

PULL HERE TO OPEN ▲



# Glyphogan® Plus

**HERBICIDE**

Non-selective, broad-spectrum weed control for many cropping systems, farmsteads and Conservation Reserve Program acres. Selective broad-spectrum weed control in Roundup Ready® crops.

ACTIVE INGREDIENT:	% BY WT.
*Glyphosate, N-(phosphonomethyl)glycine, in the form of its isopropylamine salt. ....	41.0%
<b>OTHER INGREDIENTS:</b> .....	<b>59.0%</b>
<b>TOTAL</b> .....	<b>100.0%</b>

\*Contains 480 grams per litre or 4 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its isopropylamine salt. Equivalent to 356 grams per litre or 3 pounds per U.S. gallon of the acid, glyphosate.

## KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>

*(continued)*

**EPA Reg. No. 66222-176**

FIRST AID <i>(continued)</i>	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give any liquid to the person.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>

**Have the product container or label with you when calling a poison control center or doctor or going for treatment.** You may also contact PROSAR at 1-877-250-9291 for emergency medical treatment information.



Manufactured for:  
**Makhteshim Agan  
of North America, Inc.**  
4515 Falls of Neuse Road  
Suite 300  
Raleigh, NC 27609

**For additional precautionary, handling, and use statements, see inside of this booklet.**

EPA 121508/EPA 032111/Rev B

**M A N A**

12702

### Net Contents:

EPA Est. No.  70989-MO-01  
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**30 Gallons**  
 **270 Gallons**  
 \_\_\_\_\_

FG# 12636 (30 Gallons)  
FG# 12637 (270 Gallons)



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12944; 12702

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EPA 121508/EPA 032111/Rev B

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

Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

**DOMESTIC ANIMALS:** This product is considered to be relatively non-toxic 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)**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Shoes plus socks

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

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

**USER SAFETY RECOMMENDATIONS**

**Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**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 regulation.

### AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 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 is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

### 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.

AVOID CONTACT OF HERBICIDE WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS (EXCEPT AS SPECIFIED FOR INDIVIDUAL ROUNDUP READY® CROPS), AND DESIRABLE PLANTS AND TREES BECAUSE SEVERE INJURY OR DESTRUCTION MAY RESULT.

Read the entire label before using this product. Use only according to label instructions.

Read the "LIMITATION OF WARRANTY AND LIABILITY" statement at the end of the label before buying or using. If terms are not acceptable, return at once unopened.

### GENERAL INFORMATION (How This Product Works)

**Product Description:** This product is a postemergent, 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. No additional surfactants, additives containing surfactant, buffering agents, or pH adjusting agents are needed or recommended. 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 this product. Ammonium sulfate may be used. See the "MIXING" section of this label for instructions.

When an adjuvant is to be used with this product, Makhteshim Agan of North America, Inc. suggests the use of a Chemical Producers and Distributors Association certified adjuvant.

**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 RATE TABLE," "PERENNIAL WEEDS RATE TABLE," and the "WOODY BRUSH AND TREES RATE TABLE" for recommendations for specific weeds.

Always use the higher rate of this product per acre within the specified range when weed growth is heavy or dense or weeds are growing in an undisturbed (non-cultivated) area.

Do not treat weeds under poor growing conditions such as drought stress, disease, or insect damage, as reduced weed control may result. Reduced results may also occur when treating weeds 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 recommended 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 runoff.

**Mode of Action:** The active ingredient in this product inhibits an enzyme found only in plants 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.

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 recommended in this labeling. Mixing this product with herbicides or other materials not recommended on this label 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 8 quarts of this product per acre per year. For applications in non-crop sites, the combined total of all treatments must not exceed 10.6 quarts of this product per acre per year.

**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. Keep container closed to prevent spills and contamination.

## 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 specified 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:

1. Place a 20- to 35-mesh screen or wetting basket over filling port.
2. Through the screen, fill the spray tank one-half full with water and start agitation.
3. 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.
4. 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.
5. 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.
6. Continue filling the spray tank with water and add the required amount of this product near the end of the filling process.
7. Add individual formulations to the spray tank as follows: wettable powder, flowable, emulsifiable concentrate, drift control 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 under the "GENERAL INFORMATION" section 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 Glyphogan Plus Herbicide					
	0.5%	1%	1.5%	2%	5%	10%
1 gallon	0.7 oz	1.3 oz	2 oz	2.7 oz	6.5 oz	13 oz
25 gallons	1 pt	1 qt	1.5 qt	2 qt	5 qt	10 qt
100 gallons	2 qt	1 gal	1.5 gal	2 gal	5 gal	10 gal

2 tablespoons = 1 fluid ounce

For use in knapsack sprayers, it is suggested that the specified 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 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 specified 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 Control Additives

Drift control additives may be used with all equipment types except wiper applicators, sponge bars, and Controlled Droplet Applicator (CDA) equipment. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

## APPLICATION EQUIPMENT AND TECHNIQUES

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

This product may be applied 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.

## SPRAY DRIFT MANAGEMENT

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS.

Do not allow the herbicide solution to mist, drip, drift, or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants, or other areas on which treatment was not intended. The likelihood of injury occurring from the use of this product increases when winds are gusty, as wind velocity increases, when wind direction is constantly changing, or when there are other meteorological conditions that favor spray drift. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) which are likely to drift. AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE.

## AERIAL SPRAY DRIFT MANAGEMENT

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

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

1. The distance of the outermost nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.
2. Nozzles must always point backward, parallel with the airstream, and never be pointed downward more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the "AERIAL DRIFT REDUCTION ADVISORY" section of this label.

## AERIAL DRIFT REDUCTION ADVISORY

This section is advisory in nature and does not supersede the mandatory label requirements.

### 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 flow rate nozzles to apply the highest practical spray volume. Nozzles with the higher rated flows produce larger droplets.
- **Pressure:** Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles:** Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation:** Orienting nozzles so that the spray is released backward, parallel to the airstream, will produce larger droplets than other orientations and is the recommended practice. 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 the largest droplets and the lowest drift.

**Boom Length:** For some use patterns, reducing the effective boom length to less than  $\frac{3}{4}$  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 target 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 should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.



### Sensitive Areas

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

### Aerial Equipment

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT EXCEPT UNDER CONDITIONS AS SPECIFIED WITHIN THIS LABEL.

Use the specified 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 1 quart per acre. Aerial applications of this product may be made in annual cropping conventional tillage systems, fallow and reduced-tillage systems, and preharvest applications. Refer to the individual use area sections of this label for recommended volumes, application rates, and further instructions.

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

Avoid direct application to any body of water.

AVOID DRIFT – DO NOT APPLY DURING LOW-LEVEL INVERSION CONDITIONS, WHEN WINDS ARE GUSTY, OR UNDER ANY OTHER CONDITION WHICH FAVORS DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED. Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations which dispense spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure. Ensure uniform application – To avoid streaked, uneven, or overlapped application, use appropriate marking devices.

### 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.

### AERIAL APPLICATION IN CALIFORNIA ONLY

Aerial applications of this product are allowed in the following situations:

1. In fallow and reduced-tillage systems prior to the emergence or transplanting of labeled crops.
2. In alfalfa and pasture renovation applications.
3. Over-the-top applications in Roundup Ready® corn and cotton.
4. Preharvest in alfalfa, corn, cotton, wheat, Roundup Ready® corn, and Roundup Ready® cotton.

Do not plant subsequent crops other than those listed in the label booklet for 30 days following application.

When tank mixing this product with 2,4-D for aerial applications, only 2,4-D amine formulations may be used. This tank mixture may be used for fallow and reduced-tillage systems and alfalfa and pasture renovation applications only.

### DO NOT EXCEED THE FOLLOWING MAXIMUM RATES WHEN MAKING APPLICATIONS BY AIR:

1 Quart per Acre Prior to Harvest	2 Quarts per Acre
Alfalfa	Fallow
Corn	Reduced-Tillage Systems
Roundup Ready® Corn*	Alfalfa and Pasture Renovation
Cotton	
Roundup Ready® Cotton*	
Wheat	

\* This restriction also applies to over-the-top applications in these crops.

### Aerial Equipment

Use the specified rates of this product in 3 to 15 gallons of water per acre. Use the following guidelines when aerial applications are made near crops or desirable perennial vegetation after bud break and before total leaf drop and/or near other desirable vegetation or annual crops.

1. Do not apply within 100 feet of all 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 of the desirable vegetation or crop(s).
3. Winds blowing from 5 to 10 miles per hour toward desirable vegetation or crops may require buffer zones in excess of 500 feet.
4. Do not apply when winds are in excess of 10 miles per hour or when inversion conditions exist.



## **AERIAL APPLICATION IN FRESNO COUNTY, CALIFORNIA ONLY (From February 15 through March 31 Only)**

### **Geographic Areas**

This only applies to the area contained inside the following boundaries within Fresno County, California.

North:	Fresno County line
South:	Fresno County line
East:	State Highway 99
West:	Fresno County line

### **General Information**

Always read and follow the label directions and precautionary statements for all products used in the aerial application.

Observe the following directions to minimize off-site movement during aerial application of this product. Minimization of off-site movement is the responsibility of the grower, Pest Control Advisor, and aerial applicator.

### **Written Recommendations**

A written recommendation MUST be submitted by or on behalf of the applicator to the Fresno County Agricultural Commissioner 24 hours prior to the application. This written recommendation MUST state the proximity of surrounding crops and that conditions of each manufacturer's product label and this label have been satisfied.

### **Aerial Applicator Training and Equipment**

Aerial application of this product is limited to pilots who have successfully completed a Fresno County Agricultural Commissioner and California Department of Pesticide Regulation approved training program for aerial application of herbicides. All aircraft must be inspected, critiqued in flight, and certified at a Fresno County Agricultural Commissioner approved fly-in. Test and calibrate spray equipment at intervals sufficient to ensure that proper rates of herbicides and adjuvants are being applied during commercial use. Applicator must document such calibrations and testing. Demonstration of performance at Fresno County Agricultural Commissioner approved fly-ins constitutes such documentation or other written records showing calculations and measurements of flight and spray parameters acceptable to the Fresno County Agricultural Commissioner.

**Applications at Night** – Do not apply this product by air earlier than 30 minutes prior to sunrise and/or later than 30 minutes after sunset without prior permission from the Fresno County Agricultural Commissioner.

To report known or suspected misuse of this product, call 1-800-332-3111.

For additional information on the proper aerial application of this product, call 1-916-784-1718.

**NOTE:** For aerial application from April 1 through February 14, refer to the "AERIAL APPLICATION IN CALIFORNIA ONLY" section of this label.

## **AERIAL APPLICATION IN ARKANSAS ONLY**

AVOID DRIFT. DO NOT APPLY INTO STILL AIR WHERE THERE IS A TEMPERATURE INVERSION LAYER LOW ENOUGH FOR FINE SPRAY PARTICLES TO BECOME SUSPENDED AND MOVE OUTSIDE THE TARGET AREA WHEN THE INVERSION LAYER MOVES. DO NOT APPLY WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITION THAT FAVORS DRIFT. DRIFT IS LIKELY TO CAUSE DAMAGE TO ANY VEGETATION CONTACTED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.

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

Use sufficient carrier volume and appropriate equipment setup 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 airstream and never discharge downward 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 5 to 10 miles per hour toward desirable vegetation or crops will likely require buffer zones in excess of 500 feet.

### **AERIAL APPLICATION IN ARKANSAS, LOUISIANA, MISSISSIPPI, MISSOURI, AND TENNESSEE ONLY**

This product controls annual and perennial weeds listed on this label prior to planting, or emergence of corn, cotton, rice, sorghum, and soybeans; prior to the harvest of cotton and soybeans; and following the harvest of any crop in the fall via aerial applications in these locations.

Aerial applications of this product may be made in fallow systems and conventional, reduced, and zero tillage systems. For applications via aerial equipment, use the specified rates of this product in 3 to 10 gallons of water per acre. Do not exceed a rate of 3 quarts per acre. The likelihood of injury occurring from the use of this product is greatest when winds are gusty or in excess of 5 miles per hour or when other conditions including lesser velocities will allow spray drift to occur.

### **GROUND BROADCAST EQUIPMENT**

Use the specified 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 recommended range to ensure complete coverage. Carefully select proper nozzles to avoid spraying a fine mist. For best results with ground application equipment, use flat fan 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 control of weeds listed in the "ANNUAL WEEDS RATE TABLE," apply a 0.5 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 1 percent solution.

For best results, use a 2 percent solution on harder-to-control perennials such as bermudagrass, dock, field bindweed, hemp dogbane, milkweed, and Canada thistle.

When using application methods which result in less than complete coverage, use a 5 percent solution for annual and perennial weeds and a 5 to 10 percent solution for woody brush and trees.

### **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 non-crop site specified on this label and only when specifically recommended in cropping systems.

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

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

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. Use nozzles that provide uniform coverage within the treated area. Keep shields on these sprayers adjusted to protect desirable vegetation. **EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF HERBICIDE WITH 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. The spray hoods must be operated on the ground or by skimming across the ground. Avoid operation on rough or sloping ground where the spray hoods might be raised off the ground.

These procedures will reduce the potential for crop injury:

- The spray hoods must be operated on the ground or by 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 and Sponge Bars**

A wiper or sponge applicator applies the herbicide solution onto weeds by rubbing the weed with an absorbent material containing the herbicide solution. Wipers over the top of crops may be used only when specifically recommended in this product's labeling.

When applied under the conditions described in the following paragraphs, this product **CONTROLS** many weeds including volunteer corn, Texas panicum, common rye, shattercane, sicklepod, spanishneedles, and bristly starbur and **SUPPRESSES** many weeds including Florida beggarweed, bermudagrass, hemp dogbane, dogfennel, guineagrass, johnsongrass, milkweed, silverleaf nightshade, redroot pigweed, common ragweed, giant ragweed, smutgrass, sunflower, Canada thistle, musk thistle, vaseygrass, 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 wiping 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** – Mix 1 gallon of this product in 2 gallons of water to prepare a 33 percent solution. Apply this solution to weeds listed in this section.

**For Porous Plastic Applicators** – Solutions ranging from 33 to 100 percent of this product in water may be used in porous plastic wiper applications.

## **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 specified in this label when applied by conventional broadcast equipment. For vehicle-mounted CDA equipment, apply 3 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 40 percent solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 0.75 miles per hour (2 to 4 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.

## 1.0 ANNUAL AND PERENNIAL CROPS

**NOTE:** THIS SECTION GIVES GENERAL DIRECTIONS THAT APPLY TO ALL LISTED CROPS WITHIN SECTION 1 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.

### GENERAL USE INSTRUCTIONS:

Unless otherwise specified, applications may be made to control any of the weeds listed in the "ANNUAL WEEDS RATE TABLE," "PERENNIAL WEEDS RATE TABLE," and the "WOODY BRUSH AND TREES RATE TABLE." For any crop not listed in this label, applications must be made at least 30 days prior to planting.

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

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.

When applying this product prior to transplanting crops into plastic mulch, residues may be removed from the plastic by 0.5 inches of water via sprinkler irrigation or natural rainfall.

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.

### 1.1 Cereal and Grain Crops

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

PRECAUTIONS, RESTRICTIONS: Do not treat rice fields or levees when field is flooded.

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, red rice control prior to planting rice (Texas only), spot treatment (except rice), postharvest, preharvest (wheat only), wiper applicators (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.

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

#### Wiper Applicators (Wheat Only)

USE INSTRUCTIONS: Wiper applications may be used in wheat. 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.

PRECAUTIONS, RESTRICTIONS: Allow at least 35 days between application and harvest. Do not use roller applicators.

#### Preharvest (Wheat Only)

USE INSTRUCTIONS: This product provides weed control when applied prior to harvest of wheat. Apply after the hard-dough stage of grain (30 percent or less grain moisture) and at least 7 days prior to harvest. Wheat 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, RESTRICTIONS: Do not apply more than 1 quart of this product per acre. Do not apply to wheat grown for seed, as a reduction in germination or vigor may occur.

#### Postharvest

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.

PRECAUTIONS, RESTRICTIONS: For any crop not listed on this label, applications must be made at least 30 days prior to planting the next crop. Do not harvest or feed treated vegetation for 8 weeks following application.

**Red Rice Control Prior to Planting Rice (Texas Only)**

USE INSTRUCTIONS: Apply 1.5 quarts 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, RESTRICTIONS: Avoid spraying during low humidity conditions, as reduced control may result. Do not treat rice fields or levees when the fields contain floodwater. Do not re-flood treated fields for 8 days following application.

**Non-Selective Control of Listed Annual Weeds in Small Grain Cropping Systems (South Dakota Only)**

USE INSTRUCTIONS: Apply by ground application in 5 to 10 gallons of water per acre. For aerial applications, apply in 2 to 3 gallons of water per acre.

PRECAUTIONS, RESTRICTIONS: The likelihood of injury occurring from the use of this product is greatest when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow spray drift to occur. Adjust boom height on ground equipment to prevent streaked, overlapped, or uneven applications. Avoid spraying when weeds are subject to moisture stress, when dust is on foliage, or when straw canopy covers the weeds.

**1.2 Corn**

TYPES OF CORN: Field corn, Seed corn, Sweet corn, and Popcorn. For Roundup Ready® corn, see the "ROUNDUP READY® CROPS" section of this label.

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, spot treatment, hooded sprayers, preharvest, postharvest.

**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 before, during, or after planting corn in conventional tillage systems into a cover crop, established sod, or in previous crop residue. Apply these tank mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre. For improved burndown, this product may be tank mixed with 2,4-D or dicamba.

2,4-D	Guardsman®	Lorox®
Atrazine	Harness®	Marksman®
Banvel®	Harness® XTRA	Micro-Tech®
Cyanazine	Harness® XTRA 5.6L	Prowl®
Broadstrike®	Lariat®	Simazine
Bullet®	Lasso®/Alachlor	Surpass®
Frontier®	Linex®	Topnotch®

**NOTE:** These tank mixes are not registered in California.

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 2 pints per acre in these tank mixtures. For other labeled annual weeds, apply 1 to 1.5 pints of this product per acre when weeds are less than 6 inches tall and 2 to 3 pints when weeds are over 6 inches tall.

PRECAUTIONS, 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 ryegrass, and any perennial weeds. The area covered by this recommendation includes 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. Refer to the map under "ANNUAL WEEDS RATE TABLE."

**Hooded Sprayers**

USE INSTRUCTIONS: This product may be used through hooded sprayers for weed control between the rows of all types of corn (including field corn, sweet corn, and popcorn). 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" and "SELECTIVE EQUIPMENT" sections of this label.

PRECAUTIONS, RESTRICTIONS: Corn must be at least 12 inches tall measured without extending leaves. 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. Do not apply more than 1 quart of this product per acre for each application and no more than 3 quarts per acre per year for hooded sprayer applications. Do not graze or feed corn forage or fodder following applications of this product through hooded sprayers.

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.

#### **Spot Treatment**

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

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

#### **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 3 quarts of this product per acre. For aerial applications, apply up to 1 quart of this product per acre.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 7 days between application and harvest. Preharvest application is not recommended for corn grown for seed, as a reduction in germination or vigor may occur.

#### **Postharvest**

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 crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.

PRECAUTIONS, RESTRICTIONS: Do not harvest or feed treated vegetation for 8 weeks following application.

### **1.3 Cotton**

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, hooded sprayer, 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 alone or in tank mixtures before, during, or after planting cotton. Applications must be made prior to emergence of the crop.

#### **Hooded Sprayer, 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, RESTRICTIONS: See the "APPLICATION EQUIPMENT AND TECHNIQUES" and "SELECTIVE EQUIPMENT" sections 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, RESTRICTIONS: Do not treat more than 10 percent of the total field area to be harvested. The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.

#### **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 RATE TABLE," "PERENNIAL WEEDS RATE TABLE," and the "WOODY BRUSH AND TREES RATE TABLE" of this label. For cotton regrowth inhibition, apply 1 pint to 2 quarts of this product per acre.

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. 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, Folex®, or Prep®/Setup™ to provide additional enhancement of cotton leaf drop.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 7 days between application and harvest of cotton. Do not feed or graze treated cotton forage or hay following preharvest applications. Do not apply more than 1 quart of this product per acre by air. Do not apply more than 2 quarts of this product per acre by ground. Do not apply to cotton grown for seed, as a reduction in germination or vigor may occur.



## 1.4 Fallow Systems

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. Refer to the specific product labels for crop rotation restrictions and cautionary statements of all products used in tank mixtures. Some crop injury may occur if dicamba is applied within 45 days of planting.

PRECAUTIONS, RESTRICTIONS: Do not apply dicamba tank mixtures by air in California. For any crop not listed on this label, applications must be made at least 30 days prior to planting.

### 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 RATE TABLE," "PERENNIAL WEEDS RATE TABLE," and the "WOODY BRUSH AND TREES RATE TABLE" sections of this label.

TANK MIXTURES: In addition, 12 fluid ounces of this product plus 2 to 3 fluid ounces of Goal™ 2XL/Galigan 2E per acre will control the following weeds with the maximum height or length indicated: 3" – common cheeseweed, chickweed, groundsel; 6" – London rocket, shepherdspurse.

16 fluid ounces of this product plus 2 to 3 fluid ounces of Goal 2XL/Galigan 2E per acre will control the following weeds with the maximum height or length indicated: 6" – common cheeseweed, groundsel, marestail (*Conyza canadensis*); 12" – chickweed, London rocket, shepherdspurse.

### 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. For any crop not listed on this label, applications must be made at least 30 days prior to planting. 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, RESTRICTIONS: Tank mixtures with residual herbicides may result in reduced performance.

## 1.5 Grain Sorghum (Milo)

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, spot treatment, wiper applicators, preharvest, postharvest.

### 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.

### Spot Treatment and 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 AND SPONGE BARS " in the "SELECTIVE EQUIPMENT" section of this label.

PRECAUTIONS, RESTRICTIONS: For spot treatment, do not treat more than 10 percent of the total field area to be harvested. The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.

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.

### Preharvest

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

PRECAUTIONS, RESTRICTIONS: Do not apply more than 2 quarts of this product per acre. Allow a minimum of 7 days between application and harvest. Preharvest application is not recommended for sorghum grown for seed, as a reduction in germination or vigor may occur. The use of this product for preharvest grain sorghum (milo) is not registered in California.

### Postharvest

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 1 quart of this product per acre for control or 1.5 pints of this product per acre for suppression.

PRECAUTIONS, RESTRICTIONS: Do not harvest or feed treated vegetation for 8 weeks following application.

## 1.6 Herbs

LABELED CROPS: Peppermint, Spearmint

### Spot Treatments (Peppermint and Spearmint Only)

USE INSTRUCTIONS: This product may be used as a spot treatment in spearmint and peppermint. Apply spot treatments on a spray-to-wet basis with hand-held 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.

PRECAUTIONS, RESTRICTIONS: 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 should be treated at one time. 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.

## 1.7 Soybeans

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, spot treatment, preharvest, selective equipment, hooded sprayers. 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 of this product with any of the following products may be applied in conventional tillage systems into a cover crop, established sod, or in previous crop residue.

Canopy®	Linex®	Pursuit® Plus
Command®	Lorox®/Linuron	Scepter®
Frontier®	Micro-Tech®	Sencor®/Lexone®/Metribuzin
Fusion®	Prowl®	Squadron®
Lasso®/Alachlor	Pursuit®	

**NOTE:** The tank mix recommendations in this section are not registered in California.

For improved burndown, this product may be tank mixed with 2,4-D or 2,4-DB. See the 2,4-D label for intervals between application and planting.

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 2 pints per acre in these tank mixtures. For other labeled annual weeds, apply 1 to 1.5 pints of this product per acre when weeds are less than 6 inches tall and 2 to 3 pints when weeds are over 6 inches tall.

### Spot Treatment

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

PRECAUTIONS, RESTRICTIONS: Do not treat more than 10 percent of the total field area to be harvested. The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.

### Preharvest

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

Apply at rates given in the "ANNUAL WEEDS RATE TABLE," "PERENNIAL WEEDS RATE TABLE," and the "WOODY BRUSH AND TREES RATE TABLE." 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. 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, RESTRICTIONS: Do not apply more than 6 quarts per acre of this product for preharvest applications. Do not apply more than 1 quart per acre of this product by air. Allow a minimum of 7 days between application and harvest of soybeans. Do not graze or harvest treated crop for livestock feed within 25 days of last preharvest application. Do not apply to soybeans grown for seed, as a reduction in germination or vigor may occur.

### **Selective Equipment**

USE INSTRUCTIONS: This product may be applied through recirculating sprayers, shielded applicators, hooded sprayers, over-the-top 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.

## **1.8 Sugarcane**

TYPES OF APPLICATIONS: Preplant, preemergence, spot treatment, fallow, hooded sprayers.

### **Preplant and Preemergence**

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

PRECAUTIONS, 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.

PRECAUTIONS, RESTRICTIONS: Avoid spray contact with healthy cane plants since severe damage or destruction may result. 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 4 to 5 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.

### **Hooded Sprayers**

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

PRECAUTIONS, RESTRICTIONS: 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.

## **2.0 VEGETABLE CROPS**

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

USE DIRECTIONS: This product may be applied prior to the emergence of direct-seeded vegetables or prior to transplanting vegetables. For the following crops, apply only prior to planting and allow at least 3 days between application and planting: cantaloupe, casaba melon, crenshaw melon, cucumber, eggplant, garlic, gherkin, gourds, ground cherry, honeydew melon, honey ball melon, mango melon, melons (all), muskmelon, pepper (all), Persian melon, pumpkin, squash (summer, winter), tomatillo, tomato, watercress, and watermelon.

PRECAUTIONS, RESTRICTIONS: When applying this product prior to transplanting crops into plastic mulch, care must be taken to remove residues of this product from the plastic prior to transplanting. Residues can be removed by a single 0.5-inch application of water, either by natural rainfall or via a sprinkler system.

### **2.1 Brassica Vegetables**

LABELED CROPS: Broccoli (all), Brussels sprouts, Cabbage (all), Chinese cabbage (bok choy), Cauliflower, Cavalo broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens.

### **2.2 Bulb Vegetables**

LABELED CROPS: Garlic, Leek, Onion, Shallot.

### **2.3 Cucurbit Vegetables and Fruits**

LABELED CROPS: Chayote (fruit), Cucumber, Gherkin, Gourds, Melons (all), Cantaloupe, Casaba melon, Crenshaw melon, Honeydew melon, Honey ball melon, Mango melon, Muskmelon, Okra, Persian 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.

## 2.4 Leafy Vegetables

LABELED CROPS: Amaranth, Arugula (roquette), Beet greens, Cardoon, Celery, Chinese celery, Celtuce, Chervil, Chrysanthemum, Corn salad, Cress, Dandelion, Dock (sorrel), Endive, Florence fennel, Lettuce (head and leaf), Parsley, Purslane (garden and winter), Radicchio (red chicory), Rhubarb, Spinach (all), Swiss chard, Watercress (upland).

## 2.5 Fruiting Vegetables

LABELED CROPS: Eggplant, Groundcherry (*Physalis* spp.), Pepino, Pepper (all), Tomatillo, Tomato.

## 2.6 Legume Vegetables (Succulent or Dried)

LABELED CROPS: Beans (all: *Lupinus*: includes grain lupin, sweet lupin, white lupin, and white sweet lupin), Beans (*Phaseolus*: includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean), Beans (*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, Peas (all: *Pisum*: includes dwarf pea, edible-podded pea, English pea, field pea, garden pea, green pea, snow-pea, sugar snap pea), Pigeon pea, Soybean (immature seed), Sword bean.

## 2.7 Root and Tuber Vegetables

LABELED CROPS: Artichoke (Jerusalem), Beet (all, garden), Carrot, Celeriac, Chicory, Ginseng, Horseradish, Parsnip, Potato (Irish), Oriental radish, Radish, Rutabaga, Sugar beets, Salsify, Sweet potato, Turnip, Yams.

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

USE INSTRUCTIONS: This product may be used for general weed control in established non-bearing ginseng. Direct applications so that there is no contact of this product with the ginseng plant. Applications may be made with boom equipment, CDA, shielded sprayers, hand-held and high-volume wands, lances, and orchard guns or with wiper application equipment.

PRECAUTIONS, RESTRICTIONS: Allow one year to elapse between application and harvest. Extreme care must be exercised to avoid contact of herbicide solution, spray, drift, or mist with foliage or green bark of trunk, branches, suckers, fruit, or other parts of desirable plants. Contact of this product with other than matured brown bark can result in serious crop damage.

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

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

PRECAUTIONS, RESTRICTIONS: Allow at least 14 days between application and harvest of rutabagas.

## 2.8 Asparagus

TYPES OF APPLICATIONS: Preplant, preemergence, spot treatment, postharvest

### Preplant and Preemergence

USE INSTRUCTIONS: This product may be applied prior to emergence of asparagus.

PRECAUTIONS, RESTRICTIONS: Do not apply within a week before the first spears emerge.

### Spot Treatment

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

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

### Postharvest

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. Delayed treatments should be applied as a directed or shielded spray in order to avoid contact of the spray with ferns, stems, or spears.

PRECAUTIONS, RESTRICTIONS: Direct contact of the spray with the asparagus may result in serious crop injury. Select and use recommended types of spray equipment for postemergence postharvest 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.

## 2.9 Peanuts

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting

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

## 2.10 Sunflowers

TYPES OF APPLICATIONS: Preplant, preemergence

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

PRECAUTIONS, RESTRICTIONS: Do not apply more than 1 quart of this product per acre for sunflowers. Make only one preplant or preemergent application per year. Do not feed or graze sunflower forage following application of this product.

## 3.0 TREE, NUT, AND VINE CROPS

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

GENERAL USE INSTRUCTIONS:

TYPES OF APPLICATIONS: General weed control, middles (between rows of trees), strips (within rows of trees), selective equipment (shielded sprayers, wiper applications, except kiwi), perennial grass suppression, cut 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.

This product may be applied in middles, strips, and for general weed control in established tree fruit and nut groves, orchards, berries, and vineyards. It may also be used for site preparation prior to transplanting these crops. Allow a minimum of 3 days between application and transplanting. Apply 1 pint to 5 quarts per acre according to the "ANNUAL WEEDS RATE TABLE" and "PERENNIAL WEEDS RATE TABLE" sections of this label. Repeat applications may be made up to a maximum of 10.6 quarts per acre per year.

### 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 fruits, tree nuts, 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/Galigan 2E may be used for annual weeds in middles between rows of citrus crops, tree fruits, tree nuts, and vine crops. This mixture is recommended when weeds are stressed or growing in dense populations. 16 to 32 fluid ounces per acre of this product plus 3 to 12 fluid ounces per acre of Goal 2XL/Galigan 2E will control annual weeds with a maximum height or diameter of 6 inches including crabgrass, hairy fleabane (*Conyza bonariensis*), common groundsel, junglerice, common lambsquarters, redroot pigweed, London rocket, common ryegrass, shepherds-purse, annual sowthistle, common cheeseweed (malva), filaree (suppression), horseweed/marestail (*Conyza canadensis*), stinging nettle, and common purslane (suppression). 12 to 32 oz./A of this product plus 3 to 12 fluid ounces per acre of Goal 2XL/Galigan 2E will control common cheeseweed (malva) with a maximum height or diameter of 3 inches.

### Strips (In Rows)

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

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

Do not apply these tank mixtures in Puerto Rico.

Refer to the individual product labels for specific crops, rates, geographic restrictions, and precautionary statements. Apply 1 pint to 5 quarts of this product per acre in these tank mixtures. Use rates at the higher end of the specified rate range when weeds are stressed, growing in dense populations, or are greater than 12 inches tall.

### **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 8 fluid ounces of this product in 10 to 20 gallons of water per acre.

For suppression of Kentucky bluegrass covers, apply 6 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 6 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 4 fluid ounces of this product per acre followed by an application of 2 to 4 fluid ounces per acre about 45 days later. Make no more than 2 applications per year.

For burndown of bermudagrass, apply 1 to 2 quarts 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 elapse to ensure sufficient time for burndown to occur.

For suppression of bermudagrass, apply 6 to 16 fluid ounces of this product per acre east of the Rocky Mountains and 16 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 6 to 10 fluid ounces of this product per acre should be used in shaded conditions or where a lesser degree of suppression is desired.

### **Selective Equipment**

Shielded and wiper applicators may be used in tree crops and grapes. Refer to the individual crop section for time interval between application and harvest.

**GENERAL PRECAUTIONS, RESTRICTIONS:** For all uses in this section, extreme care must be exercised to avoid contact of herbicide solution, spray, drift, or mist with foliage, or green bark of trunk, branches, suckers, fruit, or other parts of trees, canes, and vines. Contact of this product with other than matured brown bark can result in serious crop damage or destruction. Avoid painting cut stumps with this product, as injury resulting from root grafting may occur in adjacent trees.

### **3.1 Berry Crops**

**LABELED CROPS:** Blackberry (boysenberry, dewberry, and youngberry), Blueberry, Cranberry, Currant, Elderberry, Gooseberry, Huckleberry, Loganberry, Olallieberry, Raspberry (black, red).

**TYPES OF APPLICATIONS:** Preplant, preemergence, directed spray (except Cranberry), wiper application.

**USE INSTRUCTIONS:** This product may be applied as a preplant or preemergence broadcast application or as a wiper application for crops listed in this section. Directed sprays may be applied to any crop except cranberries. For wick or wiper applications, mix 1 gallon of this product in 4 gallons of water to prepare a 20 percent solution. In severe infestations, reduce equipment ground speed to ensure that adequate amounts of this product are wiped on the weeds. A second treatment in the opposite direction may be beneficial.

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

### **3.2 Citrus Crops**

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

**TYPES OF APPLICATIONS:** General weed control, middles (between rows of trees), strips (within rows of trees), selective equipment (shielded sprayers, wiper applications).

**USE INSTRUCTIONS:** For general use directions, see the "TREE, NUT, AND VINE CROPS (GENERAL)" section. The recommendations below pertain to applications in Florida and Texas.

**FLORIDA AND TEXAS:** For burndown or control of the weeds listed below, apply the specified 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 citron, apply as a post-directed spray only.

For goatweed, apply 2 to 3 quarts of this product per acre. Apply in 20 to 30 gallons of water per acre when plants are actively growing. Use 2 quarts per acre when plants are less than 8 inches tall and 3 quarts per acre when plants are greater than 8 inches tall. If goatweed is greater than 8 inches tall, the addition of Krovar® 1 or Karmex®/Diuron may improve control. Refer to the individual product labels for specific crops, rates, geographic restrictions, and precautionary statements.

**Perennial weeds:**

WEED SPECIES	GLYPHOGAN PLUS HERBICIDE RATE PER ACRE			
	1 Qt.	2 Qts.	3 Qts.	5 Qts.
Bermudagrass	B	—	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

S = Suppression      B = Burndown  
 PC = Partial control      C = Control

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 1 day between last application and harvest in citrus crops.

**3.3 Pome Fruit, Stone Fruit, and Olives**

LABELED CROPS: Apple, Crabapple, Loquat, Mayhaw, Pear, Quince, Apricot, Cherry (sweet, tart), Nectarine, Olive, Peach, Plum/Prune (all types).

TYPES OF APPLICATIONS: General weed control, middles (between rows of trees), strips (in row of trees), selective equipment.

USE DIRECTIONS: For general use directions, see the "TREE, NUTS, AND VINE CROPS (GENERAL)" section. The following directions are specific to tree fruits.

EQUIPMENT RESTRICTIONS: For cherries, any application equipment listed in this section may be used in all states. For olives, apply as a post-directed spray only. Any application equipment listed in this 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.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 1 day between last application and harvest for apple, crabapple, loquat, mayhaw, pear, and quince. Allow a minimum of 17 days between last application and harvest in apricot, cherry (sweet, tart), nectarine, olive, peach, and plum/prune.

**3.4 Tree Nuts**

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

TYPES OF APPLICATIONS: General weed control, middles (between rows of trees), strips (in row of trees), selective equipment.

USE DIRECTIONS: For general use directions, see the "TREE, NUTS, AND VINE CROPS (GENERAL)" section. The following directions are specific to tree nuts.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 3 days between last application and harvest of tree nuts.

**3.5 Tropical and Subtropical Trees and Fruits**

LABELED CROPS: Atemoya, Avocado, Banana, Barbados cherry (acerola), Breadfruit, Canistel, Carambola (starfruit), Cherimoya, Cocoa beans, Coconuts, Coffee, Dates, Figs, Guava, Jaboticaba, Jackfruit, Longan, Lychee, Mango, Marmaladebox (genip), Papaya, Passion fruit, Persimmon, Pineapple, Plantain, Pomegranate, Sapodilla, Sapote (black, mamey, white), Soursop, Sugar apple, Tamarind, Tea.

TYPES OF APPLICATIONS: General weed control, middles (between rows of trees), strips (in row of trees), selective equipment plus Bananacide (banana only).

USE DIRECTIONS: This product may be applied for general weed control or for site preparation prior to transplanting crops listed in this section. In coffee and banana, delay applications 3 months after transplanting to allow the new coffee or banana plant to become established.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 1 day between last application and harvest in banana, guava, and papaya. Allow a minimum of 28 days between last application and harvest in coffee and plantain. Allow a minimum of 14 days between last application and harvest for any other tropical or subtropical tree fruit crop including tea. Do not feed or graze treated pineapple forage following application.

**Bananacide (Bananas Only)**

USE INSTRUCTIONS: This product may be used to destroy banana plants. For direct application to bananas, remove fruit prior to treatment.

**3.6 Vine Crops**

LABELED CROPS: Grapes (raisin, table, wine), Kiwi.

TYPES OF APPLICATIONS: General weed control, middles (between rows), strips (in row), selective equipment.

USE DIRECTIONS: For general use directions, see the "TREE, NUTS, AND VINE CROPS (GENERAL)" section. The following directions are specific to vine crops. 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.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 14 days between last application and harvest.

**4.0 PASTURE GRASSES, FORAGE LEGUMES, AND RANGELANDS**

**4.1 Alfalfa, Clover, and Other Forage Legumes**

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

TYPES OF APPLICATIONS: Dormant (alfalfa only), preplant, preemergence, at-planting, spot treatment (alfalfa and clover only), wiper applicators (alfalfa and clover only), renovation, preharvest (alfalfa only).

**Dormant (Alfalfa Only)**

USE INSTRUCTIONS: This product will control or suppress many weeds including quackgrass, downy brome, and cheatgrass in dormant alfalfa. Apply 8 to 12 ounces per acre of this product. Apply in the spring to alfalfa that is dormant. Applications should be made after spring temperatures have warmed enough to encourage resumption of weed growth, but prior to initiation of trifoliolate leaf expansion of the alfalfa. Applications made after expansion of the first trifoliolate leaf of the alfalfa will cause growth reduction and reduced crop yield.

PRECAUTIONS, RESTRICTIONS: Do not use ammonium sulfate when spraying dormant alfalfa with this product. Do not use this product where a slight yield reduction in the first cutting of alfalfa cannot be tolerated. Do not make more than one application per year. Allow 36 hours after application before grazing livestock or harvesting. Slight discoloration of the alfalfa may occur, but the alfalfa will regreen and regrow under moist soil conditions as effects of this product wear off. Application of this product can cause crop injury. Any crop injury is the sole responsibility of the applicator.

**Preplant, Preemergence, and At-Planting**

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

PRECAUTIONS, RESTRICTIONS: Remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

**Preharvest (Alfalfa Only)**

USE INSTRUCTIONS: This product may be used in declining alfalfa stands or any stand of alfalfa where crop destruction is acceptable. This application will severely injure or destroy the stand of alfalfa. This product will control annual and perennial weeds including quackgrass when applied prior to the harvest of alfalfa. The treated crop and weeds can be harvested and fed to livestock after 36 hours. Allow a minimum of 36 hours between application and harvest. Use up to 1 quart of this product per acre. Applications may be made at any time of the year. Make only one application to an existing stand of alfalfa per 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, RESTRICTIONS: Do not apply more than 1 quart of this product per acre as a preharvest treatment. Do not apply to alfalfa grown for seed, as a reduction in germination or vigor may occur.

**Spot Treatment and Wiper Applications (Alfalfa and Clover Only)**

USE INSTRUCTIONS: This product may be applied as a spot treatment in alfalfa or clover. This product may be applied with wiper applicators to control or suppress the weeds listed under "WIPER AND SPONGE BARS" in the "SELECTIVE EQUIPMENT" section of this label. Applications may be made in the same area at 30-day intervals.



PRECAUTIONS, 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 should be treated at one time. Remove domestic livestock before application and wait 14 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. Labeled crops may be planted into the treated area.

PRECAUTIONS, RESTRICTIONS: Remove domestic livestock before application and wait 8 weeks between applications and grazing or harvesting.

### **4.2 Conservation Reserve Program (CRP)**

TYPES OF APPLICATIONS: Renovation (rotating out of CRP), site preparation, postemergence weed control in dormant CRP grasses, 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 recommendations.

#### **Postemergence Weed Control in Dormant CRP Grasses, 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 12 to 16 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, RESTRICTIONS: Some stunting of CRP perennial grasses will occur if broadcast applications are made when plants are not dormant. Do not apply more than 3 quarts per acre per year onto CRP grasses.

### **4.3 Grass Seed Production**

LABELED CROPS: Any grass (*Gramineae* family) except corn, sorghum, sugarcane, and those listed above under "CEREAL AND GRAIN CROPS."

TYPES OF APPLICATIONS: Preplant, renovation, site preparation, shielded sprayers.

#### **Preplant, Renovation, and Site Preparation**

USE INSTRUCTIONS: This product may be applied before planting or renovation of turf or forage grass areas grown for seed production. For maximum control of existing vegetation, delay planting to determine if any regrowth from escaped underground plant parts occurs. 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.

PRECAUTIONS, RESTRICTIONS: 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. Do not feed or graze treated areas for 8 weeks following application.

#### **Shielded Sprayers (Idaho, Oregon, and Washington Only)**

USE INSTRUCTIONS: Apply 1 to 3 quarts of this product as a broadcast spray in 10 to 20 gallons of water per acre to control weeds in the rows. Uniform planting in straight rows aids in shielded sprayer applications. Best results are obtained when the grass seed crop is small enough to easily pass by or through the protective shields.

PRECAUTIONS, RESTRICTIONS: 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.

### **4.4 Pastures**

LABELED CROPS: Any grass (*Gramineae* family except corn, sorghum, sugarcane, and those listed above under "CEREAL AND GRAIN CROPS") including Bahiagrass, Bermudagrass, Bluegrass, Bromegrass, Fescue, Orchardgrass, Ryegrass, Timothy, Wheatgrass, Alfalfa, and Clover. In Hawaii, pastures include Kikuyugrass, Pangola grass, and Guineagrass.

TYPES OF APPLICATIONS: Spot treatment, over-the-top wiper application, preplant, preemergence, pasture renovation.

#### **Spot Treatment and Wiper Application**

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.

**PRECAUTIONS, 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 pasture area should be treated at one time. Remove domestic livestock before application and wait 14 days after application before grazing livestock or harvesting.

**Preplant, Preemergence, and Pasture Renovation**

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

**PRECAUTIONS, RESTRICTIONS:** Remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

## 5.0 ROUNDUP READY® CROPS

The following instructions include all applications which can be made onto the specified Roundup Ready® crops during the complete cropping season. Do NOT combine these instructions with other recommendations made for crop varieties that do not contain the Roundup Ready® gene in the “ANNUAL AND PERENNIAL CROPS” section of this label.

**MAKHTESHIM AGAN OF NORTH AMERICA, INC. (MANA) RECOMMENDS USE OF THIS PRODUCT FOR POSTEMERGENCE APPLICATION ONLY ON CROP VARIETIES DESIGNATED AS CONTAINING THE 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, fruit of crops, or any desirable plants that do not contain the 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 MANA representative. Roundup Ready® crop varieties must be purchased from an authorized licensed seed supplier.

**IT IS UNLAWFUL TO SELL OR PLANT SAVED SEED. SEEDS WITH THE ROUNDUP READY® GENE MAY ONLY BE USED FOR PLANTING A COMMERCIAL CROP IN A SINGLE SEASON. SEED MAY NOT BE SAVED FOR REPLANTING AND SAVED SEED MAY NOT BE SUPPLIED TO OTHERS FOR REPLANTING. MANA DOES NOT WARRANT THE SAFETY OR PERFORMANCE OF THIS PRODUCT WHEN USED ON “BROWN BAG” OR FARMER- SAVED SEED.**

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 fan 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.

For proper stewardship of aerial applications over the top of Roundup Ready® crops, MANA recommends that growers and applicators read and follow all precautions and procedures contained in the use guide *A Guide to On-Target Aerial Application* available by calling 1-800-ROUNDUP (1-800-768-6387) or on the internet at [www.FARMSOURCE™.com](http://www.FARMSOURCE™.com).

**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.**

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

**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.**

### 5.1 Seed Production of Canola with the Roundup Ready® Gene

**MANA RECOMMENDS USE OF THIS PRODUCT TO CONTROL NON-GLYPHOSATE-TOLERANT CANOLA IN PRODUCTION FIELDS OF CANOLA WHICH CONTAIN THE ROUNDUP READY® GENE.**

**SEVERE INJURY OR DEATH WILL RESULT IF CANOLA VARIETIES WHICH DO NOT CONTAIN THE ROUNDUP READY® GENE ARE SPRAYED WITH THIS PRODUCT.**

**USE INSTRUCTIONS:** This product will control non-glyphosate-tolerant canola in seed production fields of canola containing the Roundup Ready® gene. This product may be applied by ground application equipment only. Apply 1 pint of this product in 5 to 20 gallons of spray solution per acre as a broadcast spray. A second application of 1 pint may be applied if needed to control non-glyphosate-resistant canola plants. Apply to Roundup Ready® canola from emergence to the pre-flower (early bolting) stage.

PRECAUTIONS, RESTRICTIONS: Do not exceed a maximum rate of 1 quart of this product per acre per season. Treated canola may not be used for food or feed. Do not feed or graze treated canola. Do not process treated canola for food or feed.

## 5.2 Preplant, Preemergent and/or Over-the-Top Applications to Canola with the Roundup Ready® Gene

**MANA RECOMMENDS USE OF THIS PRODUCT ONLY ON CANOLA WHICH CONTAINS THE ROUNDUP READY® GENE.**

**DO NOT USE THIS PRODUCT ON CANOLA WITH THE 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.**

**SEVERE INJURY OR DEATH WILL RESULT IF CANOLA VARIETIES WHICH DO NOT CONTAIN THE ROUNDUP READY® GENE ARE SPRAYED WITH THIS PRODUCT. Avoid contact with foliage, green stems, fruit of crops, or any desirable plants which do not contain the Roundup Ready® gene since severe injury or destruction will result.**

USE INSTRUCTIONS: This product will control many troublesome emerged weeds when applied preplant, preemergent, and/or over-the-top applications in Roundup Ready® canola.

PRECAUTIONS, RESTRICTIONS: See the "ROUNDUP READY® CROPS" general section of this label for other precautionary instructions for use in Roundup Ready® crops. There are no rotational crop restrictions following applications of this product. Allow a minimum of 60 days between last application and canola harvest. Refer to the table below for maximum seasonal rates.

Maximum Allowable Combined Application Quantities Per Season	
Preplant and preemergence applications	2 quarts per acre
Total in-crop application from emergence to 6-leaf stage	1 quart per acre

**Ground Applications:** Apply this product in 5 to 20 gallons of spray solution per acre using broadcast equipment. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results with ground application equipment, use nozzles which provide a flat fan pattern. Check for even distribution of spray droplets.

**Aerial Applications:** Use the specified rates of this product in 3 to 15 gallons of spray solution per acre. Do not exceed a maximum rate of 16 ounces of this product per acre when applied by air. 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. DO NOT APPLY DURING LOW-LEVEL INVERSION CONDITIONS, WHEN WINDS ARE GUSTY, OR UNDER ANY OTHER CONDITIONS WHICH FAVOR DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. MAINTAIN APPROPRIATE BUFFER ZONES TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION.

Do not allow the herbicide solution to mist, drip, drift, or splash onto desirable vegetation since minute quantities of this herbicide can cause severe damage or destruction to the crop, plants, or other areas on which treatment was not intended. The likelihood of injury occurring from the use of this product is greatest when winds are gusty or in excess of 5 miles per hour or when other conditions including lesser wind velocities will allow spray drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) that are likely to drift. AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE.

Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations that dispense spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure.

WEEDS CONTROLLED: For specific rates of application and instructions, refer to the "ANNUAL WEEDS RATE TABLE" and the "PERENNIAL WEEDS RATE TABLE."

TANK MIXTURES: Tank mixes of this product with other herbicides, insecticides, or fungicides may result in reduced weed control or crop injury and are not recommended for over-the-top applications of this product. Some weeds with multiple germination times or suppressed (stunted) weeds may require sequential applications of this product for control. The second application should be made after some regrowth has occurred and at least 10 days after a previous application of this product. 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. For over-the-top uses on Roundup Ready® crop varieties, crop safety and weed control performance are not warranted by MANA when this product is used in conjunction with "brown bag" or "bin run" seed saved from previous year's production and replanted.

### Preplant or Preemergence

USE INSTRUCTIONS: This product may be applied by aerial or ground application equipment before planting or emergence of canola.

RESTRICTIONS, PRECAUTIONS: The maximum combined application rate from all preplant and preemergent applications must not exceed 2 quarts per acre per season. **NOTE:** In no-till and stale seedbed systems, always use a burndown treatment to control existing weeds before canola emerges. Apply a preplant burndown treatment of 16 to 32 fl. oz. per acre of this product.

**Over-the-Top (Postemergence)**

USE INSTRUCTIONS: This product may be applied by aerial or ground application equipment postemergence to Roundup Ready® canola from emergence through the 6-leaf stage of development. To maximize yield potential, make applications early to eliminate competing weeds.

RESTRICTIONS, PRECAUTIONS: Do not exceed 16 fl. oz. per acre of this product in any single over-the-top broadcast application. Do not apply more than two broadcast over-the-top applications from emergence to the 6-leaf stage of development. Sequential over-the-top applications must be at least 10 days apart.

**5.3 Corn with the Roundup Ready® Gene**

**MANA RECOMMENDS USE OF THIS PRODUCT ONLY ON CORN SEED WHICH CONTAINS THE ROUNDUP READY® GENE.**

**SEVERE INJURY OR DEATH WILL RESULT IF CORN VARIETIES WHICH DO NOT CONTAIN THE ROUNDUP READY® GENE ARE SPRAYED WITH THIS PRODUCT.**

**Avoid contact with foliage, green stems, fruit of crops, or any desirable plants which do not contain the Roundup Ready® gene, since severe injury or destruction will result.**

**Postemergence**

USE INSTRUCTIONS: This product may be applied postemergence to Roundup Ready® corn during the period beginning at corn emergence and continuing through the 12-leaf stage or until corn height reaches 30 inches, whichever comes first.

PRECAUTIONS, RESTRICTIONS: See the "ROUNDUP READY® CROPS" section of this label for general precautionary instructions for use in Roundup Ready® crops. Single in-crop applications of this product are not to exceed 1 quart per acre. Sequential in-crop applications of this product may not exceed 2 quarts per acre per growing season. Total Glyphogan Plus use must not exceed 8 quarts per acre per year. Refer to the table below for maximum seasonal rates.

Allow a minimum of 50 days between application of this product and harvest of corn forage and 7 days between application and harvest of corn grain. Allow a minimum of 14 days between in-crop applications of this product. The use of additives for in-crop applications to Roundup Ready® corn is prohibited. There are no rotational crop restrictions following applications of this product.

<b>Maximum Allowable Application Quantities Per Season</b>	
Combined total per year for all applications	8 quarts per acre
Preplant, preemergence applications (maximum)	5 quarts per acre
Total in-crop applications from emergence to 12-leaf stage or 30 inches	2 quarts per acre
Maximum preharvest application rate	1 quart per acre

WEEDS CONTROLLED: 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. Applications should be made to actively growing weeds before they reach the maximum size listed in the "ANNUAL WEEDS RATE TABLE" and "PERENNIAL WEEDS RATE TABLE" on this label. Glyphogan Plus applied at up to 1 quart per acre will burn down or suppress the growth of the following perennial weeds and reduce crop competition: nutsedge, rhizome johnsongrass, quackgrass, Canada thistle, wirestem muhly.

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS.

**Ground Applications:** Apply this product in 5 to 20 gallons of spray solution per acre using broadcast equipment. Refer to the "ANNUAL WEEDS RATE TABLE" and "PERENNIAL WEEDS RATE TABLE" section for specific application rates. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results with ground application equipment, use nozzles which provide a flat fan pattern. Check for even distribution of spray droplets.

**Aerial Applications:** Use the specified rates of this product in 3 to 15 gallons of spray solution per acre. Do not exceed a maximum rate of 1 quart of this product per acre when applied by air. Refer to the "ANNUAL WEEDS RATE TABLE" and "PERENNIAL WEEDS RATE TABLE" sections for specific application rates. AVOID DRIFT. DO NOT APPLY DURING INVERSION CONDITIONS, WHEN WINDS ARE GUSTY, OR UNDER ANY OTHER CONDITIONS WHICH FAVOR DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. MAINTAIN APPROPRIATE BUFFER ZONES TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION.

**Sequential Applications:** Some weeds with multiple germination times or suppressed (stunted) weeds may require sequential applications of this product for control. The second application should be made after some regrowth has occurred.

**TANK MIXTURES:** Glyphogan Plus with Micro-Tech®: Use these tank mixtures for postemergence and residual control of additional annual weeds in corn. These tank mixtures may be made during the period beginning at corn emergence and continuing until corn height reaches 5 inches.

Glyphogan Plus with atrazine, Banvel®, Clarity®, Permit®, or 2,4-D: Use these tank mixtures for postemergence control of additional weeds in corn. A Glyphogan Plus tank mixture with atrazine may be made during the period beginning at corn emergence and continuing until corn height reaches 12 inches. A Glyphogan Plus tank mixture with Banvel or Clarity at 0.125 to 0.25 lb. per acre may be made during the period beginning at corn emergence and continuing until corn height reaches 30 inches. A Glyphogan Plus tank mixture with Permit may be made during the period beginning at corn emergence and continuing until corn height reaches 30 inches. A Glyphogan Plus tank mixture with 2,4-D at 0.125 to 0.25 lb. per acre may be made during the period beginning at corn emergence and continuing until corn is at the 5-leaf stage or corn height reaches 8 inches, whichever comes first.

#### 5.4 Cotton with the Roundup Ready® Gene

See the "ROUNDUP READY® CROPS" section of this label for general precautionary instructions for use in Roundup Ready® Cotton. MANA RECOMMENDS USE OF THIS PRODUCT FOR POSTEMERGENCE APPLICATION ONLY ON COTTON VARIETIES DESIGNATED AS CONTAINING 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 FOLIAGE, GREEN STEMS, FRUIT OF CROPS, OR ANY DESIRABLE PLANTS AND TREES, OTHER THAN CROPS WITH THE ROUNDUP READY® GENE, SINCE SEVERE INJURY OR DESTRUCTION WILL RESULT.

**USE INSTRUCTIONS:** This product will control many troublesome weeds with over-the-top, post-directed, hooded spray, and preharvest applications in Roundup Ready® cotton.

**PRECAUTIONS, RESTRICTIONS:** For preharvest applications (applied for preharvest annual and perennial weed control as a broadcast treatment to Roundup Ready® cotton after 20% boll crack), allow a minimum of 7 days between final application and harvest of cotton. There are no rotational crop restrictions following application of this product. Sprayer preparation: Cotton is very sensitive to many herbicides at extremely low concentrations, and care should be taken to thoroughly clean all equipment prior to use. Follow the cleaning procedures specified on the label of the product(s) previously used.

**NOTE:** Glyphogan Plus will not enhance the performance of harvest aids when applied to Roundup Ready® cotton. Do not apply Glyphogan Plus to crops grown for seed.

**MAXIMUM ANNUAL RATES:** See table below for maximum amount of this product which can be applied to Roundup Ready® Cotton.

Maximum Allowable Application Quantities Per Season	
Combined total per year for all applications	8 quarts per acre
Preplant, preemergence applications	5 quarts per acre
Total in-crop applications from ground cracking to lay-by	4 quarts per acre
Maximum preharvest application rate	2 quarts per acre

**Ground Applications:** Use the specified rates of this product in 5 to 20 gallons of spray solution per acre as a broadcast spray. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results with ground application equipment, use nozzles which provide a flat fan pattern. Check for even distribution of spray droplets.

**Aerial Applications:** Use the specified rates of this product in 3 to 15 gallons of spray solution per acre. Do not exceed a rate of 1 quart of this product per acre. 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. DO NOT APPLY DURING LOW LEVEL INVERSION CONDITIONS, WHEN WINDS ARE GUSTY, OR UNDER ANY OTHER CONDITIONS WHICH FAVOR DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. MAINTAIN APPROPRIATE BUFFER ZONES TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION.

#### Over-the-Top Applications

This product may be applied by aerial or ground application equipment 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. Any single over-the-top broadcast application should not exceed 1 quart 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. Sequential over-the-top applications of this product must be at least 10 days apart, and cotton must have at least two nodes of incremental growth between applications.

**NOTE:** Always plant into a weed-free seedbed. In no-till and stale seedbed systems, always burn down existing weeds before cotton emerges. Apply a pre-plant burndown treatment of 16 to 48 fl. oz. per acre of this product.

#### **Post-Directed or Hooded Applications**

This product may be applied using precision post-directed or hooded sprayers to Roundup Ready® cotton through lay-by. Be especially careful to minimize contact of the spray with cotton leaves. At this stage, post-directed equipment should be used which directs the spray to the base 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. For best results, make applications while weeds are small (less than 3 inches). Minimize spray drift onto the leaves of the cotton plants by maintaining low spray pressure (less than 30 PSI). Applications that contact the cotton leaves may result in boll loss, delayed maturity, and/or yield loss. Any single post-directed application should not exceed 1 quart per acre of this product. No more than two applications should be made from the fifth leaf through lay-by. Sequential in-crop applications of this product must be at least 10 days apart, and cotton must have at least two nodes of incremental growth between applications.

#### **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. One quart 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 should be used per growing season.

**WEEDS CONTROLLED:** For specific rates of application and instructions for control of various annual and perennial weeds, refer to the "ANNUAL WEEDS RATE TABLE" and "PERENNIAL WEEDS RATE TABLE" of this label. Glyphogan Plus applied at 1 quart per acre will burn down or suppress the growth of the following perennial weeds and reduce crop competition: yellow and purple nutsedge, rhizome johnsongrass, common bermudagrass, silverleaf nightshade, trumpet creeper, and redvine. Fall preharvest applications may be required for control of these perennial weeds. Tank mixtures with other herbicides may result in reduced weed control or crop injury and are not recommended for over-the-top applications of this product. Some weeds with multiple germination times or suppressed (stunted) weeds may require sequential applications of this product for control.

### **5.5 Roundup Ready Flex Cotton**

**The instructions provided in this section are specific to, and may only be used with, varieties designated as Roundup Ready Flex cotton. Applications described in this section on other than Roundup Ready Flex cotton will cause crop injury and reduced yields. DO NOT combine the instructions in this section with those in the "Roundup Ready Cotton" section or with any other Roundup Ready cotton or Roundup Ready Flex cotton instructions in labeling for this or any other glyphosate-containing products. Drift of this product from an application 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.**

**TYPES OF APPLICATION:** 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.

<b>Maximum Application Rates</b>	
Combined total per year for all applications	8 quarts per acre
Total of all Preplant, At-planting, Preemergence applications	5 quarts per acre
Total of all In-crop applications from cracking to 60 percent open bolls	6 quarts per acre
Total of all In-crop applications between layby and 60 percent open bolls	2 quarts per acre
Total of all In-crop applications from 60 percent bolls open to 7 days prior to harvest	2 quarts per acre
Total of all In-crop applications from emergence through harvest	6 quarts per acre

**PRECAUTIONS, RESTRICTIONS:** See the "ROUNDUP READY CROPS" section of the Glyphogan Plus Herbicide label for precautionary instructions regarding the use of this product in Roundup Ready Crops. Also refer to the Glyphogan Plus Herbicide 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 Flex cotton.

**TANK MIXTURES:** This product may be tank mixed with 2,4-D 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 is labeled for application prior to planting or the emergence of cotton. Read and follow label directions of all products in the tank mixture.



clomazone, diuron, flumioxazin, fluometuron, fomesafen, metolachlor, s-metolachlor, pendimethalin, prometryn, pyriithiobac-sodium

Caparol, Cotton Pro, Command, Cotoran, MANA Diuron, Direx, Karmex, Parallel, Parallel PCS Dual MAGNUM, Dual II MAGNUM, Prowl, Prowl H2O, Reflex, Pyrimax, Staple, Valor, Zorial

**PRECAUTIONS, RESTRICTIONS:** Maximum quantity of this product that may be applied for all preplant, at-planting, and preemergence applications combined is 5 quarts per acre per season. Refer to individual tank mix 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 in the Glyphogan Plus Herbicide label. To maximize yield potential, eliminate competing weeds early. Many perennial weeds will be controlled or suppressed with one or more applications of this product. Use an initial application of 1 quart per acre to control or suppress 1- to 3-inch-tall annual grasses and broadleaf weeds. This product may be applied postemergence to Roundup Ready Flex cotton using ground application equipment at rates up to 1.5 quarts per acre per application. In addition to broadcast application, 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 is labeled for application postemergence (in-crop) to cotton. Read and follow label directions of all products in the tank mixture.

clethodim, fluazifop-P-butyl, fomesafen, metolachlor, s-metolachlor, pyriithiobac-sodium, quizalofop-p-ethyl, sethoxydim, trifloxysulfuron-sodium

Assure II, Parallel, Parallel PCS, Dual MAGNUM, Envoke, Fusilade, Poast Plus, Arrow, Select, Pyrimax, Staple

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

This product can 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 is labeled for application postemergence (in-crop) to cotton. Read and follow label directions of all products in the tank mixture.

carfentrazone-ethyl, diuron, flumioxazin, fluometuron, linuron, pendimethalin, prometryn, pyriithiobac-sodium, trifloxysulfuron-sodium

Aim, Cotton PRO, Caparol, Cotoran, MANA Diuron, Direx, Envoke, Layby-Pro, Prowl H2O, Pyrimax, Staple, Valor

Pyrimax or Staple may cause leaf yellowing and/or leaf crinkling when applied postemergence (in-crop) in Roundup Ready Flex cotton.

**PRECAUTIONS, RESTRICTIONS:** The maximum single, in-crop application rate of this product to Roundup Ready Flex cotton using ground application equipment is 1.5 quarts per acre. **In-crop application rates above 1 quart 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 1 quart of this product per acre when making application by air. Between layby and 60 percent open bolls, the maximum combined total application rate of this product is 2 quarts per acre. The maximum combined total of all applications of this product made from crop emergence to 60 percent open bolls must not exceed 6 quarts per acre. **DO NOT ADD ADDITIONAL SURFACTANT OR ADDITIVES CONTAINING SURFACTANT TO THIS PRODUCT FOR OVER-THE-TOP APPLICATION TO ROUNDUP READY FLEX COTTON.** Refer to individual tank mix 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 Flex cotton up to 2 quarts per acre for annual and perennial weed control prior to harvest after 60 percent boll crack.

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

**PRECAUTIONS, RESTRICTIONS:** Allow a minimum of 7 days between application and harvest of Roundup Ready Flex cotton. **DO NOT ADD ADDITIONAL SURFACTANT OR ADDITIVES CONTAINING SURFACTANT TO THIS PRODUCT FOR PREHARVEST APPLICATION TO ROUNDUP READY FLEX COTTON.**

**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.



## 5.6 Soybeans with the Roundup Ready® Gene

MANA RECOMMENDS USE OF THIS PRODUCT FOR POSTEMERGENCE APPLICATION ONLY ON SOYBEAN VARIETIES DESIGNATED AS CONTAINING THE ROUNDUP READY® GENE.

SEVERE INJURY OR DEATH OF SOYBEANS WILL RESULT IF ANY SOYBEAN VARIETIES NOT PROPERLY DESIGNATED AS HAVING THE ROUNDUP READY® GENE ARE SPRAYED WITH THIS PRODUCT. AVOID CONTACT OF HERBICIDE WITH FOLIAGE, GREEN STEMS, FRUIT OF CROPS, OR ANY DESIRABLE PLANTS AND TREES, OTHER THAN CROPS WITH THE ROUNDUP READY® GENE, SINCE SEVERE INJURY OR DESTRUCTION WILL RESULT.

See the "ROUNDUP READY® CROPS" section of this label for general precautionary instructions for use in Roundup Ready® soybeans.

USE INSTRUCTIONS: This product may be applied postemergence to Roundup Ready® soybeans from the cracking stage throughout flowering. When applied as directed, this product will control the labeled annual grasses and broadleaf weeds in Roundup Ready® soybeans. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more applications of this product.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 14 days between final application and harvest of soybeans. There are no rotational crop restrictions following application of this product. Refer to the table below for the maximum annual rates.

**NOTE:** The use of this product for in-crop applications over Roundup Ready® soybeans may not be used in California unless the applicator has at the time of application a California-approved supplemental label specifying the accepted directions for use.

MAXIMUM ANNUAL RATES: See table below for maximum amount of this product which can be applied to Roundup Ready® Soybeans.

Maximum Allowable Application Quantities Per Season	
Combined total per year for all applications	8 quarts per acre
Preplant, prior to crop emergence	5 quarts per acre
Total in-crop applications from cracking throughout flowering	3 quarts per acre
Maximum combined total applied in-crop and preharvest	3 quarts per acre
Maximum combined total applied during flowering	2 quarts per acre
Maximum single rate for in-crop applications	2 quarts per acre
Maximum preharvest application rate (applied after loss of green color in soybean pods until 14 days before harvest)	1 quart per acre

**Ground Applications:** Use the specified rates of this product in 5 to 20 gallons of spray solution per acre as a broadcast spray. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results with ground application equipment, use nozzles which provide a flat fan pattern. Check for even distribution of spray droplets.

**Aerial Applications:** Use the specified rates of this product in 3 to 15 gallons of spray solution per acre. Do not exceed a rate of 1 quart of this product per acre. Aerial applications are permitted only in the states of Alabama, Arkansas, Florida, Georgia, Kansas, Louisiana, Mississippi, Missouri (boot heel only), North Carolina, Oklahoma, South Carolina, Tennessee, and Texas. DO NOT APPLY DURING LOW-LEVEL INVERSION CONDITIONS, WHEN WINDS ARE GUSTY, OR UNDER ANY OTHER CONDITIONS WHICH FAVOR DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. MAINTAIN APPROPRIATE BUFFER ZONES TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION.

### ANNUAL WEED APPLICATION RATES

The following application rates will provide control of labeled grasses and broadleaf weeds in conventional and no-till soybean production systems. Refer to the "ANNUAL WEEDS RATE TABLE" on this label for application rates for specific annual weeds.

MANA will not warrant crop safety or weed control when Roundup Ready® soybeans are treated with herbicides not specified on this label. Because of the potential for: 1) crop injury, 2) poor weed control from antagonism, and/or 3) rotational crop restrictions, herbicides not specified on this label should not be used, whether applied preemergence or applied postemergence as a tank mixture with Glyphogan Plus.

This product may be used up to 64 fl. oz. per acre in any single application for control of annual weeds where heavy weed densities exist. The maximum combined total of this product which can be applied during flowering is 64 fl. oz. per acre.

**NOTE:** The following instructions 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 16 to 64 fl. oz. per acre of this product can be used to control existing weeds prior to crop emergence.

## MIDWEST/MID-ATLANTIC INSTRUCTIONS

**Narrow Row or Drilled Soybeans:** A single in-crop application of this product will provide effective control of labeled weeds. For best results, an initial application of 32 fl. oz. per acre on 4- to 8-inch weeds is recommended. Weeds will generally be 4 to 8 inches tall 3 to 5 weeks after planting. If the initial application is delayed and weeds are 8 to 18 inches tall, use 48 fl. oz. per acre for best results.

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 at 16 to 32 fl. oz. per acre may be necessary to control late flushes of weeds. The combined total application in-crop must not exceed 64 fl. oz. per acre.

**Wide Row Soybeans:** An in-crop application of this product will provide effective control of the initial stand of labeled weeds. For best results, apply an initial application of 32 fl. oz. per acre on 4- to 8- inch weeds. Weeds will generally be 4 to 8 inches tall 3 to 5 weeks after planting. If new flushes of weeds occur, they can be controlled by sequential applications of this product.

### Initial Treatment

<u>Weed Height (inches)</u>	<u>Rate (fl. oz./A)</u>
8	32
18	48

### Sequential Application (if needed, combined total application in-crop not to exceed 96 fl. oz./A)

<u>Weed Height (inches)</u>	<u>Rate (fl. oz./A)</u>
1-3	16
3-6	24
6-12	32

Giant ragweed: Apply 32 fl. oz./A when the weed is 8 to 12 inches tall to avoid the need for sequential application.

Groundcherry, ladythumb, Pennsylvania smartweed, morning glory: Apply 32 fl. oz./A to weeds 3 to 6 inches tall.

Some weeds such as black nightshade, wooly cupgrass, shattercane, wild proso millet, burcucumber, and giant ragweed with multiple germination times may require a sequential application of this product. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 16 fl. oz. of this product per acre for sequential applications. The combined total of all in-crop post-emergence treatments must not exceed 96 fl. oz. per acre.

## SOUTHEAST INSTRUCTIONS

**Narrow Row, Drilled, or Wide Row Soybeans:** An in-crop application of this product will provide effective control of the initial stand of labeled weeds. For best results, apply an initial application of 32 fl. oz. per acre on 3- to 6-inch weeds. Weeds will generally be 3 to 6 inches tall 2 to 3 weeks after planting.

<u>Weed Height (inches)</u>	<u>Rate (fl. oz./A)</u>
3-6	32
6-12	48

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 at 16 to 32 fl. oz. per acre may be necessary to control late flushes of weeds.

### Sequential Application (if needed, combined total application in-crop not to exceed 96 fl. oz./A)

<u>Weed Height (inches)</u>	<u>Rate (fl. oz./A)</u>
2-3	16
3-6	24
6-12	32

Florida pusley, hemp sesbania, and spurred anoda: Apply 32 fl. oz. per acre to weeds 2 to 4 inches for the initial application. Apply 32 fl. oz. per acre when these weeds are 3 to 6 inches tall if a sequential application is necessary.

Morning glory, black nightshade, groundcherry, and Pennsylvania smartweed: Apply 24 fl. oz. per acre on 1- to 3-inch weeds, 32 fl. oz. per acre on 3- to 6-inch weeds, or 48 fl. oz. per acre on 6- to 12-inch weeds for the initial application. Some weeds such as black nightshade, broadleaf signalgrass, Texas panicum, burcucumber, and sicklepod with multiple germination times may require a sequential application of this product. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 16 fl. oz. of this product per acre for sequential applications. The combined total of all in-crop postemergence treatments must not exceed 96 fl. oz. per acre.

## DELTA/MID-SOUTH INSTRUCTIONS

**Narrow Row, Drilled, or Wide Row Soybeans:** An in-crop application of this product will provide effective control of the initial stand of labeled weeds. A sequential application will be required to control new flushes of weeds. For best results, an initial application of 32 fl. oz. per acre on 2- to 4-inch weeds is recommended. Weeds will generally be 2 to 4 inches tall 2 to 3 weeks after planting.

### Initial Treatment

<u>Weed Height (inches)</u>	<u>Rate (fl. oz./A)</u>
2-4	32
5-12	48

### Sequential Application (if needed, combined total application in-crop not to exceed 96 fl. oz./A)

<u>Weed Height (inches)</u>	<u>Rate (fl. oz./A)</u>
2-3	16
3-6	24
6-12	32

Hemp sesbania and spurred anoda: Apply a sequential treatment of 32 fl. oz. per acre to weeds 3 to 6 inches tall if necessary.

Some weeds such as black nightshade, broadleaf signalgrass, Texas panicum, burcucumber, and sicklepod with multiple germination times may require a sequential application of this product. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 16 fl. oz. of this product per acre for sequential applications. The combined total of all in-crop postemergence treatments must not exceed 96 fl. oz. per acre.

## PERENNIAL WEEDS APPLICATION RATES

A 32 to 64 fl. oz. 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, marestail (horseweed), nutsedge, quackgrass, rhizome johnsongrass, redvine, trumpetcreeper, swamp smartweed, and wirestem muhly. For best results, allow perennial weed species to achieve at least 6 inches of growth before spraying with Glyphogan Plus. For additional information on perennial weeds, see the "PERENNIAL WEEDS RATE TABLE" on this label. For some perennial species, repeat applications may be required to eliminate crop competition throughout the growing season.

### 5.7 Sugar Beets with the Roundup Ready® Gene

MANA RECOMMENDS USE OF THIS PRODUCT FOR APPLICATION ONLY ON SUGAR BEET VARIETIES DESIGNATED AS CONTAINING THE ROUNDUP READY® GENE. SEVERE INJURY OR DEATH OF SOYBEANS WILL RESULT IF ANY SUGAR BEET VARIETIES NOT PROPERLY DESIGNATED AS HAVING THE ROUNDUP READY® GENE ARE SPRAYED WITH THIS PRODUCT. AVOID CONTACT OF HERBICIDE WITH FOLIAGE, GREEN STEMS, FRUIT OF CROPS, OR ANY DESIRABLE PLANTS AND TREES OTHER THAN CROPS WITH THE ROUNDUP READY® GENE, SINCE SEVERE INJURY OR DESTRUCTION WILL RESULT.

See the "ROUNDUP READY® CROPS" section of this label for general precautionary instructions for use in Roundup Ready® sugar beets.

TYPES OF APPLICATIONS: Preplant, at-planting, preemergence, postemergence (in-crop).

PRECAUTIONS, RESTRICTIONS: Refer to the table below for rate restrictions.

Allow a minimum of 30 days between last application and sugar beet harvest. For any crop NOT listed in the "CROPS" section of this label, applications must be at least 30 days prior to planting.

<b>Maximum Allowable Application Rates Per Season</b>	
Combined total per year for all applications	8 quarts per acre
Combined total per year for preplant, preemergence applications	5 quarts per acre
Combined total from crop emergence through harvest	4.5 quarts per acre
Combined total per year for emergence to 8-leaf stage	2.5 quarts per acre
Combined total per year for 8-leaf stage to canopy closure	2 quarts per acre
Maximum single application rate from emergence to 8-leaf stage	1.5 quarts per acre
Maximum single application rate from 8-leaf stage and canopy closure	1 quart per acre

**Preplant, Preemergence, At-Planting**

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

PRECAUTIONS, RESTRICTIONS: The maximum quantity of this product that may be applied for all preplant, at-planting, and preemergence applications combined is 5.0 quarts per acre per season.

**Postemergence (In-Crop)**

USE INSTRUCTIONS: To control annual grasses and broadleaf weeds, this product may be applied postemergent over the top to 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 TABLES" in this label for application rates 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.

**6.0 NON-CROP USES AROUND THE FARMSTEAD**

TYPES OF APPLICATIONS: General non-selective weed control, trim-and-edge, chemical mowing, cut stumps, habitat management, wildlife food plots, and rangelands (dormant).

**General Weed Control, 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 non-crop sites. Refer to these product labels for approved farmstead sites and application rates. For annual weeds, use 1 quart per acre of this product when weeds are less than 6 inches tall and 1.5 quarts per acre when weeds are greater than 6 inches tall. For perennial weeds, apply 2 to 5 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 "HAND-HELD OR HIGH-VOLUME EQUIPMENT" under the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for specified rates.

Banvel	2,4-D
Diuron	Simazine, Simazine 4L, Simazine 80W
Princep® Caliber 90	Surflan® 75 W
Surflan® AS/Oryzalin 4 AS	

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

**Chemical Mowing**

USE INSTRUCTIONS: This product will suppress perennial grasses listed in this section to serve as a substitute for mowing. Use 6 to 8 fl. oz. of this product per acre. Use 6 fl. oz. of this product per acre when treating Kentucky bluegrass. Use 8 fl. oz. of this product per acre when treating tall fescue, fine fescue, orchardgrass, or quackgrass covers. 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, RESTRICTIONS: Use only in areas where some temporary injury or discoloration of perennial grasses can be tolerated.

**Cut Stumps**

TYPES OF APPLICATIONS: Treating cut stumps in any non-crop 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	Saltcedar
Eucalyptus	Sweetgum
Madrone	Tan oak
Oak	Willow
Reed, giant	

**PRECAUTIONS, 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. Injury resulting from root grafting may occur in adjacent woody brush or trees.

**Habitat Restoration and Management**

**TYPES OF USES:** Habitat restoration and maintenance, wildlife food plots.

**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. The tank mixtures listed in this section of the label may be used for habitat restoration and maintenance.

**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.

**Rangelands (Dormant)**

**USE DIRECTIONS:** This product will control or suppress many weeds, including downy brome, cheatgrass, cereal rye, medusahead rye, and jointed goatgrass in dormant rangelands. Apply 8 to 16 fl. oz. of this product per acre in the early spring when the weeds have greened up, but desirable grasses such as crested and tall wheatgrass are still truly dormant. 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.

**PRECAUTIONS, RESTRICTIONS:** Do not use ammonium sulfate when spraying dormant rangeland grasses with this product. Do not make more than one application per year.

## 7.0 CHRISTMAS TREES

**TYPES OF APPLICATIONS:** Post-directed, spot treatment, site preparation

**Post-Directed, Spot Treatment**

**USE INSTRUCTIONS:** This product may be used as a post-directed spray and spot treatment around established Christmas trees.

**PRECAUTIONS, RESTRICTIONS:** Desirable plants may be protected from the spray solution by using shields or coverings made of cardboard or other impermeable material. **THIS PRODUCT IS NOT RECOMMENDED FOR USE AS AN OVER-THE-TOP BROADCAST SPRAY IN CHRISTMAS TREES.** Care must be exercised to avoid contact of spray, drift, or mist with foliage or green bark of established Christmas trees.

**Site Preparation**

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

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

### ANNUAL WEEDS RATE TABLE (Alphabetically by Species)

**WATER CARRIER VOLUMES OF 3 TO 10 GALLONS PER ACRE FOR GROUND APPLICATIONS AND 3 TO 5 GALLONS PER ACRE FOR AERIAL APPLICATIONS ARE RECOMMENDED.**

Apply to actively growing annual weeds.

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.

For those rates less than 48 fl. oz. per acre, this product may be used up to 48 fl. oz. per acre where heavy weed densities exist.

Refer to the map below for locations of the regions listed in the annual weed tables below.



**ANNUAL WEEDS RATE TABLE – NORTH (N) AND SOUTH (S) REGIONS**

The table below gives the maximum height or length in inches for various annual weeds which are controlled by Glyphogan Plus at different use rates (fl. oz. per acre).

WEED SPECIES	REGION	Maximum Weed Height/Length (in inches)					
		RATE OF GLYPHOGAN PLUS (fluid ounces per acre)					
		12	16	24	32	40	48
Anoda, spurred		–	1	2	3	5	8
Barley		–	18	18 +	–	–	–
Barnyardgrass	S	–	3	5	7	9	12
	N	–	–	6	12	–	–
Bassia, fivehook		–	–	–	6	–	–
Bittercress		–	12	20	–	–	–
Bluegrass, annual		–	10	–	–	–	–
Brome, downy		6	–	–	–	–	–
Brome, Japanese		–	6	–	24	–	–
Browntop panicum		–	6	8	12	–	24
Burcucumber		–	–	6	12	–	–
Buttercup		–	12	20	–	–	–
Carolina foxtail		–	20	–	–	–	–
Carolina geranium		–	–	–	4	–	9
Carpetweed		–	–	6	12	–	–

*(continued on next page)*

**Maximum Weed Height/Length (in inches)**

WEED SPECIES	REGION	RATE OF GLYPHOGAN PLUS (fluid ounces per acre)					
		12	16	24	32	40	48
Cheat		–	6	20	–	–	–
Chervil		–	20	–	–	–	–
Chickweed		–	12	18	–	–	–
Cocklebur		–	12	18	24	–	–
Copperleaf, hophornbeam		–	1	2	3	4	6
Copperleaf, Virginia		–	1	2	3	4	6
Corn		–	12	20	–	–	–
Corn speedwell		–	12	–	–	–	–
Crabgrass		–	12	18	–	–	–
Cutleaf evening primrose		–	–	–	3	–	6
Dwarf dandelion		–	20	–	–	–	–
Eastern manna grass		–	8	12	–	–	–
Eclipta		–	4	8	12	–	–
Fall panicum	S	–	4	6	8	12	24
	N	–	6	12	18	–	–
Falsedandelion		–	20	–	–	–	–
Falseflax, smallseed		–	12	–	–	–	–
Fiddleneck		–	–	–	6	–	12
Field pennycress		–	6	12	–	–	–
Filaree		–	–	–	–	–	12
Fleabane, annual		–	6	20	–	–	–
Fleabane, hairy ( <i>Conyza bonariensis</i> )		–	6	–	–	–	–
Fleabane, rough		–	3	6	12	–	–
Florida pusley		–	–	–	12	–	–
Foxtail	N	18	18 +	–	–	–	–
	S	–	8	12	20	–	–
Goatgrass, jointed		–	6	–	–	–	–
Goosegrass		–	3	5	8	–	18
Grain sorghum (milo)		–	6	12	20	–	–
Groundsel, common		–	6	–	–	–	–
Hemp sesbania		–	–	2	4	6	8
Henbit		–	–	–	6	–	20
Horseweed/Marestail ( <i>Conyza canadensis</i> )	N	–	6	12	18	–	–
	S	–	–	12	30	–	–
Itchgrass		–	6	12	18	–	–

*(continued on next page)*



Maximum Weed Height/Length (in inches)

WEED SPECIES	REGION	RATE OF GLYPHOGAN PLUS (fluid ounces per acre)					
		12	16	24	32	40	48
Jimsonweed		–	–	6	–	12	–
Johnsongrass, seedling	N	–	12	18	–	–	–
	S	–	–	18	–	–	–
Junglerice		–	3	5	7	9	12
Knotweed		–	3	8	12	–	20
Kochia **		–	–	3 to 6	12	–	–
Lambsquarters		–	6	8	12	–	20
Little barley		–	20	–	–	–	–
London rocket		–	6	–	–	–	–
Mayweed		–	–	2	6	12	18
Morning glory ( <i>Ipomoea</i> spp.)		–	–	2	4	–	6
Mustard, blue		6	–	–	–	–	–
Mustard, tansy		6	12	20	–	–	–
Mustard, tumble		6	–	–	–	–	–
Mustard, wild		6	12	18	–	–	–
Nightshade, black		–	6	12	–	–	–
Nightshade, hairy		–	6	12	–	–	–
Oats		–	–	6	20	–	–
Pigweed species		–	12	18	24	–	–
Plains/Tickseed coreopsis		–	5	12	18	–	–
Prickly lettuce		–	6	12	20	–	–
Purslane		–	–	–	6	–	12
Ragweed, common	N	–	6	12	18	–	–
	S	–	4	6	8	–	11
Ragweed, giant		–	–	4	6	–	11
Red rice		–	–	–	4	–	–
Russian thistle		–	–	–	6	–	–
Rye	N	–	18	18 +	–	–	–
	S	–	6	20	60	–	–
Ryegrass		–	–	–	6	–	7 +
Sandbur, field		12	–	–	–	–	–
Shattercane		–	12	18	–	–	–
Shepherdspurse		–	6	12	–	–	–
Sicklepod		–	–	2	4	–	8
Signalgrass, broadleaf		–	3	5	7	9	12
Smartweed, ladysthumb		–	4	6	8	–	12

(continued on next page)

		Maximum Weed Height/Length (in inches)					
WEED SPECIES	REGION	RATE OF GLYPHOGAN PLUS (fluid ounces per acre)					
		12	16	24	32	40	48
Smartweed, Pennsylvania		–	4	6	8	–	12
Sowthistle, annual		–	–	–	6	–	12
Spanishneedles		–	–	–	8	–	18
Speedwell, purslane		–	12	–	–	–	–
Sprangletop		–	6	12	20	–	–
Spurge, prostrate		–	6	12	20	–	–
Spurge, spotted		–	6	12	20	–	–
Spurry, umbrella		6	–	–	–	–	–
Stinkgrass		12	–	–	–	–	–
Sunflower		–	12	18	–	–	–
Teaweed/Prickly sida		–	1	2	3	4	6
Texas panicum		–	6	8	12	–	24
Velvetleaf	N	–	3	6	12	–	–
	S	–	2	3	4	5	8
Virginia pepperweed		–	18	–	–	–	–
Waterhemp		–	–	6	12	–	–
Wheat	N	–	18	18 +	–	–	–
	S	–	6	30	–	–	–
Wheat (overwintered)		–	6	18	–	–	–
Wild oats		–	12	–	–	–	–
Witchgrass		–	12	–	–	–	–
Woolly cupgrass		–	6	12	–	–	–
Yellow rocket		–	–	12	20	–	–

\*\* Do not treat kochia in the button stage.

### ANNUAL WEEDS RATE TABLE – WEST REGION

The table below gives the maximum height or length in inches for various annual weeds which are controlled by Glyphogan Plus at different use rates (fl. oz. per acre).

		Maximum Weed Height/Length (in inches)				
WEED SPECIES	REGION	RATE OF GLYPHOGAN PLUS (fluid ounces per acre)				
		12	16	24	32	48
Barley		12	–	–	–	–
Barnyardgrass		6	–	–	–	–
Bluegrass, annual		6	–	–	–	–
Bluegrass, bulbous		–	6	–	–	–
Brome, downy **		6	–	–	–	–

*(continued on next page)*

WEED SPECIES	REGION	Maximum Weed Height/Length (in inches)				
		RATE OF GLYPHOGAN PLUS (fluid ounces per acre)				
		12	16	24	32	48
Buttercup		–	12	–	–	–
Cheat		–	6	–	–	–
Chickweed		–	6	–	–	–
Cocklebur		–	12	–	–	–
Corn		–	6	–	–	–
Crabgrass		–	12	–	–	–
Dwarf dandelion		–	12	–	–	–
Fall panicum		–	12	–	–	–
Falseflax, smallseed		–	12	–	–	–
Field pennycress		–	6	–	–	–
Filaree		–	–	–	–	12
Fleabane, hairy ( <i>Conyza bonariensis</i> )		–	6	–	–	–
Florida pusley		–	–	–	12	–
Foxtail				8 fl. oz. for up to 12 inches		
Goatgrass, jointed		–	6	–	–	–
Groundsel, common		–	6	–	–	–
Henbit		–	6	–	–	–
Horseweed/Marestail ( <i>Conyza canadensis</i> )		–	6	–	–	–
Johnsongrass, seedling		–	12	–	–	–
Lambsquarters		–	6	–	–	–
London rocket		–	6	–	–	–
Morning glory ( <i>Ipomoea</i> spp.)		–	2	–	–	–
Mustard, blue		6	–	–	–	–
Mustard, tansy		6	–	–	–	–
Mustard, tumble		6	–	–	–	–
Mustard, wild		6	–	–	–	–
Pigweed species		–	12	–	–	–
Rye		12	–	–	–	–
Ryegrass, Italian		–	6	–	–	–
Sandbur, field		12	–	–	–	–
Shattercane		12	–	–	–	–
Shepherdspurse		–	6	–	–	–
Sowthistle, annual		–	6	–	–	–
Spurge, annual		–	6	–	–	–

(continued on next page)

WEED SPECIES	REGION	Maximum Weed Height/Length (in inches)				
		RATE OF GLYPHOGAN PLUS (fluid ounces per acre)				
		12	16	24	32	48
Stinkgrass		12	–	–	–	–
Texas panicum		–	12	–	–	–
Wheat		18	–	–	–	–
Wild oats		–	12	–	–	–
Witchgrass		–	12	–	–	–

\*\* For control of downy brome in no-till systems, use 16 fl. oz. per acre.

#### Annual Weeds – Rates for 10 to 40 Gallons per Acre

Apply 1 to 1.5 quarts of this product per acre. Use 1 quart per acre if weeds are less than 6 inches tall and 1.5 quarts per acre if weeds are over 6 inches tall. These rates will provide control of weeds listed in the annual weed control tables when water carrier volumes are 10 to 40 gallons per acre for ground applications.

#### Annual Weeds – Tank Mixtures with 2,4-D or Dicamba

12 to 16 fl. oz. of this product plus 0.25 pound a.i. of dicamba or 0.5 pound a.i. of 2,4-D per acre will control the following weeds with the maximum height or length indicated: 6 inches – prickly lettuce, marestail/horseweed, morning glory, kochia (dicamba only); 12 inches – cocklebur, lambsquarters, pigweed, Russian thistle.

16 fl. oz. of this product plus 0.5 pound a.i. 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.

12 fl. oz. of this product plus 0.25 pound a.i. of dicamba or 0.5 pound a.i. 2,4-D per acre will control foxtail up to 18 inches.

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 is applied within 45 days of planting.

DO NOT APPLY DICAMBA TANK MIXTURES BY AIR IN CALIFORNIA.

### 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. Do not treat when weeds are under drought stress, as good soil moisture is necessary for active growth.

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.

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.

Desired Volume	Amount of Glyphogan Plus to Prepare Different Percent Spray Concentrations					
	1/2%	1%	1 1/2%	2%	5%	10%
1 Gallon	2/3 oz	1 1/3 oz	2 oz	2 2/3 oz	6 1/2 oz	13 oz
25 Gallons	1 pt	1 qt	1 1/2 qt	2 qt	5 qt	10 qt
100 Gallons	2 qt	1 gal	1 1/2 gal	2 gal	5 gal	10 gal

2 tablespoons = 1 fluid ounce

<b>Weed Species</b>	<b>Rate (Qt./A)</b>	<b>Water Volume (GPA)</b>	<b>Hand-Held % Solution</b>
<b>Alfalfa</b> 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.	<b>1</b>	<b>3 – 10</b>	<b>2%</b>
<b>Alligatorweed</b> Partial control. Apply when most of the plants are in bloom. Repeat applications will be required to maintain control.	<b>4</b>	<b>3 – 20</b>	<b>1.5%</b>
<b>Anise (fennel)</b> For hand-held sprayers, apply as a spray-to-wet treatment. Optimum results are obtained when plants are treated at the bud to full-bloom stage of growth.	—	—	<b>1 – 2%</b>
<b>Bahiagrass</b> Apply when most plants have reached the early head stage.	<b>3 – 5</b>	<b>3 – 20</b>	<b>2%</b>
<b>Bentgrass</b> 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 is recommended for best results.	<b>1.5</b>	<b>10 – 20</b>	<b>2%</b>
<b>Bermudagrass</b> For control, apply 5 quarts of this product per acre. For partial control, apply 3 quarts per acre. Treat when bermudagrass is actively growing and seedheads are present. Retreatment may be necessary to maintain control.	<b>3 – 5</b>	<b>3 – 20</b>	<b>2%</b>
<b>Bermudagrass, water (knotgrass)</b> Apply 1.5 quarts of this product in 5 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.  Fall applications only: Apply 1 quart 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.	<b>1 – 1.5</b>	<b>5 – 10</b>	<b>2%</b>
<b>Bindweed, field</b> Do not treat when weeds are under drought stress, as good soil moisture is necessary for active growth.  For control, apply 4 to 5 quarts of this product per acre west of the Mississippi River and 3 to 4 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 2 quarts of this product plus 0.5 pound a.i. of dicamba in 10 to 20 gallons of water per acre. Do not apply by air.  For suppression on irrigated agricultural land, apply 1 to 2 quarts of this product plus 1 pound a.i. 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 16 fl. oz. of this product plus 0.5 pound a.i. 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 1 to 5 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 1 quart 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.	<b>0.5 – 5</b>	<b>3 – 20</b>	<b>2%</b>
<b>Bluegrass, Kentucky</b> Apply 2 quarts 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 1 to 1.5 quarts 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.	<b>1 – 2</b>	<b>3 – 40</b>	<b>2%</b>
<b>Blueweed, Texas</b> Apply 4 to 5 quarts of this product per acre west of the Mississippi River and 3 to 4 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.	<b>3 – 5</b>	<b>3 – 40</b>	<b>2%</b>

*(continued on next page)*

<b>Weed Species</b>	<b>Rate (Qt./A)</b>	<b>Water Volume (GPA)</b>	<b>Hand-Held % Solution</b>
<b>Brackenfern</b> Apply to fully expanded fronds that are at least 18 inches long.	<b>3 – 4</b>	<b>3 – 40</b>	<b>1 – 1.5%</b>
<b>Bromegrass, smooth</b> Apply 2 quarts 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 1 to 1.5 quarts 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.	<b>1 – 2</b>	<b>3 – 40</b>	<b>2%</b>
<b>Bursage, woolly-leaf</b> For control, apply 2 quarts of this product plus 0.5 pound a.i. of dicamba per acre. For partial control, apply 1 quart of this product plus 0.5 pound a.i. 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.	<b>—</b>	<b>3 – 20</b>	<b>2%</b>
<b>Canarygrass, reed</b> For best results, apply when most plants have reached the boot-to-head stage of growth.	<b>2 – 3</b>	<b>3 – 40</b>	<b>2%</b>
<b>Cattail</b> Apply when most plants have reached the early head stage.	<b>3 – 5</b>	<b>3 – 40</b>	<b>2%</b>
<b>Clover, red or white</b> Apply when most plants have reached the early bud stage.	<b>3 – 5</b>	<b>3 – 20</b>	<b>2%</b>
<b>Cogongrass</b> 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 maintain control.	<b>3 – 5</b>	<b>10 – 40</b>	<b>2%</b>
<b>Dallisgrass</b> Apply when most plants have reached the early head stage.	<b>3 – 5</b>	<b>3 – 20</b>	<b>2%</b>
<b>Dandelion</b> Apply when most plants have reached the early bud stage of growth. Also for control, apply 16 fl. oz. of this product plus 0.5 pound a.i. of 2,4-D in 3 to 10 gallons of water per acre.	<b>3 – 5</b>	<b>3 – 40</b>	<b>2%</b>
<b>Dock, curly</b> Apply when most plants have reached the early bud stage of growth. Also for control, apply 16 fl. oz. of this product plus 0.5 pound a.i. of 2,4-D in 3 to 10 gallons of water per acre.	<b>3 – 5</b>	<b>3 – 40</b>	<b>2%</b>
<b>Dogbane, hemp</b> 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 16 fl. oz. of this product plus 0.5 pound a.i. 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.	<b>4</b>	<b>3 – 40</b>	<b>2%</b>
<b>Fescue (except tall)</b> Apply when most plants have reached the early head stage.	<b>3 – 5</b>	<b>3 – 20</b>	<b>2%</b>
<b>Fescue, tall</b> Apply 3 quarts of this product per acre when most plants have reached boot-to-early seedhead stage of development. Fall applications only: Apply 1 quart 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 1 pint per acre of this product will improve long-term control and control seedlings germinating after fall treatments or the following spring.	<b>1 – 3</b>	<b>3 – 40</b>	<b>2%</b>
<b>Guineagrass</b> Apply when most plants have reached at least the 7-leaf stage of growth. Ensure thorough coverage when using hand-held equipment.	<b>3</b>	<b>3 – 40</b>	<b>1%</b>

(continued on next page)

<b>Weed Species</b>	<b>Rate (Qt./A)</b>	<b>Water Volume (GPA)</b>	<b>Hand-Held % Solution</b>
<b>Horsenettle</b> Apply when most plants have reached the early bud stage.	<b>3 – 5</b>	<b>3 – 20</b>	<b>2%</b>
<b>Horseradish</b> Apply when most plants have reached the late bud to flower stage of growth. For best results, apply in late summer or fall.	<b>4</b>	<b>3 – 40</b>	<b>2%</b>
<b>Iceplant</b> Iceplant should be at or beyond the early bud stage of growth. Thorough coverage is necessary for best control.	<b>—</b>	<b>—</b>	<b>1.5 – 2%</b>
<b>Jerusalem artichoke</b> Apply when most plants are in the early bud stage.	<b>3 – 5</b>	<b>3 – 20</b>	<b>2%</b>
<b>Johnsongrass</b> In annual cropping systems, apply 1 to 2 quarts of this product per acre. Apply 1 quart in 3 to 10 gallons of water per acre. Use 2 quarts of this product when applying 10 to 40 gallons of water per acre. In non-crop or areas where annual tillage is not practiced (no-till), apply 2 to 3 quarts 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 1 quart of this product per acre. For burndown of Johnsongrass, apply 1 pint 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 1 percent solution of this product when Johnsongrass is 12 to 18 inches in height. Coverage should be uniform and complete.	<b>0.5 – 3</b>	<b>3 – 40</b>	<b>1%</b>
<b>Kikuyugrass</b> 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.	<b>2 – 3</b>	<b>3 – 40</b>	<b>2%</b>
<b>Knapweed</b> Apply when most plants have reached the late bud to flower stage of growth. For best results, apply in late summer or fall.	<b>4</b>	<b>3 – 40</b>	<b>2%</b>
<b>Lantana</b> Apply at or beyond the bloom stage of growth. Use the higher application rate for plants that have reached the woody stage of growth.	<b>—</b>	<b>—</b>	<b>1 – 1.25%</b>
<b>Lespedeza</b> Apply when most plants have reached the early bud stage.	<b>3 – 5</b>	<b>3 – 20</b>	<b>2%</b>
<b>Milkweed, common</b> Apply when most plants have reached the late bud to flower stage of growth.	<b>3</b>	<b>3 – 40</b>	<b>2%</b>
<b>Muhly, wirestem</b> Use 1 quart of this product in 3 to 10 gallons of water per acre. Use 2 quarts of this product when applying 10 to 40 gallons of water per acre or in pasture, sod, or non-crop 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.	<b>1 – 2</b>	<b>3 – 40</b>	<b>2%</b>
<b>Mullein, common</b> Apply when most plants are in the early bud stage.	<b>3 – 5</b>	<b>3 – 20</b>	<b>2%</b>
<b>Napiergrass</b> Apply when most plants are in the early head stage.	<b>3 – 5</b>	<b>3 – 20</b>	<b>2%</b>
<b>Nightshade, silverleaf</b> Applications should be made when at least 60 percent of the plants have berries. Fall treatments must be applied before a killing frost.	<b>2</b>	<b>3 – 10</b>	<b>2%</b>

(continued on next page)



<b>Weed Species</b>	<b>Rate (Qt./A)</b>	<b>Water Volume (GPA)</b>	<b>Hand-Held % Solution</b>
<b>Nutsedge, purple or yellow</b>	<b>0.5 – 3</b>	<b>3 – 40</b>	<b>1 – 2%</b>
Apply 3 quarts of this product per acre or apply a 1 to 2 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: 1 to 2 quarts 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 1 pint to 2 quarts 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.			
<b>Orchardgrass</b>	<b>1 – 2</b>	<b>3 – 40</b>	<b>2%</b>
Apply 2 quarts 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 1 to 1.5 quarts 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 1 to 1.5 quarts 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.			
<b>Pampasgrass</b>	—	—	<b>1.5 – 2%</b>
Pampasgrass should be at or beyond the boot stage of growth. Thorough coverage is necessary for best control.			
<b>Paragrass</b>	<b>3 – 5</b>	<b>3 – 20</b>	<b>2%</b>
Apply when most plants are in the early head stage.			
<b>Phragmites</b>	<b>3 – 5</b>	<b>10 – 40</b>	<b>1 – 2%</b>
For partial control and for 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 maintain control. Visual control symptoms will be slow to develop.			
<b>Poison hemlock</b>	—	—	<b>1 – 2%</b>
For hand-held, 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.			
<b>Quackgrass</b>	<b>1 – 3</b>	<b>3 – 40</b>	<b>2%</b>
In annual cropping systems or in pastures and sods followed by deep tillage: Apply 1 quart of this product in 3 to 10 gallons of water per acre. For 10 to 40 gallons of water per acre, apply 2 quarts of this product. Do not tank mix with residual herbicides when using the 1-quart 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 non-crop areas where deep tillage does not follow application: Apply 2 to 3 quarts of this product in 10 to 40 gallons of water per acre when the quackgrass is greater than 8 inches tall.			
<b>Redvine</b>	<b>0.75 – 2</b>	<b>5 – 10</b>	<b>2%</b>
For suppression, apply 24 fl. oz. of this product per acre at each of two applications 7 to 14 days apart or a single application of 2 quarts per acre. Apply specified 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.			
<b>Reed, giant</b>	—	—	<b>2%</b>
Best results are obtained when applications are made in late summer to fall.			

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<b>Weed Species</b>	<b>Rate (Qt./A)</b>	<b>Water Volume (GPA)</b>	<b>Hand-Held % Solution</b>
<b>Ryegrass, perennial</b> In annual cropping systems, apply 1 to 2 quarts of this product per acre. Apply 1 quart of this product in 3 to 10 gallons of water per acre. Use 2 quarts of this product when applying 10 to 40 gallons of water per acre. In non-crop or areas where annual tillage is not practiced (no-till), apply 2 to 3 quarts 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 1 quart of this product per acre.	<b>1 – 3</b>	<b>3 – 40</b>	<b>1%</b>
<b>Smartweed, swamp</b> Apply when most plants have reached the early bud stage of growth. Also for control, apply 16 fl. oz. of this product plus 0.5 pound a.i. of 2,4-D in 3 to 10 gallons of water per acre in the late summer or fall.	<b>3 – 5</b>	<b>3 – 40</b>	<b>2%</b>
<b>Spurge, leafy</b> For suppression, apply 16 fl. oz. of this product plus 0.5 pound a.i. 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.	—	<b>3 – 10</b>	<b>2%</b>
<b>Starthistle, yellow</b> Best results are obtained when applications are made during the rosette, bolting, and early flower stages.	<b>2</b>	<b>10 – 40</b>	<b>2%</b>
<b>Sweet potato, wild</b> For partial control, apply to plants that are at or beyond the bloom stage of growth. Repeat applications may be required.	—	—	<b>2%</b>
<b>Thistle, artichoke</b> For partial control, apply to plants that are at or beyond the bloom stage of growth. Repeat applications may be required.	—	—	<b>2%</b>
<b>Thistle, Canada</b> 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, apply 1 quart of this product or 1 pint of this product plus 0.5 pound a.i. 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.	<b>2 – 3</b>	<b>3 – 40</b>	<b>2%</b>
<b>Timothy</b> For best results, apply when most plants have reached the boot-to-head stage of growth.	<b>2 – 3</b>	<b>3 – 40</b>	<b>2%</b>
<b>Torpedograss</b> For partial control, apply when most plants are at or beyond the seedhead stage of growth. Repeat applications will be required to maintain control. Fall treatments must be applied before frost.	<b>4 – 5</b>	<b>3 – 40</b>	<b>2%</b>
<b>Trumpetcreeper</b> 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.	<b>2</b>	<b>5 – 10</b>	<b>2%</b>
<b>Vaseygrass</b> Apply when most plants are in the early head stage.	<b>3 – 5</b>	<b>3 – 20</b>	<b>2%</b>
<b>Velvetgrass</b> Apply when most plants are in the early head stage.	<b>3 – 5</b>	<b>3 – 20</b>	<b>2%</b>
<b>Wheatgrass, western</b> For best results, apply when most plants have reached the boot-to-head stage of growth.	<b>2 – 3</b>	<b>3 – 40</b>	<b>2%</b>

## WOODY BRUSH AND TREES RATE TABLE

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.

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.

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.

Weed Species	Rate (Qt./A)	Hand-Held % Solution	
Alder	3 – 4	1 – 1.5%	
Ash *	2 – 5	1 – 2%	
Aspen, quaking	2 – 3	1 – 1.5%	
Bearmat (Bearclover) *	2 – 5	1 – 2%	
Beech *	2 – 5	1 – 2%	
Birch	2	1%	
Blackberry	3 – 4	1 – 1.5%	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 0.75 percent solution of this product. For control of blackberries after leaf drop and until killing frost or as long as stems are green, apply 3 to 4 quarts of this product in 10 to 40 gallons of water per acre.
Blackgum	2 – 5	1 – 2%	
Bracken	2 – 5	1 – 2%	
Broom: French, Scotch	—	1.5 – 2%	
Buckwheat, California *	—	1 – 2%	Thorough coverage of foliage is necessary for best results.
Cascara *	2 – 5	1 – 2%	
Catsclaw *	—	1 – 1.5%	
Ceanothus *	2 – 5	1 – 2%	
Chamise	—	1%	Thorough coverage of foliage is necessary for best results.
Cherry: bitter, black, pin	2 – 3	1 – 1.5%	
Coyote brush	—	1.5 – 2%	Apply when at least 50 percent of the new leaves are fully developed.
Dogwood *	2 – 5	1 – 2%	
Elderberry	2	1%	
Elm *	2 – 5	1 – 2%	

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<b>Weed Species</b>	<b>Rate (Qt./A)</b>	<b>Hand-Held % Solution</b>	
Eucalyptus	—	2%	For control of eucalyptus resprouts, apply when resprouts are 6 to 12 feet tall. Ensure complete coverage. Avoid application to drought-stressed plants.
Florida holly (Brazilian Peppertree)*	2 – 5	1 – 2%	
Gorse *	2 – 5	1 – 2%	
Hasardia *	—	1 – 2%	Thorough coverage of foliage is necessary for best results.
Hawthorn	2 – 3	1 – 1.5%	
Hazel	2	1%	
Hickory *	2 – 5	1 – 2%	
Honeysuckle	3 – 4	1 – 1.5%	
Hornbeam, American *	2 – 5	1 – 2%	
Kudzu	4	2%	Repeat applications may be required to maintain control.
Locust, black *	2 – 4	1 – 2%	
Madrone resprouts *	—	2%	Apply to resprouts that are 3 to 6 feet tall. Best results are obtained with spring/early summer treatments.
Manzanita *	2 – 5	1 – 2%	
Maple, red	2 – 4	1 – 1.5%	Apply a 1 to 1.5 percent solution when at least 50 percent of the new leaves are fully developed. For partial control, apply 2 to 4 quarts of this product per acre.
Maple, sugar	—	1 – 1.5%	Apply when at least 50 percent of the new leaves are fully developed.
Monkey flower *	—	1 – 2%	Thorough coverage of foliage is necessary for best results.
Oak: black, white *	2 – 4	1 – 2%	
Oak, post	3 – 4	1 – 1.5%	
Oak: northern, pin	—	1 – 1.5%	Apply when at least 50 percent of the new pin leaves are fully developed.
Oak: southern, red	2 – 3	1 – 1.5%	
Persimmon *	2 – 5	1 – 2%	
Pine	2 – 5	1 – 2%	
Poison ivy/Poison oak	4 – 5	2%	Repeat applications may be required to maintain control. Fall treatments must be applied before leaves lose green color.
Poplar, yellow *	2 – 5	1 – 2%	
Redbud, eastern	2 – 5	1 – 2%	
Rose, multiflora	2	1%	Treatments should be made prior to leaf deterioration by leaf-eating insects.
Russian olive *	2 – 5	1 – 2%	
Sage, black	—	1%	Thorough coverage of foliage is necessary for best results.
Sage, white *	2 – 5	1 – 2%	
Sagebrush, California	—	1%	Thorough coverage of foliage is necessary for best results.
Salmonberry	2	1%	

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<b>Weed Species</b>	<b>Rate (Qt./A)</b>	<b>Hand-Held % Solution</b>	
Saltcedar	2 – 5	1 – 2%	
Sassafras *	2 – 5	1 – 2%	
Sourwood *	2 – 5	1 – 2%	
Sumac: poison, smooth, winged *	2 – 4	1 – 2%	
Sweetgum	2 – 3	1 – 1.5%	
Swordfern *	2 – 5	1 – 2%	
Tallowtree, Chinese	—	1%	Thorough coverage of foliage is necessary for best results.
Tan oak resprouts *	—	2%	Apply to resprouts that are less than 3 to 6 feet tall. Best results are obtained with fall applications.
Thimbleberry	2	1%	
Tobacco, tree *	—	1 – 2%	
Trumpetcreeper	2 – 3	1 – 1.5%	
Vine maple *	2 – 5	1 – 2%	
Virginia creeper	2 – 5	1 – 2%	
Waxmyrtle, southern *	2 – 5	1 – 2%	
Willow	3	1%	

\* Partial Control

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## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store above 10°F (-12°C) to keep product from crystallizing. Crystals will settle to the bottom. If allowed to crystallize, place in a warm room at 68°F (20°C) for several days to redissolve and roll or shake container or recirculate in mini-bulk or bulk container to mix well before using.

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 should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state, or local procedures.

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

### CONTAINER DISPOSAL:

**Nonrefillable Container (five gallons or less):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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.

**Nonrefillable Container (greater than five gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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.

**Refillable Container:** Refillable container. Refill this container with glyphosate 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 mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

## LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following **CONDITIONS, DISCLAIMER OF WARRANTIES** and **LIMITATIONS OF LIABILITY**.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Makhteshim Agan of North America, Inc. All such risks shall be assumed by the user or buyer.

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