Planting, Preemergence

**USE INSTRUCTIONS:** This product may be applied before, during or after planting Roundup Ready cotton.

**TANK MIXTURES:** This product may be tank-mixed with 2,4-D and Clarity and **ONLY** applied prior to planting. This product may be tank-mixed with the following products and applied prior to crop emergence. Ensure that the specific product being used in the tank mixture is registered for application prior to emergence of cotton. Read and follow label directions of all products in the tank mixture.

Caparol, Direx, Dual MAGNUM, pendimethalin, Reflex/Staple, metolachlor

**RESTRICTIONS:** The maximum quantity of this product that may be applied for all preplant, at-planting and preemergence applications combined is 3.3 quarts per acre per season. Refer to individual tank mixture product label for restrictions and precautions; use according to the most restrictive precautionary statements for each product in the tank mixture.

#### Postemergence (In-crop)

**USE INSTRUCTIONS:** This product may be applied over the top of Roundup Ready cotton (in-crop) at rates up to 22 fluid ounces per acre per application from ground cracking until 4-leaf (node) stage of development (until the first true leaf reaches the size of a quarter). **NO MORE THAN TWO OVER-THE-TOP BROADCAST APPLICATIONS MAY BE MADE FROM CROP EMERGENCE THROUGH THE 4-LEAF (NODE) STAGE OF DEVELOPMENT. SEQUENTIAL OVER-THE-TOP OR POST-DIRECTED APPLICATIONS OF THIS PRODUCT IN-CROP MUST BE AT LEAST 10 DAYS APART AND COTTON MUST HAVE AT LEAST TWO NODES OF INCREMENTAL GROWTH BETWEEN APPLICATIONS. Over-the-top applications made after 4-leaf (node) stage of development may result in boll loss, delayed maturity and/or yield loss.**

**TANK MIXTURES:** This product may be tank-mixed with the following products and applied over the top of Roundup Ready cotton up to the 4-leaf stage. Ensure that the specific product being used in the tank mixture is registered for application postemergence (in-crop) to cotton. Read and follow label directions of all products in the tank mixture.

Assure II, Dual MAGNUM, Fusilade, Poast Plus, Select MAX, Staple, metolachlor

Staple may cause leaf yellowing and/or leaf crinkling when applied postemergence (in-crop). Dual MAGNUM applied over the top of Roundup Ready cotton may cause leaf injury in the form of necrotic spotting.

#### Salvage Treatment

This treatment may be used after the 4-leaf stage of development and should only be used where weeds threaten to cause the loss of the crop. Apply 22 fluid ounces per acre either as an over-the-top application or as a post-directed treatment sprayed higher on the cotton plants and over the weeds. **NOTE: SALVAGE TREATMENTS WILL RESULT IN SIGNIFICANT BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS. NO MORE THAN ONE SALVAGE TREATMENT MAY BE USED PER GROWING SEASON.**

**RESTRICTIONS:** Maximum quantity of this product that may be applied for all in-crop applications from ground-cracking to layby combined is 2.5 quarts per acre per season. **DO NOT ADD ADDITIONAL SURFACTANT OR ADDITIVES CONTAINING SURFACTANT TO THIS PRODUCT (OTHER THAN THOSE CONTAINED IN ANY TANK-MIX PRODUCT) FOR OVER-THE-TOP APPLICATIONS TO ROUNDUP READY COTTON.**

Refer to individual tank mixture product label for restrictions and precautions; use according to the most restrictive precautionary statements for each product in the tank mixture.

#### Selective Equipment (In-crop)

**USE INSTRUCTIONS:** This product may be applied using precision post-directed or hooded sprayers at rates up to 22 fluid ounces per acre per application to Roundup Ready cotton through layby. At this stage, use post-directed equipment that directs the spray to the base of the cotton plants. Avoid contact of the herbicide spray with leaves of the cotton to the maximum extent possible. To minimize spray onto the leaves of the cotton plants, place nozzle in a low position directing a horizontal spray pattern under the cotton leaves to contact weeds in the row, and maintain low spray pressure (less than 30 psi). For best results, make applications while weeds are small (less than 3 inches in height). See the "APPLICATION EQUIPMENT AND TECHNIQUES" section of the label for additional use instructions.

**TANK MIXTURES:** This product may be tank-mixed with the following products for in-crop application using precision post-directed or hooded sprayers. Ensure that the specific product being used in the tank mixture is registered for application postemergence (in-crop) to cotton. Read and follow label directions of all products in the tank mixture.

Aim, Caparol, Chateau, Direx, Envoko, Layby-Pro, pendimethalin, Staple, Valor

Staple may cause leaf yellowing and/or leaf crinkling when applied postemergence (in-crop).

**RESTRICTIONS:** Maximum quantity of this product that may be applied for all in-crop applications from ground cracking to layby combined is 2.5 quarts per acre per season. NO MORE THAN TWO APPLICATIONS OF THIS PRODUCT MAY BE MADE FROM THE 5-LEAF STAGE THROUGH LAYBY. SEQUENTIAL OVER-THE-TOP OR POST-DIRECTED APPLICATIONS OF THIS PRODUCT IN-CROP MUST BE AT LEAST 10 DAYS APART AND COTTON MUST HAVE AT LEAST TWO NODES OF INCREMENTAL GROWTH BETWEEN APPLICATIONS. Refer to individual tank mixture product label for restrictions and precautions; use according to the most restrictive precautionary statements for each product in the tank mixture.

#### Preharvest

**USE INSTRUCTIONS:** This product may be applied for annual and perennial weed control prior to crop harvest after 20 percent boll crack. Apply up to 44 fluid ounces of this product per acre. **NOTE:** This product will not enhance the performance of harvest aids when applied to Roundup Ready cotton.

**PRECAUTIONS: DO NOT** apply this product for preharvest weed control to cotton grown for seed, as a reduction in germination or vigor may occur.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between application and harvest of cotton.

**ATTENTION: USE OF THIS PRODUCT IN ACCORDANCE WITH LABEL DIRECTIONS IS EXPECTED TO RESULT IN NORMAL GROWTH OF ROUNDUP READY COTTON. HOWEVER, DUE TO SENSITIVITY OF COTTON FRUITING TO VARIOUS ENVIRONMENTAL CONDITIONS, AGRONOMIC PRACTICES AND OTHER FACTORS, IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS ASSOCIATED WITH THIS PRODUCT, EVEN WHEN APPLICATIONS ARE MADE IN CONFORMANCE WITH THE LABEL SPECIFICATIONS. IN SOME CASES, THESE FACTORS CAN RESULT IN BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS.**

#### FOR COTTON WITH THE ROUNDUP READY® GENE FOR APPLICATIONS IN THE STATE OF ARIZONA ONLY

**ATTENTION: USE THIS PRODUCT ONLY FOR OVER-THE-TOP OR DIRECTED ONTO IMPROVED COTTON VARIETIES THAT ARE DESIGNATED AS COTTON WITH THE ROUNDUP READY GENE. SEVERE INJURY OR DEATH OF COTTON WILL RESULT IF ANY COTTON VARIETIES NOT PROPERLY DESIGNATED AS HAVING THE ROUNDUP READY GENE ARE SPRAYED WITH THIS PRODUCT. AVOID CONTACT OF HERBICIDE WITH SOILAGE, GREEN STEMS, OR FRUIT OF CROPS, OR ANY DESIRABLE PLANTS AND TREES, OTHER THAN CROPS WITH THE ROUNDUP READY GENE. SINCE SEVERE INJURY OR DESTRUCTION WILL RESULT. TYPES OF APPLICATIONS:** Preplant, At-Planting, Preemergence, Over-the-top, Selective Equipment, Preharvest

Maximum Allowable Combined Application Quantities Per Season	
Combined total per year for all applications	5.3 quarts per acre
Total of Preplant, At-Planting, Preemergence applications	3.3 quarts per acre
Total in-crop applications from ground cracking to layby	2.5 quarts per acre
Total in-crop over-the-top from ground cracking to 4-leaf stage	2.0 quarts per acre
Total in-crop applications using selective equipment through layby	1.3 quarts per acre
Maximum preharvest application rate	44 fluid ounces per acre

**RESTRICTIONS:** See the "ROUNDUP READY CROPS" section of this product's label booklet for precautionary instructions for use in Roundup Ready crops. Do NOT combine these instructions with other crop varieties that do not contain the Roundup Ready gene, in the "ANNUAL AND PERENNIAL CROPS (Alphabetical)" section of this product's label booklet. The combined total application of this product from cotton emergence until harvest must not exceed 4 quarts per acre.

NO MORE THAN TWO OVER-THE-TOP BROADCAST APPLICATIONS MAY BE MADE FROM CROP EMERGENCE THROUGH THE 4-LEAF (NODE) STAGE OF DEVELOPMENT.

NO MORE THAN TWO POST-DIRECTED APPLICATIONS MAY BE MADE FROM THE 5-LEAF STAGE THROUGH LAYBY. SEQUENTIAL IN-CROP OVER-THE-TOP OR POST-DIRECTED APPLICATIONS OF THIS PRODUCT MUST BE AT LEAST 10 DAYS APART AND COTTON MUST HAVE AT LEAST TWO NODES OF INCREMENTAL GROWTH BETWEEN APPLICATIONS.

**Pre-harvest Interval (PHI):** ALLOW A MINIMUM OF 7 DAYS BETWEEN APPLICATION AND HARVEST. APPLICATIONS MADE IN EXCESS OF MAXIMUM LABEL RATES ARE EXPECTED TO RESULT IN BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS AND ARE THE SOLE

#### RESPONSIBILITY OF THE GROWER.

THE MAXIMUM USE RATES STATED THROUGHOUT THIS PRODUCT'S LABELING APPLY TO THIS PRODUCT OR COMBINED WITH THE USE OF ALL OTHER HERBICIDES CONTAINING GLYPHOSATE OR SULFOSATE AS THE ACTIVE INGREDIENT, WHETHER APPLIED AS MIXTURES OR SEPARATELY. CALCULATE THE APPLICATION RATES AND ENSURE THAT THE TOTAL USE OF THIS AND OTHER GLYPHOSATE OR SULFOSATE CONTAINING PRODUCTS DOES NOT EXCEED STATED MAXIMUM USE RATE.

#### Preplant, At-Planting, and Preemergence

**USE INSTRUCTIONS:** This product may be applied before, during or after planting cotton.

#### Over-the-Top

**USE INSTRUCTIONS:** This product may be applied by aerial or ground application equipment at rates up to 22 fluid ounces per acre per application postmergence to Roundup Ready cotton from the ground cracking stage until the 4-leaf (node) stage of development (until the fifth true leaf reaches the size of a quarter). Unless otherwise directed in this supplemental label, any single over-the-top broadcast application must not exceed 22 fluid ounces per acre. Combined over-the-top applications between ground cracking until the 4-leaf (node) stage must not exceed 2.0 quarts per acre.

**NOTE:** For specific rates of application and instructions, refer to the "ANNUAL" and "PERENNIAL WEEDS RATE TABLES" in the label booklet for this product.

#### Selective Equipment

**USE INSTRUCTIONS:** This product may be applied in-crop using precision post-directed or hooded sprayers to Roundup Ready cotton through layby. Unless otherwise directed in this supplemental label, any single application using selective equipment must not exceed 22 fluid ounces per acre. Sequential in-crop applications using selective equipment may be made up to a maximum of 1.3 quarts per acre. At this stage, post-directed equipment should be used which directs the spray to the base of the cotton plants. Contact of the spray with cotton leaves should be avoided to the maximum extent possible. To minimize spray onto the leaves of the cotton plants, place nozzles in a low position directing a horizontal spray pattern under the cotton leaves to contact weeds in the row, and maintain low spray pressure (less than 50 psi). For best results, make applications while weeds are small (less than 3 inches).

**PRECAUTIONS, RESTRICTIONS:** See the "SELECTIVE EQUIPMENT" part of the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this product's label booklet for information on proper use and calibration of this equipment. The combined total of in-crop over-the-top plus selective equipment applications must not exceed 2.6 quarts per acre.

#### Salvage Treatment

**USE INSTRUCTIONS:** From the ground cracking stage through layby, where weeds threaten to cause the loss of the crop, applications of up to 32 fluid ounces per acre may be applied either as an over-the-top application or as a post-directed treatment sprayed higher on the cotton plants and over the weeds. **NOTE: COTTON TOLERANCE OF ROUNDUP READY COTTON HAS NOT BEEN FULLY TESTED AT THIS APPLICATION RATE. SALVAGE TREATMENTS ARE EXPECTED TO RESULT IN SIGNIFICANT BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS AND ARE THE SOLE RESPONSIBILITY OF THE GROWER. NO MORE THAN TWO SALVAGE TREATMENTS MAY BE USED PER GROWING SEASON.**

**RESTRICTIONS:** The combined total of in-crop over-the-top plus selective equipment applications must not exceed 2.6 quarts per acre.

#### Preharvest

**USE INSTRUCTIONS:** This product may be applied for preharvest annual and perennial weed control as a broadcast treatment to Roundup Ready cotton after 20 percent boll crack. Up to 1.3 quarts per acre of this product may be applied using either aerial or ground spray equipment. **NOTE:** This product will not enhance the performance of harvest aids when applied to Roundup Ready cotton.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between application and harvest of cotton. Do not apply this product preharvest to Roundup Ready cotton grown for seed.

**ATTENTION: USE OF THIS PRODUCT IN ACCORDANCE WITH LABEL DIRECTIONS IS EXPECTED TO RESULT IN NORMAL GROWTH OF ROUNDUP READY COTTON. HOWEVER, VARIOUS ENVIRONMENTAL CONDITIONS, AGRONOMIC PRACTICES AND OTHER FACTORS MAKE IT IMPOSSIBLE TO ELIMINATE ALL RISKS ASSOCIATED WITH THIS PRODUCT, EVEN**

WHEN APPLICATIONS ARE MADE IN CONFORMANCE WITH THE LABEL SPECIFICATIONS, IN SOME CASES, THESE FACTORS CAN RESULT IN BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS.

**TYPES OF APPLICATIONS:** Preplant, Preemergence, At-Planting, Postemergence (Over-the-Top), Selective Equipment, Preharvest.

Maximum Allowable Combined Application Quantities Per Season	
Combined total per year for all applications	5.3 quarts per acre
Total of Preplant, At-Planting, Preemergence applications	3.3 quarts per acre
Total in-crop applications from ground cracking to layby	2.5 quarts per acre
Maximum Preharvest application rate	44 fluid ounces per acre

**RESTRICTIONS:** See the "ROUNDUP READY CROPS" section of this label for precautionary instructions for use in Roundup Ready crops. The combined total application of this product from cotton emergence until harvest must not exceed 4 quarts per acre. NO MORE THAN TWO OVER-THE-TOP BROADCAST APPLICATIONS MAY BE MADE FROM CROP EMERGENCE THROUGH THE 4-LEAF (NODE) STAGE OF DEVELOPMENT. NO MORE THAN TWO POST-DIRECTED APPLICATIONS MAY BE MADE FROM THE 5-LEAF STAGE THROUGH LAYBY. SEQUENTIAL IN-CROP, OVER-THE-TOP OR POSTDIRECTED APPLICATIONS OF THIS PRODUCT MUST BE AT LEAST 10 DAYS APART AND COTTON MUST HAVE AT LEAST TWO NODES OF INCREMENTAL GROWTH BETWEEN APPLICATIONS. **Pre-harvest interval (PHI):** ALLOW A MINIMUM OF 7 DAYS BETWEEN APPLICATION AND HARVEST.

#### Preplant, Preemergence, At-Planting

**USE INSTRUCTIONS:** This product may be applied before, during or after planting cotton.

#### Postemergence (Over-the-Top)

**USE INSTRUCTIONS:** This product may be applied by aerial or ground application equipment at rates up to 22 fluid ounces per acre per application postemergence to Roundup Ready cotton from the ground cracking stage until the 4-leaf (node) stage of development (until the fifth true leaf reaches the size of a quarter). **Over-the-top applications made after the 4-leaf (node) stage of development may result in boll loss, delayed maturity and/or yield loss.**

#### Salvage Treatment

This treatment may be used after the 4-leaf stage of development and should only be used where weeds threaten to cause the loss of the crop. 22 fluid ounces per acre may be applied either as an over-the-top application or as a post-directed treatment sprayed higher on the cotton plants and over the weeds. **NOTE: SALVAGE TREATMENTS WILL RESULT IN SIGNIFICANT BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS. NO MORE THAN ONE SALVAGE TREATMENT MAY BE USED PER GROWING SEASON.**

**NOTE:** For specific rates of application and instructions, refer to the "ANNUAL WEEDS" and "PERENNIAL WEEDS RATE TABLES" in this label.

**RESTRICTIONS:** See the "ROUNDUP READY CROPS" section of this label for precautionary instructions for use in Roundup Ready crops.

#### Selective Equipment

**USE INSTRUCTIONS:** This product may be applied using precision post-directed or hooded sprayers at rates up to 22 fluid ounces per acre per application to Roundup Ready cotton through layby. At this stage, post-directed equipment should be used which directs the spray to the base of the cotton plants. Contact of the spray with cotton leaves should be avoided to the maximum extent possible. To minimize spray onto the leaves of the cotton plants, place nozzles in a low position directing a horizontal spray pattern under the cotton leaves to contact weeds in the row, and maintain low spray pressure (less than 30 psi). For best results, make applications while weeds are small (less than 3 inches).

**PRECAUTIONS:** See the "Selective Equipment" part of the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information on proper use and calibration of this equipment.

#### Preharvest

**USE INSTRUCTIONS:** This product may be applied for preharvest annual and perennial weed control as a broadcast treatment to Roundup Ready cotton after 20 percent boll crack. Up to 44 fluid ounces of this product may be applied using either aerial or ground spray equipment. **NOTE:** This product will not enhance the performance of harvest aids when applied to Roundup Ready cotton.

**PRECAUTIONS:** Do not apply this product to cotton grown for seed, as a reduction in germination or vigor may occur.

**RESTRICTIONS: Pre-harvest interval (PHI):** Allow a minimum of 7 days between application and harvest of cotton.

**ATTENTION: USE OF THIS PRODUCT IN ACCORDANCE WITH LABEL DIRECTIONS IS EXPECTED TO RESULT IN NORMAL GROWTH OF ROUNDUP READY COTTON, HOWEVER, DUE TO THE SENSITIVITY OF COTTON FRUITING TO VARIOUS ENVIRONMENTAL CONDITIONS, AGRONOMIC PRACTICES AND OTHER FACTORS IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS ASSOCIATED WITH THIS PRODUCT, EVEN WHEN APPLICATIONS ARE MADE IN CONFORMANCE WITH THE LABEL SPECIFICATIONS. IN SOME CASES, THESE FACTORS CAN RESULT IN BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS.**

#### ROUNDUP READY® FLEX COTTON

In the Following States:

Alabama, Arkansas, Florida, Georgia, Louisiana, Missouri, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia

See Label Booklet for Arizona Only Roundup Ready® Flex Cotton Use Instructions

**The instructions provided in this section are specific to, and should only be used with, varieties designated as Roundup Ready Flex cotton. Applications described in this section over the top of cotton other than Roundup Ready cotton will cause crop injury and reduced yields. DO NOT combine the instructions in this section with those in the "ROUNDUP READY COTTON" section of this label, or any other Roundup Ready cotton or Roundup Ready Flex Cotton instructions or labeling for this or other glyphosate-containing products. Drift of this product from applications made to Roundup Ready Flex cotton onto adjacent fields of post 4-leaf (node) Roundup Ready cotton may cause extensive crop injury, including boll loss, delayed maturity and/or yield loss.**

**TYPES OF APPLICATIONS:** Preplant, At-Planting, Preemergence, Postemergence (In-crop), Preharvest.

**USE INSTRUCTIONS:** Refer to the following table for maximum application rates of this product with Roundup Ready Flex cotton.

Maximum Application Rates	
Combined total per year for all applications	5.3 quarts per acre
Total of all Preplant, At-Planting, Preemergence applications	3.3 quarts per acre
Total of all In-crop applications from cracking to 60 percent open bolls	4.0 quarts per acre
Total of all In-crop applications between layby and 60 percent open bolls	44 fluid ounces per acre
Maximum allowed from 60 percent open bolls to 7 days prior to harvest	44 fluid ounces per acre

**RESTRICTIONS:** See Roundup Ready CROPS section of label booklet for precautionary instructions for use in Roundup Ready crops. The combined total application of this product from cotton emergence through harvest must not exceed 4 quarts per acre. The maximum combined total quantity of this product for all applications in a season is 5.3 quarts per acre. Refer to the **PRODUCT INFORMATION (How This Product Works)** section of the label booklet for more information on Maximum Application Rates.

#### Preplant, At-Planting, Preemergence

**USE INSTRUCTIONS:** This product may be applied before, during or after planting Roundup Ready Flex cotton.

**TANK MIXTURES:** This product may be tank-mixed with 2,4-D or Clarity and only applied prior to planting. This product may be tank-mixed with the following products and applied prior to crop emergence. Ensure that the specific product being used in the tank mixture is registered for application prior to emergence of cotton. Read and follow label directions of all products in the tank mixture.

Caparol, Direx, Dual MAGNUM, pendimethalin, Reflex, Staple, metolachlor
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**RESTRICTIONS:** The maximum quantity of this product that may be applied for all preplant, at-planting and preemergence applications combined is 3.3 quarts per acre per season. Refer to individual tank mixture product label for restrictions and precautions; use according to the most restrictive precautionary statements for each product in the tank mixture.

### Postemergence (In-crop)

**USE INSTRUCTIONS:** This product may be applied to control annual grasses and broadleaf weeds listed on this label in Roundup Ready Flex cotton. To maximize yield potential, spray cotton early to eliminate competing weeds. Many perennial weeds will be controlled or suppressed with one or more applications of this product. In general, an initial application of 22 fluid ounces per acre on 1 to 3 inch tall annual grass and broadleaf weeds is recommended. This product may be applied postemergence to Roundup Ready Flex cotton by ground application equipment at rates up to 32 fluid ounces per acre per application. In addition to broadcast applications, post-directed spray equipment may be used to achieve more thorough weed coverage.

**TANK MIXTURES:** This product may be tank-mixed with the following products and applied postemergence (in-crop) over the top of Roundup Ready Flex cotton. Ensure that the specific product being used in the tank mixture is registered for application postemergence (in-crop) to cotton. Read and follow label directions of all products in the tank mixture.

Assure II, Dual MAGNUM, Fusilade, Poast Plus, Select MAX, Staple, metolachlor
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Post-directed to cotton: Aim, Caparol, Chateau, Direx, Envoke, Layby-Pro, pendimethalin, Staple, Valor
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Staple may cause leaf yellowing and/or leaf crinkling when applied postemergence (in-crop). Dual MAGNUM applied over the top of Roundup Ready Flex cotton may cause leaf injury in the form of necrotic spotting.

**PRECAUTIONS:** Refer to individual tank mixture product label for restrictions and precautions; use according to the most restrictive precautionary statements for each product in the tank mixture.

**RESTRICTIONS:** The maximum rate for any single in-crop application of this product is 32 fluid ounces per acre using ground application equipment. **In-crop application rates above 22 fluid ounces per acre made alone or with the addition of other crop chemical products containing surfactant may cause a crop response including leaf speckling or leaf necrosis. DO NOT** exceed a maximum rate of 22 fluid ounces of this product per acre when making applications by air. Between layby and 60 percent open bolls, the maximum combined total application rate of this product is 44 fluid ounces per acre. The maximum combined total of all applications of this product made from crop emergence to 60 percent open bolls must not exceed 4.0 quarts per acre. **DO NOT ADD ADDITIONAL SURFACTANT OR ADDITIVES CONTAINING SURFACTANT TO THIS PRODUCT FOR OVER-THE-TOP APPLICATIONS TO ROUNDUP READY FLEX COTTON.**

### Preharvest

**USE INSTRUCTIONS:** This product may be applied to Roundup Ready Flex cotton for annual and perennial weed control prior to crop harvest after 60 percent boll crack. Up to 44 fluid ounces of this product may be applied using either aerial or ground application equipment.

**NOTE:** This product will not enhance the performance of harvest aids when applied to Roundup Ready Flex cotton.

**PRECAUTIONS: DO NOT** apply this product over the top of cotton grown for seed beyond first bloom, as a reduction in germination or vigor may occur.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between application and harvest of Roundup Ready Flex cotton.

### FOR APPLICATIONS TO ROUNDUP READY® FLEX COTTON FOR APPLICATIONS IN THE STATE OF ARIZONA ONLY

The use of the over-the-top applications described in this label on other than Roundup Ready Flex cotton will cause crop injury and reduced yields. Drift of this product from applications made to Roundup Ready Flex cotton on to adjacent fields of post 4-leaf (node) Roundup Ready cotton may cause extensive injury including boll loss, delayed maturity and/or yield loss.

**NOTE:** The instructions provided in this label are specific to, and should only be used with, varieties designated as Roundup Ready Flex cotton. **DO NOT** combine the instructions in this supplemental label, with those in the "Roundup Ready Cotton" or "Roundup Ready Flex Cotton" sections found in this label booklet or with any other Roundup Ready cotton or Roundup Ready Flex cotton instructions on labeling for this or other glyphosate-containing product.

ROUNDUP READY FLEX COTTON VARIETIES MUST BE PURCHASED FROM AN AUTHORIZED LICENSED SEED SUPPLIER. THE DESIGNATION, "ROUNDUP READY", INDICATES THE COTTON VARIETY CONTAINS A PATENTED PROPRIETARY TRAIT.

**TYPES OF APPLICATIONS:** Preplant, At-Planting, Preemergence, Postemergence, Preharvest

Maximum Allowable Combined Application Quantities Per Season	
Combined total per year for all applications	5.3 quarts per acre
<b>Calculate the combined rate to be used for all preplant, in-crop and preharvest applications, to ensure that the total does not exceed the maximum allowed rate per acre per year shown above.</b>	
Total of Preplant, At-planting, Preemergence applications	3.3 quarts per acre
Total in-crop applications from ground cracking to 60 percent open bolls	4.0 quarts per acre
Maximum allowed from 60 percent bolls open to 7 days prior to harvest	4.4 fluid ounces per acre

**RESTRICTIONS:** See the "ROUNDUP READY CROPS" section of this product's label booklet for precautionary instructions for use in Roundup Ready crops.

### Preplant, Preemergence, At-Planting

**USE INSTRUCTIONS:** This product may be applied before, during or after planting Roundup Ready Flex cotton.

### Postemergence

**USE INSTRUCTIONS:** When applied in accordance with this label, this product will control labeled annual grasses and broadleaf weeds in Roundup Ready Flex cotton. To maximize yield potential, spray cotton early to eliminate competing weeds. Many perennial weeds will be controlled or suppressed with one or more applications of this product. In general, an initial application of 22 fluid ounces per acre on 1 to 3 inch tall annual grass and broadleaf weeds. This product may be applied by ground application equipment at rates up to 44 fluid ounces per acre per application postemergence to Roundup Ready Flex cotton. In addition to broadcast applications, post-directed equipment may be used to achieve weed coverage.

**NOTE:** For specific rates of application and instructions, refer to the "ANNUAL" and "PERENNIAL WEEDS RATE TABLES" in the label booklet for this product.

**PRECAUTIONS: In-crop application rates above 22 fluid ounces per acre made alone or with the addition of other crop chemical products containing surfactant may cause a crop response including leaf speckling or leaf necrosis.**

**RESTRICTIONS:** The maximum rate for any single in-crop application of this product is 44 fluid ounces per acre made using ground application equipment. Do not exceed a maximum rate of 32 fluid ounces per acre of this product when making applications by air. Between layby and 60 percent open bolls, the maximum combined total rate of this product that may be applied is 44 fluid ounces per acre. The maximum combined total of all applications made from crop emergence to 60 percent open bolls must not exceed 4.0 quarts per acre.

### Preharvest

**USE INSTRUCTIONS:** This product may be applied for pre-harvest annual and perennial weed control as a broadcast treatment to Roundup Ready Flex cotton after 60 percent boll crack. Up to 44 fluid ounces of this product may be applied using either aerial or ground spray equipment.

**NOTE:** This product will not enhance the performance of harvest aids when applied to Roundup Ready Flex cotton.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between application and harvest of Roundup Ready Flex cotton. Do not apply this product over-the-top beyond first bloom to cotton grown for seed.

**ATTENTION: USE OF THIS PRODUCT IN ACCORDANCE WITH LABEL DIRECTIONS IS EXPECTED TO RESULT IN NORMAL GROWTH OF ROUNDUP READY FLEX COTTON, HOWEVER, DUE TO THE SENSITIVITY OF COTTON FRUITING TO VARIOUS ENVIRONMENTAL CONDITIONS, AGRONOMIC PRACTICES AND OTHER FACTORS IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS ASSOCIATED WITH THIS PRODUCT, EVEN WHEN APPLICATIONS ARE MADE IN CONFORMANCE WITH THE LABEL SPECIFICATIONS. IN SOME CASES, THESE FACTORS CAN RESULT IN BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS.**

The use of the over-the-top applications described in this section on other than Roundup Ready Flex cotton will cause crop injury and reduced yields. Drift of this product from applications made to Roundup Ready Flex cotton onto adjacent fields of post 4-leaf (node) Roundup Ready cotton may cause extensive injury including boll loss, delayed maturity and/or yield loss.



**NOTE:** The instructions provided in this section are specific to, and should only be used with, varieties designated as Roundup Ready Flex cotton. **DO NOT** combine the instructions in this section, with those in the "Roundup Ready Cotton" section of this label, or with any other Roundup Ready cotton or Roundup Ready Flex cotton instructions on labeling for this or other glyphosate-containing product. See "Annual Maximum Use Rate" in the "PRODUCT INFORMATION" section of this label for additional information.

**TYPES OF APPLICATIONS:** Preplant, At-Planting, Preemergence, Postemergence, Preharvest.

Maximum Allowable Combined Application Quantities Per Season	
Combined total per year for all applications	5.3 quarts per acre
<b>Calculate the combined rate to be used for all preplant, In-Crop and preharvest applications, to ensure that the total does not exceed the maximum allowed rate per acre per year shown above.</b>	
Total of Preplant, At-planting, Preemergence applications	3.3 quarts per acre
Total in-crop applications from ground cracking to 60 percent open bolls	4.0 quarts per acre
Maximum allowed from 60 percent bolls open to 7 days prior to harvest	44 fluid ounces per acre

**RESTRICTIONS:** See the "ROUNDUP READY CROPS" section of this label for precautionary instructions for use in Roundup Ready crops.

#### Preplant, Preemergence, At-Planting

**USE INSTRUCTIONS:** This product may be applied before, during or after planting Roundup Ready Flex cotton.

#### Postemergence

**USE INSTRUCTIONS:** When applied in accordance with this label this product will control labeled annual grasses and broadleaf weeds in Roundup Ready Flex cotton. To maximize yield potential, spray cotton early to eliminate competing weeds. Many perennial weeds will be controlled or suppressed with one or more applications of this product. In general, an initial application of 22 fluid ounces per acre on 1 to 3 inch tall annual grass and broadleaf weeds. This product may be applied by ground application equipment at rates up to 32 fluid ounces per acre per application postemergence to Roundup Ready Flex cotton. In addition to broadcast applications, post-directed equipment may be used to achieve weed coverage.

**NOTE:** For specific rates of application and instructions, refer to the "ANNUAL WEEDS" and "PERENNIAL WEEDS RATE TABLES" in this label.

**PRECAUTIONS:** In-Crop application rates above 22 fluid ounces per acre made alone or with the addition of other crop chemical products containing surfactant may cause a crop response including leaf speckling or leaf necrosis.

**RESTRICTIONS:** The maximum rate for any single in-crop application of this product is 32 fluid ounces per acre made using ground application equipment. Do not exceed a maximum rate of 22 fluid ounces per acre of this product when making applications by air. Between layby and 60 percent open bolls, the maximum combined total rate of this product that may be applied is 44 fluid ounces per acre. The maximum combined total of all applications made from crop emergence to 60 percent open bolls must not exceed 4.0 quarts per acre.

#### Preharvest

**USE INSTRUCTIONS:** This product may be applied for preharvest annual and perennial weed control as a broadcast treatment to Roundup Ready Flex cotton after 60 percent boll crack. Up to 44 fluid ounces of this product may be applied using either aerial or ground spray equipment. **NOTE:** This product will not enhance the performance of harvest aids when applied to Roundup Ready Flex cotton.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 7 days between application and harvest of Roundup Ready Flex cotton. Do not apply this product over-the-top beyond first bloom to cotton grown for seed.

**ATTENTION: USE OF THIS PRODUCT IN ACCORDANCE WITH LABEL DIRECTIONS IS EXPECTED TO RESULT IN NORMAL GROWTH OF ROUNDUP READY FLEX COTTON. HOWEVER, DUE TO THE SENSITIVITY OF COTTON FRUITING TO VARIOUS ENVIRONMENTAL CONDITIONS, AGRONOMIC PRACTICES AND OTHER FACTORS IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS ASSOCIATED WITH THIS PRODUCT, EVEN WHEN APPLICATIONS ARE MADE IN CONFORMANCE WITH THE LABEL SPECIFICATIONS. IN SOME CASES, THESE FACTORS CAN RESULT IN BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS.**

#### FOR USE ON ROUNDUP READY® SOYBEANS

**TYPES OF APPLICATIONS:** Preplant, At-Planting, Preemergence, Postemergence (In-crop), Preharvest, Post-Harvest.

**PRODUCT USE INSTRUCTIONS:** Refer to the following table for maximum application rates of this product with Roundup Ready soybeans.

Maximum Allowable Combined Application Quantities Per Season	
Combined total per year for all applications	5.3 quarts per acre
Total of Preplant, At-planting, Preemergence applications	3.3 quarts per acre
Total of all in-crop applications from cracking throughout flowering (R2 stage soybeans)	64 fluid ounces per acre
Maximum Preharvest application rate	22 fluid ounces per acre

**RESTRICTIONS:** See the "ROUNDUP READY CROPS" section of the label booklet for this product for precautionary instructions for use in Roundup Ready crops. The maximum combined total quantity of this product for all applications in a season is 5.3 quarts per acre. See the "PRODUCT INFORMATION" section of the label booklet for this product for more information on Maximum Application Rates.

#### Preplant, At-Planting, Preemergence

**USE INSTRUCTIONS:** This product may be applied before, during or after planting Roundup Ready soybeans.

**TANK MIXTURES:** This product may be tank-mixed with 2,4-D, Banvel or Clarity and applied prior to planting only. This product may be tank-mixed with the following products and applied prior to crop emergence. Ensure that the specific product being used in the tank mixture is registered for application prior to emergence of soybeans. Read and follow label directions of all products in the tank mixture.

Aim	Dual MAGNUM	metolachlor	Select
Assure II	Dual II MAGNUM	Micro-Tech	Select MAX
Axiom	FirstRate	Outlook	Sencor
Blanket	Flexstar	Pendimax	Spartan
Boundary	Frontier	pendimethalin	Squadron
Canopy	Fusion	Pursuit	Steel
Classic	Garngster	Pursuit Plus	Treflan
Cobra	INTRRO	Pythox	Valor
Command	Lexone	Reflex	2,4-D
Command Xtra	Linex	Resource	
Domain	Lorox	Scepter	

**RESTRICTIONS:** Maximum quantity of this product that may be applied for all preplant, at-planting and preemergence applications combined is 3.3 quarts per acre per season. Refer to individual tank mixture product label for restrictions and precautions; use according to the most restrictive precautionary statements for each product in the tank mixture.

#### Postemergence (In-crop)

**USE INSTRUCTIONS:** This product may be used to control annual grasses and broadleaf weeds in Roundup Ready soybeans. Applications of this product can be made in Roundup Ready soybeans from emergence (cracking) through flowering (R2 stage soybeans).

R2 stage soybeans ends when a pod 5 millimeters (3/16 inch) long appears at one of the four uppermost nodes on the main stem with a fully developed leaf (R3 stage). Refer to the "ANNUAL WEEDS RATE SECTION" of the label booklet for this product for specific annual weeds. In general, an initial application of 22 fluid ounces per acre on 2 to 8 inch tall weeds. Weeds will generally be 2 to 8 inches tall, 2 to 5 weeks after planting. If the initial application is delayed and weeds are larger, apply a higher rate of this product.

This product may be applied up to 44 fluid ounces per acre as a single, in-crop application for control of annual weeds and where dense weed populations exist.

A 22- to 44-fluid-ounce per acre rate (single or multiple applications) of this product will control or suppress perennial weeds, such as, bermudagrass, Canada thistle, common milkweed, field bindweed, hemp dogbane, horsenettle, marehail (horseweed),

nutsetge, quackgrass, rhizome Johnson grass, redvine, trumpetcreeper, swamp smartweed and wirestem mully. For best results, allow perennial weed species to achieve at least 6 inches of growth before spraying with this product.

Under adverse growing conditions such as drought, hail, wind damage or a poor soybean stand that slows or delays canopy closure, a sequential application of this product may be necessary to control late flushes of weeds. IN THE SOUTHERN STATES, A SEQUENTIAL APPLICATION OF THIS PRODUCT WILL BE REQUIRED TO CONTROL NEW FLUSHES OF WEEDS IN THE ROUNDUP READY SOYBEAN CROP. To control giant ragweed, use 22 fluid ounces of this product per acre be applied when the weed is 8 to 12 inches tall to increase control and possibly avoid the need for a sequential application.

**TANK MIXTURES:** This product may be tank-mixed with the following products and applied postemergence (in-crop) over the top of Roundup Ready soybeans. Ensure that the specific product being used in the tank mixture is registered for application postemergence (in-crop) to soybeans. Read and follow label directions of all products in the tank mixture.

Arrow	FirstRate	Poast Plus	Select MAX
Assure II	Flexstar	Pursuit	Synchrony STS
Basagran	Fusilade DX	Pursuit Plus	Targa
Classic	Fusion	Raptor	Ultra Blazer
Cobra	Harmony GT XP	Reflex	
Extreme	Poast	Select	

**PRECAUTIONS:** In some cases, these tank-mix products will cause visual soybean injury.  
**RESTRICTIONS:** The combined total application from crop emergence through harvest must not exceed 64 fluid ounces per acre. The maximum rate for any single in-crop application is 44 fluid ounces per acre. The maximum combined total of this product that can be applied during flowering (R2 stage soybeans) is 44 fluid ounces per acre. Refer to individual tank mixture product label for restrictions and precautions; use according to the most restrictive precautionary statements for each product in the tank mixture.

#### Preharvest

**USE INSTRUCTIONS:** This product may be applied to Roundup Ready soybeans for weed control prior to harvest. Apply up to 22 fluid ounces of this product per acre after pods have set and lost all green color.

**PRECAUTIONS:** Care should be taken to avoid excessive seed shatter loss due to ground application equipment.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 14 days between final application and harvest of soybean grain or feeding of soybean grain, forage or hay.

#### Post-Harvest

**USE INSTRUCTIONS:** This product may be applied for weed control after harvest of Roundup Ready soybeans. Higher rates may be required for control of large weeds that were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.

### ROUNDUP READY 2 YIELD SOYBEANS

**TYPES OF APPLICATIONS:** Preplant, At-Planting, Preemergence, Postemergence (In-crop), Preharvest, Post-Harvest.

**USE INSTRUCTIONS:** Refer to the following table for maximum application rates of this product with Roundup Ready 2 Yield soybeans.

Maximum Application Rates	
Combined total per year for all applications	5.3 quarts per acre
Total of all Preplant, At-Planting, Preemergence applications	3.3 quarts per acre
Total of all in-crop applications from cracking through flowering (R2 stage soybeans)	64 fluid ounces per acre
Maximum preharvest application rate	22 fluid ounces per acre

**RESTRICTIONS:** See label for precautionary instructions for use in Roundup Ready crops. The maximum combined total quantity of this product for all applications in a season is 5.3 quarts per acre. Refer to other applicable sections of the label for more information on Maximum Application Rates.

### Preplant, At-Planting, Preemergence

**USE INSTRUCTIONS:** This product may be applied before, during or after planting Roundup Ready 2 Yield soybeans.

**TANK MIXTURES:** This product may be tank-mixed with 2,4-D, Banvel or Clarity and applied prior to planting only. This product may be tank-mixed with the following products and applied prior to crop emergence. Ensure that the specific product being used in the tank mixture is registered for application prior to emergence of soybeans. Read and follow label directions of all products in the tank mixture.

Aim	Dual Magnum	metolachlor	Select
Assure II	Dual II Magnum	Micro-Tech	Select Max
Axiom	FirstRate	Outlook	Sencor
Blanket	Flexstar	Pendimax	Spartan
Boundary	Frontier	pendimethalin	Squadron
Canopy	Fusion	Pursuit	Steel
Classic	Gangster	Pursuit Plus	Treflan
Cobra	Intro	Pybnon	Valor
Command	Lexone	Reflex	2,4-D
Command Xtra	Linex	Resource	
Domain	Lorax	Scepter	

**RESTRICTIONS:** Maximum quantity of this product that may be applied for all preplant, at-planting and preemergence applications combined is 3.3 quarts per acre per season. Refer to individual tank mixture product label for restrictions and precautions; use according to the most restrictive precautionary statements for each product in the tank mixture.

### Postemergence (In-crop)

**USE INSTRUCTIONS:** This product may be used to control annual grasses and broadleaf weeds in Roundup Ready 2 Yield soybeans. Applications of this product can be made in Roundup Ready 2 Yield soybeans from emergence (cracking) through flowering (R2 stage soybeans). R2 stage soybeans end when a pod 5 millimeters (3/16 inch) long appears at one of the four uppermost nodes on the main stem with a fully developed leaf (R3 stage). Refer to the "Annual Weeds Rate Section" of the label for this product for application rates for specific annual weeds. In general, apply an initial application of 22 fluid ounces per acre on 2 to 8 inch tall weeds. Weeds will generally be 2 to 8 inches tall, 2 to 5 weeks after planting. If the initial application is delayed and weeds are larger, apply a higher rate of this product. This product may be applied up to 44 fluid ounces per acre as a single, in-crop application for control of annual weeds and where dense weed populations exist.

A 22 to 44 fluid ounce per acre rate (single or multiple applications) of this product will control or suppress perennial weeds, such as, Bermudagrass, Canada thistle, common milkweed, field bindweed, hog dogbane, horse-nettle, mare's tail (horseweed), nutsetge, quackgrass, rhizome johnsongrass, redvine, trumpetcreeper, swamp smartweed and wirestem mully. For best results, allow perennial weed species to achieve at least 6 inches of growth before spraying with this product.

Under adverse growing conditions, such as drought, hail, wind damage or a poor soybean stand that slows or delays canopy closure, a sequential application of this product may be necessary to control late flushes of weeds. IN THE SOUTHERN STATES, A SEQUENTIAL APPLICATION OF THIS PRODUCT WILL BE REQUIRED TO CONTROL NEW FLUSHES OF WEEDS IN THE ROUNDUP READY 2 YIELD SOYBEAN CROP. To control giant ragweed, apply 22 fluid ounces of this product per acre when the weed is 8 to 12 inches tall to increase control and possibly avoid the need for a sequential application.

**TANK MIXTURES:** This product may be tank-mixed with the following products and applied postemergence (in-crop) over the top of Roundup Ready 2 Yield soybeans. Ensure that the specific product being used in the tank mixture is registered for application postemergence (in-crop) to soybeans. Read and follow label directions of all products in the tank mixture.

Arrow	FirstRate	Poast Plus	Select Max
Assure II	Flexstar	Pursuit	Synchrony STS
Basagran	Fusilade DX	Pursuit Plus	Targa
Classic	Fusion	Raptor	Ultra Blazer
Cobra	Harmony GT XP	Reflex	
Extreme	Poast	Select	

#### Early Season Disease Suppression

Postemergence applications of this product made within the application rates and timings described above for weed control may provide suppression of the following soybean fungal diseases: Brown Stem Rot (*Phialophora gregata*), Charcoal Rot (*Macrophomina phaseolina*), Stem Canker (*Diaporthe phaseolorum* var. *meridionalis*), and Sudden Death Syndrome (*Fusarium virguliforme*). Suppression of these diseases, which may result in improved plant health and protection of yield, may occur with applications of this product made during labeled timings for weed control. The level of activity against these labeled fungal diseases is not sufficient to provide complete disease prevention or control. The amount of disease suppression will be reduced with high disease pressure or environmental conditions that favor disease development. Any potential for yield protection in Roundup Ready 2 Yield soybeans provided by suppression of labeled diseases would occur only as a complement to the normal weed control applications. Therefore, always determine application rates and timings of this product based on size and species of weeds to be controlled, not on presence or absence of disease.

**RESTRICTIONS:** This combined total application from crop emergence through harvest must not exceed 64 fluid ounces per acre. The maximum rate for any single in-crop application is 44 fluid ounces per acre. The maximum combined total of this product that can be applied during flowering (R2 stage soybeans) is 44 fluid ounces per acre. Refer to individual tank mixture product labels for restrictions and precautions; use according to the most restrictive precautionary statements for each product in the tank mixture. In some cases, these tank-mix products will cause visual soybean injury. U.S. Patent pending for the use of glyphosate as a method for suppressing early-season soybean diseases in Roundup Ready and Roundup Ready 2 Yield soybeans.

#### Preharvest

**USE INSTRUCTIONS:** This product may be applied to Roundup Ready 2 Yield soybeans for weed control prior to harvest. Apply up to 22 fluid ounces of this product per acre after pods have set and lost all green color.

**PRECAUTIONS:** Care should be taken to avoid excessive seed shatter loss due to ground application equipment.

**RESTRICTIONS: Pre-harvest Interval (PHI):** Allow a minimum of 14 days between final application and harvest of soybean grain or feeding of soybean grain, forage or hay.

#### Post-Harvest

**USE INSTRUCTIONS:** This product may be applied for weed control after harvest of Roundup Ready 2 Yield soybeans. Higher rates may be required for control of large weeds that were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.

#### ROUNDUP READY SUGAR BEETS

**TYPES OF APPLICATIONS:** Preplant, Preemergence, At-Planting, Postemergence.

Preplant, Preemergence, At-Planting

**USE INSTRUCTIONS:** This product may be applied before, during or after planting of Roundup Ready sugar beets.

#### Postemergence

**USE INSTRUCTIONS:** This product may be applied postemergence over-the-top of Roundup Ready sugar beets from emergence to 30 days prior to harvest. To maximize yield potential spray sugar beets early to eliminate competing weeds. Up to 4 sequential applications of this product may be made with at least 10 days between applications. Refer to the "ANNUAL

WEEDS RATE SECTION" in this booklet for rate recommendations for specific annual weeds. This product will control or suppress, most perennial weeds. For some perennial weeds, repeat applications may be required to eliminate crop competition throughout the growing season. The combined total application rate from crop emergence through harvest must not exceed 3 quarts per acre. The maximum rate for any single application from crop emergence until the 8-leaf stage is 32 fluid ounces per acre. The maximum rate for any single application between the 8-leaf stage and canopy closure is 22 fluid ounces per acre. Allow a minimum of 30 days between last application and sugar beet harvest.

#### Maximum Allowable Combined Application Quantities Per Season

Combined total per year for all applications	5.3 quarts per acre
Total of Preplant, At-planting, Preemergence applications	3.3 quarts per acre
Emergence to 8-leaf stage	58 fluid ounces per acre
Between 8-leaf stage and canopy closure	44 fluid ounces per acre

#### NONCROP USES AROUND THE FARMSTEAD

**TYPES OF APPLICATIONS:** Weed Control, Trim-and-Edge, Greenhouse/ Shadehouse, Chemical Mowing, Cut Stump, Habitat Management.

#### WEED CONTROL AND TRIM-AND-EDGE

**USE INSTRUCTIONS:** This product may be used to control annual weeds, perennial weeds and woody brush which are found in any part of the farmstead, including building foundations, along and in fences, in dry ditches and canals, along ditchbanks, farm roads, shelterbelts, prior to landscape plantings and equipment storage areas.

**TANK MIXTURES:** This product may be tank-mixed with the following products, provided that the specific product is registered for use on such noncrop sites. Refer to these product labels for approved farmstead sites and application rates. For annual weeds, use 22 fluid ounces per acre of this product when weeds are less than 6 inches tall, 32 fluid ounces per acre when weeds are 6 to 12 inches tall and 44 fluid ounces per acre when weeds are greater than 12 inches tall. For perennial weeds, apply 44 fluid ounces to 3.3 quarts per acre in these tank mixes. For tank mixtures with these products through backpack sprayers, handguns or other high-volume spray-to-wet applications, see the "Annual Weeds—Hand-held or High-Volume Equipment" section of this label for listed rates.

Arsenal®	Karmex DF	Princep DF	Telar®
Banvel/Clarity	Krovar 1 DF	Princep 4L	Vanquish®
Barricade® 65WG	Oust®	Ronstar® 50 WP	2,4-D
Diuron	Pendulum® 3.3 EC	Sahara®	
Endurance®	Pendulum WDG	Simazine	
Escort®	Plateau®	Surflan	

This product plus dicamba tank mixtures must not be applied by air in California.

#### GREENHOUSE/SHADEHOUSE

This product may be used to control weeds in and around greenhouses and shade-houses. Desirable vegetation must not be present during application and air circulation fans must be turned off. Do not use in residential greenhouses.

#### CHEMICAL MOWING

**USE INSTRUCTIONS:** This product will suppress perennial grasses listed in this section to serve as a substitute for mowing. Use 4 fluid ounces of this product per acre when treating Kentucky bluegrass. Use 4 fluid ounces of this product per acre when treating tall fescue, fine fescue, orchardgrass, bahiagrass or quackgrass covers. Use 11 fluid ounces of this product per acre when treating Bermuda grass. Use 44 fluid ounces of this product per acre when treating topseedgrass or paragrass. Apply treatments in 10 to 20 gallons of spray solution per acre. Chemical mowing applications may be made along farm ditches and other parts of farmsteads.

**PRECAUTIONS:** Use only in areas where some temporary injury or discoloration of perennial grasses can be tolerated.

### CUT STUMP

**TYPES OF APPLICATION:** Treating cut stumps in any noncrop site listed on this label.

**USE INSTRUCTIONS:** This product will control regrowth of cut stumps and resprouts of many types of woody brush and tree species, some of which are listed below. Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut trees or resprouts close to the soil surface. Apply a 50- to 100-percent solution of this product to the freshly cut surface immediately after cutting.

Delays in application may result in reduced performance. For best results, applications should be made during periods of active growth and full leaf expansion.

Alder	Oak	Reed, giant	Tan oak
Eucalyptus	Pepper, Brazilian	Saltcedar	Willow
Madrone	Pine, Austrian	Sweetgum	

**PRECAUTIONS:** Some sprouts, stems, or trees may share the same root system. Adjacent trees having a similar age, height and spacing may signal shared roots. Whether grafted or shared, injury is likely to occur to non-treated stems/trees when one or more trees sharing common roots are treated.

**RESTRICTIONS:** Do not make cut stump applications when the roots of desirable woody brush or trees may be grafted to the roots of the cut stump.

### HABITAT MANAGEMENT

**TYPES OF USES:** Habitat Restoration and Maintenance, Wildlife Food Plots.

Habitat Restoration and Maintenance

**USE INSTRUCTIONS:** This product may be used to control exotic and other undesirable vegetation in habitat management areas. Applications can be made to allow recovery of native plant species, prior to planting desirable native species, and for similar broad-spectrum vegetation control requirements in habitat management areas. Spot treatments can be made to selectively remove unwanted plants for habitat maintenance and enhancement.

### Wildlife Food Plots

**USE INSTRUCTIONS:** This product may be used as a site preparation treatment to control annual and perennial weeds prior to planting wildlife food plots. Any wildlife food species may be planted after applying this product, or native species may be allowed to repopulate the area. If tillage is needed to prepare a seedbed, wait 7 days after application before tillage.

### ANNUAL WEEDS RATE TABLE (ALPHABETICALLY BY SPECIES)

**LISTED RATES APPLY FOR WATER CARRIER VOLUMES OF 3 TO 10 GALLONS PER ACRE FOR GROUND APPLICATIONS AND 3 TO 5 GALLONS PER ACRE FOR AERIAL APPLICATIONS.**

Apply to actively growing annual weeds. Annual weeds are generally easiest to control when they are small. Older, mature (hardened) annual weed species may require higher rates even if they meet the size requirements.

Do not tank-mix with soil residual herbicides when using these rates unless otherwise specified. For weeds that have been mowed, grazed or cut, allow regrowth to occur prior to treatment. This product may be used up to 44 fluid ounces per acre where heavy weed densities exist.

#### ANNUAL WEEDS RATE TABLE

WEED SPECIES	RATE (fluid ounces per acre)				
	11	16	22	27	32
	Maximum height/length (in inches)				
Ammannia, purple	3	6	12	-	18
Anoda, spurred	-	2	3	5	8
Barley	18	18+	-	-	-
Barnyardgrass	-	3	6	7	9
Bassia, fivehook	-	-	6	-	-
Beggarweed, Florida	-	5	8	-	-
Bittercress	12	20	-	-	-
Bluegrass, annual	10	-	-	-	-

Bluegrass, bulbous	6	-	-	-	-
Brome, downy <sup>1,2</sup>	6	12	-	-	-
Brome, Japanese	6	12	24	-	-
Browntop panicum	6	8	12	-	24
Buckwheat, wild <sup>3</sup>	-	1	2	-	-
Burcucumber	-	6	12	-	18
Buttercup	12	20	-	-	-
Carolina geranium	-	-	4	-	9
Carpetweed	-	6	12	-	-
Cheat <sup>2</sup>	6	20	-	-	-
Chervil	20	-	-	-	-
Chickweed	-	12	18	-	-
Cocklebur	12	18	24	-	36
Copperleaf, hophornbeam	-	2	4	-	6
Copperleaf, Virginia	-	2	4	-	6
Coreopsis, plains	-	6	12	-	18
Corn, volunteer	6	12	20	-	-
Corn speedwell	12	-	-	-	-
Crabgrass	3	6	12	-	-
Crowfootgrass	-	-	6	-	12
Cutleaf evening primrose	-	-	3	-	6
Devilsclaw (unicom plant)	-	3	6	-	-
Dwarf dandelion	12	-	-	-	-
Eastern manna grass	8	12	-	-	-
Euplia	-	4	8	12	-
Fall panicum	4	-	6	-	12
Falsedandelion	-	20	-	-	-
Falselax, smallseed	12	-	-	-	-
Fiddleneck	-	6	12	-	-
Field pennycress	6	12	-	-	-
Filaree	-	-	6	-	12
Fleabane, annual	6	20	-	-	-
Fleabane, hairy (Conyza bonariensis)	-	-	6	-	10
Fleabane, rough	3	6	12	-	-
Florida pusley	-	-	4	-	6
Foxtail, giant, bristly, yellow	6	12	20	-	-
Foxtail, Carolina	10	-	-	-	-
Foxtail, green	12	-	-	-	-
Goatgrass, jointed	6	12	-	-	-
Goosegrass	-	3	6	-	12
Grain sorghum (milo)	6	12	20	-	-
Groundcherry	-	3	6	-	9
Groundsel, common	-	6	10	-	-
Hemp sesbania	-	2	4	6	8

ANNUAL WEEDS RATE TABLE					
WEED SPECIES	RATE (fluid ounces per acre)				
	11	16	22	27	32
	Maximum height/length (in inches)				
Henbit	-	-	6	-	12
Horseweed/ Marestalk ( <i>Coryza canadensis</i> )	-	6	12	-	18
Itchgrass	6	8	12	-	18
Jimsonweed	-	-	12	-	18
Johnson grass, seedling	6	12	18	-	24
Junglerice	-	3	6	7	9
Knotweed	-	-	6	-	12
Kochia <sup>4</sup>	-	3 to 6	12	-	-
Lambsquarters	-	6	12	-	20
Little barley	6	12	-	-	-
London rocket	6	-	24	-	-
Mayweed	-	2	6	12	18
Morningglory, annual ( <i>Ipomoea</i> spp)	-	-	3	-	6
Mustard, blue	6	12	18	-	-
Mustard, tansy	6	12	18	-	-
Mustard, tumble	6	12	18	-	-
Mustard, wild	6	12	18	-	-
Nightshade, black	-	4	6	-	12
Nightshade, hairy	-	4	6	-	12
Oats	3	6	18	-	-
Pigweed species	-	12	18	24	-
Prickly lettuce	-	6	12	-	-
Purslane	-	-	3	-	6
Ragweed, common	-	6	12	-	18
Ragweed, giant	-	6	12	-	18
Red rice	-	-	4	-	-
Rye, volunteer/cereal <sup>2</sup>	6	18	18+	-	-
Ryegrass	-	-	6	-	12
Sandbur, field	6	12	-	-	-
Sandbur, longspine	6	12	-	-	-
Shattercane	6	12	20	-	-
Shepherd's-purse	6	12	-	-	-
Sicklepod	-	2	4	-	8
Signalgrass, broadleaf	-	3	6	7	9
Smartweed, ladysthumb	-	-	6	-	9
Smartweed, Pennsylvania	-	-	6	-	9
Sowthistle, annual	-	-	6	-	12
Spanishneedles	-	-	6	-	12
Speedwell, purslane	12	-	-	-	-
Sprangletop	6	12	20	-	-

Spurge, prostrate	-	6	12	-	-
Spurge, spotted	-	6	12	-	-
Spurry, umbrella	6	-	-	-	-
Stinkgrass	-	12	-	-	-
Sunflower	12	18	-	-	-
Swinecress	-	5	12	-	-
Teaweed/Prickly sida	-	2	4	-	6
Texas panicum	6	8	12	-	24
Thistle, Russian <sup>5</sup>	-	6	12	-	-
Velvetleaf	-	-	6	-	12
Virginia pepperweed	-	18	-	-	-
Waterhemp	-	-	6	-	12
Wheat <sup>2</sup>	6	12	18	-	-
Wheat (overwintered)	-	-	6	12	-
Wild oats	3	6	18	-	-
Wild proso-millet	-	6	12	-	18
Witchgrass	-	12	-	-	-
Woolly cuggass	-	6	12	-	-
Yellow rocket	-	12	20	-	-

- For control of downy brome in no-till systems, use 16 fluid ounces per acre.
- Performance is better if application is made before this weed reaches the boot stage of growth.
- Use 16 fluid ounces per acre of this product to control wild buckwheat in the cotyledon to 2-leaf stage. Use 22 fluid ounces per acre to control 2- to 4-leaf wild buckwheat. For improved control of wild buckwheat over 2 inches in size, use sequential treatments of 22 fluid ounces followed by 22 fluid ounces of this product per acre.
- Do not treat kochia in the button stage.
- Control of Russian thistle may vary based on environmental conditions and spray coverage. Whenever possible, a tank mixture with 2,4-D as described below may improve control.

#### ANNUAL WEEDS—RATES FOR HIGHER WATER CARRIER VOLUMES

For ground application with water carrier volumes between 11 and 40 gallons per acre and aerial applications between 6 and 15 gallons per acre, apply 22 to 44 fluid ounces of this product per acre. Use 22 fluid ounces per acre if weeds are less than 6 inches tall. 32 fluid ounces per acre if weeds are 6 to 12 inches tall and 44 fluid ounces per acre if weeds are greater than 12 inches tall. These rates will provide control of weeds listed in the "ANNUAL WEEDS RATE TABLE". Older, mature (hardened) annual weed species may require higher rates even if they meet the size requirements.

#### ANNUAL WEEDS—TANK MIXTURES WITH 2,4-D, DICAMBA OR TORDON® 22K

Apply the rate of this product specified in the "ANNUAL WEED RATE TABLE" plus 0.25 pound of dicamba or 0.5 pound of 2,4-D or 1 to 2 fluid ounces of Tordon 22K per acre will control the following weeds with the maximum height or length indicated: 6 inches—prickly lettuce, marestalk/horseweed, morningglory, kochia (dicamba only) wild buckwheat (Tordon 22K only); 12 inches—cocklebur, lambsquarters, pigweed, Russian thistle (2,4-D only). 11 fluid ounces of this product plus 0.5 pound of 2,4-D per acre will control the following weeds when they are a maximum height or length of 6 inches: common ragweed, giant ragweed, Pennsylvania smartweed, and velvetleaf. Refer to the specific product labels for crop rotation restrictions and cautionary statements of all products used in tank mixtures. Ensure that the specific product is registered for application at the desired site. Some crop injury may occur if dicamba or Tordon 22K is applied within 45 days of planting.

DO NOT APPLY DICAMBA TANK MIXTURES BY AIR IN CALIFORNIA.

### ANNUAL WEEDS—HAND-HELD OR HIGH-VOLUME EQUIPMENT

For control of weeds listed in the "ANNUAL WEEDS RATE TABLE", apply a 0.4-percent solution of this product to weeds less than 6 inches in height or runner length. Apply prior to seedhead formation in grass or bud formation in broadleaf weeds. For annual weeds over 6 inches tall, or unless otherwise specified, use a 0.7-percent solution. For best results, use a 1.5-percent solution on harder-to-control perennials, such as Bermudagrass, dock, field bindweed, hemp dogbane, milkweed and Canada thistle. When using application methods that result in less than complete coverage, use a 4-percent solution for annual and perennial weeds and a 4- to 7-percent solution for woody brush and trees.

### ANNUAL WEEDS—TANK MIXTURES WITH ATRAZINE FOR FALLOW AND REDUCED TILLAGE SYSTEMS

For use only in Colorado, Kansas, Nebraska, Oklahoma, Oregon, South Dakota, and Washington. In Oregon and Washington, do not exceed 1 pound of atrazine per acre. 16 to 20 fluid ounces of this product plus 1 to 2 pounds of atrazine per acre will control the following weeds: barnyardgrass (requires 20 fluid ounces for control), downy brome, green foxtail, lambsquarters, prickly lettuce, tansy mustard, pigweed, field sandbur, stinkgrass, Russian thistle, volunteer wheat, wildchick and Kochia (add 0.12 pound of dicamba for control). Ensure that the specific atrazine product is registered for application at the desired site.

### PERENNIAL WEEDS RATE TABLE (ALPHABETICALLY BY SPECIES)

Apply to actively growing perennial weeds.

**NOTE:** If weeds have been mowed or tilled, do not treat until plants have resumed active growth and have reached the recommended stages. Repeat treatments may be necessary to control weeds regenerating from underground parts or seed. Repeat treatments must be made prior to crop emergence. Unless otherwise stated, allow 7 or more days after application before tillage. Best results are obtained when soil moisture is adequate for active weed growth.

Weed Species	Rate (QT/A)	Water Volume (GPA)	Hand-Held % Solution
Alfalfa	1-1.5	3-10	1.5%
Make applications after the last hay cutting in the fall. Allow alfalfa to regrow to a height of 6 to 8 inches or more prior to treatment. Applications should be followed with deep tillage at least 7 days after treatment, but before soil freeze-up.			
Alligatorweed	3	3-20	1%
For partial control, apply when most of the plants are in bloom. Repeat applications will be required to achieve control.			
Anise (fennel) <sup>1</sup>			1-1.5%
Apply as a spray-to-wet treatment.			
Bahiagrass <sup>2</sup>	2-3.3	3-20	1.5%
Bentgrass	1	10-20	1.5%
For suppression in grass seed production areas. For ground applications only. Ensure entire crown area has resumed growth prior to a fall application. Bentgrass should have at least 3 inches of growth. Tillage prior to treatment should be avoided. Tillage 7 to 10 days after application for best results.			
Bermudagrass	2-3.3	3-20	1.5%
For control, apply 3.3 quarts of this product per acre. For partial control, apply 64 fluid ounces per acre. Treat when Bermudagrass is actively growing and seedheads are present. Repeat treatment may be necessary to achieve control.			
Bermudagrass, water (knotgrass)	0.7-1	5-10	1.5%
Apply 32 fluid ounces of this product in 3 to 10 gallons of water per acre. Apply when water Bermudagrass is 12 to 18 inches in length. Allow 7 or more days before tilling, flushing or flooding the field.			
<b>Fall applications only:</b> Apply 22 fluid ounces of this product in 5 to 10 gallons of water per acre. Fallow fields should be tilled prior to application. Apply prior to frost on water Bermudagrass that is 12 to 18 inches in length.			
This product is not registered in California for use on water Bermudagrass.			

Weed Species (cont.)	Rate (QT/A)	Water Volume (GPA)	Hand-Held % Solution
Bindweed, field	0.4-3.3	3-20	1.5%
Do not treat field bindweed under drought stress as good soil moisture is necessary for active growth.			
For control, apply 2.5 to 3.3 quarts of this product per acre west of the Mississippi River and 2 to 2.5 quarts east of the Mississippi River. Apply when the weeds are at or beyond full bloom. For best results, apply in late summer or fall. Fall treatments must be applied before a killing frost.			
Also for control, apply 44 fluid ounces of this product plus 0.5 pound of dicamba in 10 to 20 gallons of water per acre. Do not apply by air. For suppression on irrigated agricultural land, apply 22 to 44 fluid ounces of this product plus 1 pound of 2,4-D in 10 to 20 gallons of water per acre with ground equipment only. Applications should be made following harvest or in fall fallow ground when the bindweed is actively growing and the majority of runners are 12 inches or more in length. The use of at least one irrigation will promote active bindweed growth. For suppression, apply 11 fluid ounces of this product plus 0.5 pound of 2,4-D in 3 to 10 gallons of water per acre for ground applications and 3 to 5 gallons of water per acre for aerial applications. Apply by air in fallow and reduced tillage systems only. Applications should be delayed until maximum emergence has occurred and when vines are between 6 to 18 inches in length.			
<b>In California only,</b> apply 22 fluid ounces to 3.3 quarts of this product per acre. Actual rate needed for suppression or control will vary within this range depending on local conditions. For suppression on irrigated land where annual tillage is performed, apply 22 fluid ounces of this product in 3 to 10 gallons of water per acre. Apply to bindweed that has reached a length of 12 inches or greater. Allow maximum weed emergence and runner growth. Allow 3 or more days after application before tillage.			
Bluegrass, Kentucky	0.7-1.5	3-40	1.5%
Apply 44 fluid ounces of this product in 10 to 40 gallons of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 22 to 32 fluid ounces of this product in 3 to 10 gallons of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height.			
Blueweed, Texas	2-3.3	3-40	1.5%
Apply 2.5 to 3.3 quarts of this product per acre west of the Mississippi River and 2 to 2.5 quarts per acre east of the Mississippi River. Apply when plants are at or beyond full bloom. New leaf development indicates active growth. For best results, apply in late summer or fall. Fall treatments must be applied before a killing frost.			
Brackenfern	2-3	3-40	1%
Apply to fully expanded fronds that are at least 18 inches			
Bromegrass, smooth	0.7-1.5	3-40	1.5%
Apply 44 fluid ounces of this product in 10 to 40 gallons of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 22 to 32 fluid ounces of this product in 3 to 10 gallons of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height.			
Bursage, woolly-leaf	--	3-20	1.5%
For control, apply 44 fluid ounces of this product plus 0.5 pound of dicamba per acre. For partial control, apply 22 fluid ounces of this product plus 0.5 pound of dicamba per acre. Apply when plants are producing new active growth which has been initiated by moisture for at least 2 weeks and when plants are at or beyond flowering.			
Canarygrass, reed <sup>2</sup>	1.5-2	3-40	1.5%
Cattail <sup>2</sup>	2-3.3	3-40	1.5%
Clover; red, white <sup>1</sup>	2-3.3	3-20	1.5%
Also for control, apply 11 to 22 fluid ounces of this product plus 0.5 to 1 pound of 2,4-D in 3 to 10 gallons of water per acre.			

Weed Species (cont.)	Rate (QT/A)	Water Volume (GPA)	Hand-Held % Solution
Cogongrass	2-3.3	10-40	1.5%
Apply when cogongrass is at least 18 inches tall in late summer or fall. Due to uneven stages of growth and the dense nature of vegetation preventing good spray coverage, repeat treatments may be necessary to achieve control.			
Dallisgrass <sup>2</sup>	2-3.3	3-20	1.5%
Dandelion <sup>1</sup>	2-3.3	3-40	1.5%
Also for control, apply 11 fluid ounces of this product plus 0.5 pound of 2,4-D in 3 to 10 gallons of water per acre.			
Dock, curly <sup>1</sup>	2-3.3	3-40	1.5%
Also for control, apply 11 to 22 fluid ounces of this product plus 0.5 to 1 pound of 2,4-D in 3 to 10 gallons of water per acre.			
Dogbane, hemp	3	3-40	1.5%
Apply when most plants have reached the late bud to flower stage of growth. Following crop harvest or mowing, allow weeds to regrow to a mature stage prior to treatment. For best results, apply in late summer or fall. For suppression, apply 11 fluid ounces of this product plus 0.5 pound of 2,4-D in 3 to 10 gallons of water per acre for ground applications and 3 to 5 gallons of water per acre for aerial applications. Delay applications until maximum emergence of dogbane has occurred.			
Fescue (except tall) <sup>2</sup>	2-3.3	3-20	1.5%
Apply 64 fluid ounces of this product per acre when most plants have reached boot-to-early seedhead stage of development. <b>Fall applications only:</b> Apply 22 fluid ounces of this product in 3 to 10 gallons of water per acre. Apply to fescue in the fall when plants have 6 to 12 inches of new growth. A sequential application of 11 fluid ounces per acre of this product will improve long-term control and control seedlings germinating after fall treatments or the following spring.			
Guineagrass	1.5-2	3-40	1%
Apply when most plants have reached at least the 7-leaf stage of growth. Ensure thorough coverage when using hand-held equipment. In Texas and ridge of Florida, use 44 fluid ounces for control. In the flatwoods region of Florida, 64 fluid ounces is required for control.			
Horsenettle <sup>1</sup>	2-3.3	3-20	1.5%
Horseradish	3	3-40	1.5%
Apply when most plants have reached the late bud to flower stage of growth. For best results, apply in late summer or fall.			
Iceplant <sup>1</sup>	--	--	1.5-2%
Thorough coverage is necessary for best control.			
Jerusalem artichoke <sup>1</sup>	2-3.3	3-20	1.5%
Johnson grass	0.4-2	3-40	1%
In annual cropping systems apply 22 to 44 fluid ounces of this product per acre. Apply 22 fluid ounces of this product in 3 to 10 gallons of water per acre. Use 44 fluid ounces of this product when applying 10 to 40 gallons of water per acre. In noncrop, or areas where annual tillage (no-till) is not practiced, apply 44 to 64 fluid ounces of this product in 10 to 40 gallons of water per acre. For best results, apply when most plants have reached the boot-to-head stage of growth or in the fall prior to frost. Allow 7 or more days after application before tillage. Do not tank-mix with residual herbicides when using 22 fluid ounces of this product per acre. For burn-down of Johnson grass, apply 11 fluid ounces of this product in 3 to 10 gallons of water per acre before the plants reach a height of 12 inches. For this use, allow at least 3 days after treatment before tillage. Spot treatment (partial control or suppression)—Apply a 0.7-percent solution of this product when Johnson grass is 12 to 18 inches in height. Coverage should be uniform and complete.			

Weed Species (cont.)	Rate (QT/A)	Water Volume (GPA)	Hand-Held % Solution
Kikuyugrass	1.5-2	3-40	1.5%
Spray when most kikuyugrass is at least 8 inches in height (3- or 4-leaf stage of growth). Allow 3 or more days after application before tillage.			
Knapweed	3	3-40	1.5%
Apply when most plants have reached the late bud to flower stage of growth. For best results, apply in late summer or fall.			
Lantana	--	--	1%
Apply at or beyond the bloom stage of growth. Use the higher application rate for plants that have reached the woody stage of growth.			
Lespedeza	1.2-3.3	3-20	1.5%
Milkweed, common	2	3-40	1.5%
Apply when most plants have reached the late bud to flower stage of growth.			
Muhly, wirestem	0.7-1.5	3-40	1.5%
Use 22 fluid ounces of this product in 3 to 10 gallons of water per acre. Use 44 fluid ounces of this product when applying 10 to 40 gallons of water per acre or in pasture, sod, or noncrop areas. Spray when the wirestem muhly is 8 inches or more in height. Do not till between harvest and fall applications or in the fall or spring prior to spring applications. Allow 3 or more days after application before tillage.			
Mullein, common	2-3.3	3-20	1.5%
Napiergrass <sup>2</sup>	2-3.3	3-20	1.5%
Nightshade, silverleaf	1.5	3-10	1.5%
Applications should be made when at least 60 percent of the plants have berries. Fall treatments must be applied before a killing frost.			
Nutsedge, purple or yellow	0.4-2	3-40	1-1.5%
Apply 64 fluid ounces of this product per acre or apply a 1- to 1.5-percent solution for control of nutsedge plants and immature nutlets attached to treated plants. Treat when plants are in flower or when new nutlets can be found at rhizome tips. Nutlets that have not germinated will not be controlled and may germinate following treatment. Repeat treatments will be required for long-term control of ungerminated tubers. Sequential applications: 22 to 44 fluid ounces of this product in 3 to 10 gallons of water per acre will also provide control. Make applications when a majority of the plants are in the 3- to 5-leaf stage (less than 6 inches tall). Repeat this application, as necessary, when newly emerging plants reach the 3- to 5-leaf stage. Subsequent applications will be necessary for long-term control. For partial control of existing plants, apply 11 to 44 fluid ounces of this product in 3 to 40 gallons of water per acre. Treat when plants have 3 to 5 leaves and most are less than 6 inches tall. Repeat treatments will be required to control subsequent emerging plants or regrowth of existing plants.			
Orchardgrass	0.7-1.5	3-40	1.5%
Apply 44 fluid ounces of this product in 10 to 40 gallons of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 22 to 32 fluid ounces of this product in 3 to 10 gallons of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height. Orchardgrass sods going to no-till corn: Apply 22 to 32 fluid ounces of this product in 3 to 10 gallons of water per acre. Apply to orchardgrass that is a minimum of 12 inches tall for spring applications and 6 inches tall for fall applications. Allow at least 3 days following application before planting. A sequential application of atrazine will be necessary for optimum results.			
Pampasgrass	--	--	1-1.5%
Pampasgrass should be at or beyond the boot stage of growth. Thorough coverage is necessary for best control.			

Weed Species (cont.)	Rate (QT/A)	Water Volume (GPA)	Hand-Held % Solution
Paragrass <sup>2</sup>	2-3.3	3-20	1.5%
Phragmites	2-3.3	10-40	1-1.5%
For partial control and best results, treat during late summer or fall when plants are actively growing and in full bloom. Treatment before or after this stage may lead to reduced control. Due to the dense nature of the vegetation, which may prevent good spray coverage or uneven stages of growth, repeat treatments may be necessary to achieve control. Visual control symptoms will be slow to develop.			
Poison hemlock	--	--	1-1.5%
For hand-held equipment, apply as a spray-to-wet treatment. Optimum results are obtained when plants are treated at the bud to full- bloom stage of growth. Thorough coverage is necessary for best control.			
Pokeweed, common	1	3-40	1.5%
Apply to actively growing plants up to 24 inches tall.			
Quackgrass	0.7-2	3-40	1.5%
In annual cropping systems, or in pastures and sods followed by deep tillage: Apply 22 fluid ounces of this product in 3 to 10 gallons of water per acre. For 10 to 40 gallons of water per acre, apply 44 fluid ounces of this product. Do not tank-mix with residual herbicides when using the 22-fluid-ounce rate. Spray when quackgrass is 6 to 8 inches in height. Do not till between harvest and fall applications or in fall or spring prior to spring application. Allow 3 or more days after application before tillage. In pastures or sods, use a moldboard plow for best results.			
In pastures, sods or noncrop areas where deep tillage does not follow application: Apply 44 to 64 fluid ounces of this product in 10 to 40 gallons of water per acre when the quackgrass is greater than 8 inches tall.			
Redvine	0.5-1.5	5-10	1.5%
For suppression, apply 16 fluid ounces of this product per acre at each of two applications 7 to 14 days apart or a single application of 44 fluid ounces per acre. Apply rates in 5 to 10 gallons of water per acre. Apply in late September or early October to plants that are at least 18 inches tall and have been growing 45 to 60 days since the last tillage operation. Make applications at least 1 week before a killing frost.			
Reed, giant	--	--	1.5%
Best results are obtained when applications are made in late summer to fall			
Ryegrass, perennial	0.7-2	3-40	1%
In annual cropping systems apply 22 to 44 fluid ounces of this product per acre. Apply 22 fluid ounces of this product in 3 to 10 gallons of water per acre. Use 44 fluid ounces of this product when applying 10 to 40 gallons of water per acre. In noncrop, or areas where annual tillage (no-till) is not practiced, apply 44 to 64 fluid ounces of this product in 10 to 40 gallons of water per acre.			
For best results, apply when most plants have reached the boot-to-head stage of growth or in the fall prior to frost. Do not tank-mix with residual herbicides when using 22 fluid ounces of this product per acre.			
Smartweed, swamp <sup>1</sup>	2-3.3	3-40	1.5%
Also for control, apply 11 fluid ounces of this product plus 0.5 pound of 2,4-D in 3 to 10 gallons of water per acre in the late summer or fall.			
Sowthistle, perennial	1.5-2	3-40	1.5%
Apply when most plants are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late summer or fall, allow at least 4 weeks for initiation of active growth and rosette development prior to the application of this product. Fall treatments must be applied before a killing frost. Allow 3 or more days after application before tillage.			
Spurge, leafy	--	3-10	1.5%
For suppression, apply 11 fluid ounces of this product plus 0.5 pound of 2,4-D in 3 to 10 gallons of water per acre in the late summer or fall. If mowing has occurred prior to treatment, apply when most of the plants are 12 inches tall.			

Weed Species (cont.)	Rate (QT/A)	Water Volume (GPA)	Hand-Held % Solution
Starthistle, yellow	1.5	10-40	1.5%
Best results are obtained when applications are made during the rosette, bolting and early flower stages.			
Sweet potato, wild	--	--	1.5%
For partial control, apply to plants that are at or beyond the bloom stage of growth. Repeat applications may be required.			
Thistle, arcticoke	--	--	1.5%
For partial control, apply to plants that are at or beyond the bloom stage of growth. Repeat applications may be required.			
Thistle, Canada	1.5-2	3-40	1.5%
Apply when most plants are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late summer or fall, allow at least 4 weeks for initiation of active growth and rosette development prior to the application of this product. Fall treatments must be applied before a killing frost. Allow 3 or more days after application before tillage. For suppression in the spring, apply 22 fluid ounces of this product, or 11 fluid ounces of this product plus 0.5 pound of 2,4-D, in 3 to 10 gallons of water per acre. Allow rosette regrowth to a minimum of 6 inches in diameter before treating. Applications can be made as long as leaves are still green and plants are actively growing at the time of application. Allow 3 or more days after application before tillage.			
Timothy <sup>2</sup>	1.5-2	3-40	1.5%
Torpedograss	2.5-3.3	3-40	1.5%
For partial control, apply when most plants are at or beyond the seedhead stage of growth. Repeat applications will be required to achieve control. Fall treatments must be applied before frost.			
Trumpet creeper	1.5	5-10	1.5%
For partial control, apply in late September or October, to plants that are at least 18 inches tall and have been growing 45 to 60 days since the last tillage operation. Make applications at least 1 week before a killing frost.			
Vaseygrass <sup>2</sup>	2-3.3	3-20	1.5%
Velvetgrass <sup>2</sup>	2-3.3	3-20	1.5%
Wheatgrass, western <sup>2</sup>	1.5-2	3-40	1.5%

<sup>1</sup> Apply when most plants have reached the early bud stage of growth.

<sup>2</sup> Apply when most plants have reached the early heading stage of growth.



### WOODY BRUSH AND TREES RATE TABLE (ALPHABETICALLY BY SPECIES)

Apply this product after full leaf expansion, unless otherwise directed. Use the higher rate for larger plants and/or dense areas of growth. On vines, use the higher rate for plants that have reached the woody stage of growth. Best results are obtained when application is made in late summer or fall after fruit formation.

In arid areas, best results are obtained when applications are made in the spring to early summer when brush species are at high moisture content and are flowering. Unless otherwise directed, apply broadcast treatments in 3 to 40 gallons of water per acre. Ensure thorough coverage when using hand-held equipment. Symptoms may not appear prior to frost or senescence with fall treatments.

Allow 7 or more days after application before tillage, mowing or removal. Repeat treatments may be necessary to control plants regenerating from underground parts or seed. Some autumn colors on undesirable deciduous species are acceptable provided no major leaf drop has occurred. Reduced performance may result if fall treatments are made following a frost.

WEED SPECIES	Rate (Qt/A)	Hand-Held % Solution
Alder	2-3	1%
Ash <sup>1</sup>	1.5-3.3	1-1.5%
Aspen, Quaking	1.5-2	1%
Bearmat (Bearclover) <sup>1</sup>	1.5-3.3	1-1.5%
Beech <sup>1</sup>	1.5-3.3	1-1.5%
Birch	1.5-2	1%
Blackberry Make applications after plants have reached full leaf maturity. Best results are obtained when applications are made in late summer or fall. Applications may also be made after leaf drop and until a killing frost or as long as stems are green. After berries have set or dropped in late fall, blackberry can be controlled by applying a 0.7-percent solution of this product. For control of blackberries after leaf drop and until killing frost or as long as stems are green, apply 2 to 2.5 quarts of this product in 10 to 40 gallons of water per acre.	2-3	1%
Blackgum	1.5-3.3	1-1.5%
Bracken	1.5-3.3	1-1.5%
Broom; French, Scotch	-	1-1.5%
Buckwheat, California <sup>1,2</sup>	-	1-1.5%
Cascara <sup>1</sup>	1.5-3.3	1-1.5%
Catsclaw <sup>1</sup>	-	1%
Ceanothus <sup>1</sup>	1.5-3.3	1-1.5%
Chamise <sup>2</sup>	-	1%
Cherry; bitter, black, pin	1.5-2	1%
Coyote brush Apply when at least 50 percent of the new leaves are fully developed.	-	1-1.5%
Dogwood <sup>1</sup>	1.5-3.3	1-1.5%
Elderberry	1.5-2	1%
Elm <sup>1</sup>	1.5-3.3	1-1.5%
Eucalyptus For control of eucalyptus resprouts, apply when resprouts are 6 to 12 feet tall. Ensure complete coverage. Avoid application to drought-stressed eucalyptus plants.	-	1.5%
Florida holly (Brazilian Pepper tree) <sup>1</sup>	1.5-3.3	1-1.5%

WEED SPECIES (cont.)	Rate (Qt/A)	Hand-Held % Solution
Gorse <sup>1</sup>	1.5-3.3	1-1.5%
Hasardia <sup>1,2</sup>	-	1-1.5%
Hawthorn	1.5-2	1%
Hazel	1.5-2	1%
Hickory <sup>1</sup>	1.5-3.3	1-1.5%
Honeysuckle	2-3	1%
Horbeam, American <sup>1</sup>	1.5-3.3	1-1.5%
Kudzu Repeat applications may be required to achieve control.	2.5-3.3	1.5%
Locust, black <sup>1</sup>	1.5-3	1-1.5%
Madrone resprouts <sup>1</sup> Apply to resprouts that are 3 to 6 feet tall. Best results are obtained with spring/early summer treatments.	-	1.5%
Manzanita <sup>1</sup>	1.5-3.3	1-1.5%
Maple, red Apply a 1-percent solution when at least 50 percent of the new leaves are fully developed. For partial control, apply 44 to 86 fluid ounces of this product per acre.	1.5-3	1%
Maple, sugar Apply when at least 50 percent of the new leaves are fully developed.	-	1%
Monkey flower <sup>1,2</sup>	-	1-1.5%
Oak, black, white <sup>1</sup>	1.5-3	1%
Oak, post	2-3	1-1.5%
Oak, northern Apply when at least 50 percent of the new pin leaves are fully developed.	-	1-1.5%
Oak, southern red	1.5-2	1%
Persimmon <sup>1</sup>	1.5-3.3	1%
Pine	1.5-3.3	1%
Poison ivy/Poison oak Repeat applications may be required to achieve control. Fall treatments must be applied before leaves lose green color.	2.5-3.3	1-1.5%
Poplar, yellow <sup>1</sup>	1.5-3.3	1.5%
Redbud, eastern	1.5-3.3	
Rose, multiflora Treatments should be made prior to leaf deterioration by leaf-eating insects.	1.5	1-1.5%
Russian olive <sup>1</sup>	1.5-3.3	1-1.5%
Sage, black <sup>2</sup>	-	1%
Sage, white <sup>1</sup>	1.5-3.3	1-1.5%
Sagebrush, California <sup>2</sup>	-	1%
Salmonberry	1.5-2	1-1.5%
Saltcedar	1.5-3.3	1-1.5%
Sassafras <sup>1</sup>	1.5-3.3	1-1.5%
Sourwood <sup>1</sup>	1.5-3.3	1-1.5%
Sumac; poison, smooth, winged <sup>1</sup>	1.5-3	1-1.5%

WEED SPECIES (cont.)	Rate (Qt/A)	Hand-Held % Solution
Sweetgum	1.5-2	1%
Swordfern <sup>1</sup>	1.5-3.3	1-1.5%
Tallowtree, Chinese <sup>2</sup>	–	1%
Tan oak sprouts <sup>1</sup> Apply to sprouts that are less than 3 to 6 feet tall. Best results are obtained with fall applications.	–	1.5%
Thimbleberry	1.5-2	1-1.5%
Tobacco, tree <sup>1</sup>	–	1%
Trumpet creeper	1.5-2	1-1.5%
Vine maple <sup>1</sup>	1.5-3.3	1-1.5%
Virginia creeper	1.5-3.3	1-1.5%
Waxmyrtle, southern <sup>1</sup>	1.5-3.3	1%
Willow	2-3	1%

<sup>1</sup> Partial Control.

<sup>2</sup> Thorough coverage of foliage is necessary for best results.

#### STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

**PESTICIDE STORAGE:** Keep container closed to prevent spills and contamination

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product that cannot be used or chemically reprocessed must be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, State, or local procedures.

#### CONTAINER HANDLING:

**Nonrefillable Containers 5 Gallons or Less:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

**Nonrefillable containers larger than 5 gallons:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. If recycling or reconditioning not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** 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. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**Refillable containers larger than 5 gallons:** Refillable container. 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 from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

#### OR

**Refillable Container:** Refill this container with pesticide only. Do not reuse this container for any other purpose. Close all openings and replace all caps. Contact Altitude's Customer Service Department at 1-970-800-4300 to arrange for return of the empty refillable container.

### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ALTITUDE CROP INNOVATIONS, LLC or Seller, TO THE EXTENT CONSISTENT WITH APPLICABLE LAW All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold ALTITUDE CROP INNOVATIONS, LLC and Seller harmless for any claims relating to such factors.

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