

72167-23

02/04/2003

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U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (H7505C)  
401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg.  
Number:

72167-23

Date of Issuance:

FEB - 4 2003

## NOTICE OF PESTICIDE:

☒ Registration  
☐ Reregistration

(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

Nations Ag II  
Glyphosate 4

Name and Address of Registrant (include ZIP Code):

Nations Ag II LLC  
4680 Monticello Avenue #18i-174  
Williamsburg, VA 23188

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

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

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

This product is conditionally registered in accordance with section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) provided that you:

1. Submit/cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment.
  - a. Add the phrase "EPA Registration No. 72167-23".
  - b. At the bottom of your first aid section add the sentence "Have the product container or label with you when calling a person control center or doctor or going for treatment."
  - c. Revise the section sentence of your Environmental Hazards section to read "Do not contaminate water when **cleaning of equipment** or disposing of equipment washwaters."
  - d. Within the PPE for early re-entry in the Agricultural Use Requirements box, revise your current glove statement to read "chemical-resistant gloves made of any waterproof material."

Signature of Approving Official:

Date:

2-4-03

e. The statement "Review the tank-mix herbicides individual product labels for specific crops, application rates, geographical restrictions, and precautionary statements", should appear on your label anywhere it lists generic names such as atrazine or linuron as tank-mix partners.

3. Submit three (3) copies of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec.6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records

GLYPHOSATE 4

# Nations Ag II

# GLYPHOSATE 4

**ACTIVE INGREDIENT:**

\*Glyphosate, N-(phosphonomethyl) glycine, in the form of its isopropylamine salt. .... 41%  
 OTHER INGREDIENTS: ..... 59%  
 TOTAL ..... 100%

\*This product contains 480 grams per liter or four pounds per U.S. gallon of glyphosate—the active ingredient—in the form of its isopropylamine salt. This equals 356 grams per liter, or three pounds per U.S. gallon of the acid, glyphosate.

EPA Reg. No. 72167-

EPA Est. No. \_\_\_\_\_

## KEEP OUT OF REACH OF CHILDREN WARNING

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING! AVISO! CAUSES SUBSTANTIAL BUT TEMPORARY EYE INJURY. HARMFUL IF SWALLOWED OR INHALED. Do not get in eyes or on clothing. Avoid breathing vapor or spray mist.

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

**Net Contents: ... Gallons (\_\_\_ Liters)**

ACCEPTED  
with COMMENTS  
In EPA Letter Dated:

FEB -9 2003

Under the FIFRA Act, this product, as amended, for use as a herbicide, is registered under EPA Reg. No. 72167-23

**FIRST AID**

**IF IN EYES:** Immediately hold eyelids open and flush with plenty of water for at least 15 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Get medical attention.

**IF INHALED:** Remove individual to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

**IF SWALLOWED:** This product will cause gastrointestinal tract irritation. Immediately dilute by swallowing water or milk. Get medical attention.  
**NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.**

In case of an emergency involving this product, call CHEMTREC at 800-424-9300.

Nations Ag II, LLC  
 2901-12 Rivendell  
 Knoxville, TN 37922

GLYPHOSATE 4

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## PRECAUTIONARY STATEMENTS

### Personal Protective Equipment (PPE)

Agricultural and other handlers must wear long-sleeved shirt and long pants, socks plus shoes, and protective eyewear. Discard clothing and other substituted materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

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

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

### User Safety Recommendations:

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing 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 disposing of equipment washwaters.

### Physical or Chemical Hazards

When using spray solutions of this product, mix, store, and apply only in stainless steel, fiberglass, aluminum, plastic, or plastic-lined steel containers.

DO NOT USE GALVANIZED STEEL OR UNLINED STEEL (EXCEPT FOR STAINLESS STEEL) CONTAINERS OR SPRAY TANKS WHEN SPRAYING, MIXING, STORING, OR APPLYING THIS PRODUCT. Glyphosate 4, or spray solutions with this product, react with these containers to produce hydrogen gas, a possibly very highly-combustible gas mixture that could explode or flash, thereby causing serious personal injury if ignited by spark, welder's torch, lighted cigarette, open flame, 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. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

### Agricultural Use Requirements

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

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, waterproof gloves, shoes plus socks, and protective eyewear.

### 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 to prevent transfer of this product onto desirable vegetation.

### STORAGE AND DISPOSAL

**Storage:** Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Keep container closed to prevent spills and contamination. Store product in original container only.

**Product Disposal:** Wastes that result from using Glyphosate 4 that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal, or in accordance with all applicable Federal, state, or local procedures.

Empty containers retain vapor and product residues. Follow all labeled safeguards until container is cleaned, reconditioned, or destroyed.

#### Container Disposal:

**For Refillable Portable Containers:** Do not reuse container. Triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**For Bulk Containers:** Triple rinse emptied bulk container. Then offer for recycling or reconditioning, or dispose of in a manner approved by state and local authorities.

**For Plastic 1-Way Containers & Bottles:** Do not reuse container. Triple rinse container, then puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**For Drums:** Do not reuse container. Triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## GENERAL INFORMATION

DO NOT ALLOW CONTACT WITH EXPOSED NON-WOODY ROOTS, FRUIT, FOLIAGE OR GREEN STEMS OF DESIRABLE TREES AND PLANTS AS SEVERE PLANT INJURY OR DESTRUCTION COULD RESULT.

Use only in accordance with instructions on this label. Read the entire label before use, including the **LIMITED WARRANTY, TERMS OF SALE, AND LIMITATION OF LIABILITY** section. If the terms are not acceptable, immediately return unopened product.

GLYPHOSATE 4 IS AN END-USE PRODUCT AND IS NOT REGISTERED FOR REFORMULATION.

DO NOT APPLY GLYPHOSATE 4 BY AIR, EXCEPT UNDER SPECIFIC CONDITIONS LISTED WITHIN THIS LABEL.

Glyphosate 4 is a water soluble liquid that readily mixes with water for application as a foliar spray to control or destroy most herbaceous plants. This product can be applied by using most standard industrial or field-type sprayers after it is diluted and thoroughly mixed with water.

Glyphosate 4 works by moving through the plant from where it contacts the foliage to and into the root system. Within 2 to 4 days, visible effects on most annual weeds are apparent; however, effects may not be visible on most perennial weeds for 7 days or more. Effectiveness and visual effects of this product may be slower if very cool or cloudy weather follows treatment. A gradual wilting and yellowing of the plant will be visible, which then advances to total browning of all above-ground growth and deterioration of underground plant parts.

Unless stated otherwise within this label, application should be delayed until vegetation has emerged and has reached the specific stages described for control of vegetation under the **WEEDS CONTROLLED** section of this label. Unemerged plants that arise from unattached underground rhizomes or root stocks of perennials are not affected by Glyphosate 4, and will keep growing. Because of this, treatment should be made at late growth stages (approaching maturity) for best control of the majority of perennial weeds.

Always apply the higher rate of this product per acre within recommended ranges when weed growth is heavy or dense, or, when weeds are growing in a noncultivated, nondisturbed area.

Reduced weed control may result if weeds are treated when drought stress, insect damage, or disease is present. Additionally, if weeds are heavily covered with dust, reduced weed control will result.

Effectiveness may be reduced if applications are made to annual or perennial weeds that have been grazed, mowed or otherwise cut, unless they have been permitted to regrow to their recommended stages for treatment.

If rainfall or irrigation occurs within 6 hours of application, reduced effectiveness may result. Heavy irrigation or rainfall within 2 hours of application may wash off the chemical from foliage. In this case, a repeat treatment may be required.

Glyphosate 4 does not provide residual weed control. Use a label-approved herbicide program if subsequent residual weed control is desired. Users must read and carefully observe all cautionary statements and all other information on labels of all herbicides used.

**NOTE:** Buyer and users are responsible for all losses or damage resulting from the use and/or handling of mixtures of Glyphosate 4 with herbicides or other materials that are not specifically recommended on this product label. Reduced performance may result if users mix Glyphosate 4 with other herbicides or other products not recommended on this label.

Best results are obtained with uniform and complete spray coverage. However, do not spray weed foliage to the extent of runoff.

**DOMESTIC ANIMALS:** Glyphosate 4 is considered to be relatively nontoxic to dogs and other domestic animals. Note, however, that ingestion of this product, or of large amounts of vegetation that has been freshly sprayed with this product, may cause temporary gastrointestinal irritation, such as diarrhea, colic, vomiting, etc. If these symptoms are observed, the animal should be given plenty of fluids in order to prevent dehydration. A veterinarian should be contacted in the event symptoms persist for more than 24 hours.

**NOTE:** Using this product in a manner not consistent with the product label may result in personal injury, injury to animals or crops, or in other unintended consequences.

## MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS

APPLY THESE SPRAY SOLUTIONS IN PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT WITH THE CAPACITY TO DELIVER THE DESIRED VOLUMES. DO NOT APPLY WHEN WIND OR OTHER CONDITIONS FAVOR DRIFT. DIRECT HAND-GUN APPLICATIONS PROPERLY TO AVOID SPRAYING DESIRABLE PLANTS. **NOTE:** POOR RESULTS MAY OCCUR IF WATER CONTAINING SOIL IS USED, SUCH AS WATER FROM PONDS AND UNLINED DITCHES.

### MIXING

Glyphosate 4 mixes readily with water. Spray solutions of this product should be mixed in accordance with the following: Fill the mixing/spray tank with the correct amount of water. Then add the recommended amount of Glyphosate 4 (per the **DIRECTIONS FOR USE AND WEEDS CONTROLLED** sections) near the end of the filling process. Mix well. Be careful to avoid back siphoning. If required by state or local regulations, use approved anti-back-siphoning devices. When mixing and applying this product, foaming of the spray solution can occur. To minimize or prevent foam, do the following: do not use mechanical agitators; terminate by-pass and return lines at tank bottom, and, if necessary, use an approved defoaming or anti-foam agent.

### TANK MIXTURES

Always predetermine the compatibility of labeled tank mixtures of Glyphosate 4 with water carriers by first mixing small, proportional quantities in advance.

Mix labeled tank mixtures of Glyphosate 4 with water as described below:

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1. Place a wetting basket or a 20 to 35 mesh screen over filling port.
2. Push through the screen, adding one half the total amount of water then to agitation.
3. If using a wettable powder, first make a slurry with the water carrier, and SLOWLY add it through the screen into tank. Continue agitating.
4. If using a flowable formulation, premix one part flowable with one part water. SLOWLY add diluted mixture through screen into tank. Continue agitating.
5. If using an emulsifiable concentrate formulation, premix two parts water with one part emulsifiable concentrate. Then slowly add diluted mixture through the screen into tank. Continue agitating.
6. Continue filling spray tank with water and add required amount of Glyphosate 4 when approaching the end of the filling process.
7. If nonionic surfactant is recommended, add it to the spray tank before ending the filling process.
8. Individual formulations are added to the spray tank in the following order: Wettable powder; flowable; emulsifiable concentrate; drift control additive; water soluble liquid (e.g., Glyphosate 4) followed by surfactant.

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

To minimize foaming, keep the by-pass line on or near the bottom of the tank. The screen size used in line or nozzle strainers should be no finer than 50 mesh. Avoid spraying a fine mist by carefully selecting the proper nozzle. For best results when using conventional ground application equipment, flat fan nozzles should be used.

Clean sprayer and parts immediately when finished using this product by thoroughly flushing with water.

## ADDITIVES

### SURFACTANTS

Use only nonionic surfactants approved for use with herbicides. Do not reduce rates of Glyphosate 4 when adding surfactant. Use 0.5 percent surfactant concentration (which is 2 quarts per 100 gallons of spray solution) when using those surfactants containing a minimum of 70 percent active ingredient, or a 1 percent surfactant concentration (which is 4 quarts per 100 gallons of spray solution) for those surfactants that contain less than 70 percent active ingredient. Read and carefully observe cautionary statements and all other information that is listed on the surfactant label.

### AMMONIUM SULFATE

Adding 1 to 2 percent dry ammonium sulfate by weight (8.5 to 17 pounds per 100 gallons of water) may improve the performance of Glyphosate 4. Adding the same amount of dry ammonium sulfate may also increase the performance of Glyphosate 4 plus 2,4-D Banvel™ or residual herbicide tank mixtures on perennial and annual weeds. If environmental stress is present, performance improvement may be more apparent. Please note that nozzle tip plugging may result if low

quality ammonium sulfate (that contains material that cannot readily dissolve) is used. To determine the quality of dry ammonium sulfate, conduct a jar test by adding 1/3 cup of ammonium sulfate to 1 gallon of water, then agitate for 1 minute. If the test leaves some sediment undissolved, pre-dissolve the ammonium sulfate in water, then filter prior to adding it to the spray tank. If adding ammonium sulfate directly to the spray tank, add it slowly with agitation. Adding it too quickly could block the outlet line. Ammonium sulfate must be completely dissolved in the spray tank before adding surfactant or herbicides. Users should thoroughly rinse the spray system with clean water when spraying is completed to reduce corrosion.

**NOTE:** Using ammonium sulfate as an additive does not preclude any requirements for additional surfactant. Do not use herbicide rates that are lower than those recommended on this label.

### COLORANTS OR DYES

Colorants or marking dyes that are agriculturally approved may be added to Glyphosate 4. However, dyes or colorants used in spray solutions of Glyphosate 4 may reduce product effectiveness, especially when used at lower rates or dilutions. Follow all manufacturer's recommendations when using colorants or dyes.

## APPLICATION EQUIPMENT AND TECHNIQUES

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

The following application equipment may be used when applying this product.

**By Air, Helicopter and Fixed Wing:**

**By Broadcast Spray:**

**Controlled Droplet Applicator (CDA)**—Boom mounted or hand held applicators that produce spray with a narrow range of droplet sizes.

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

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

**Selective Equipment**—Wiper applicators, shielded sprayers, and recirculating sprayers.

Review the **Selective Equipment** section of the discussion below for rates of application and specific instructions.

### SPRAY DRIFT MANAGEMENT

**IMPORTANT: AVOID SPRAY DRIFT. EXERCISE EXTREME CAUTION WHEN APPLYING GLYPHOSATE 4 TO AVOID INJURY TO DESIRABLE CROPS AND PLANTS.**

The herbicide solution must not be permitted to drip, splash, mist, or drift onto desirable vegetation because very small quantities of this product can severely damage or destroy crops, plants, or off-target plants.

areas that were not intended for treatment.

Avoiding spray drift is the responsibility of the applicator. The potential for spray drift is determined by the interaction of many equipment and weather related factors. All applicators and growers must consider all of these factors when making decisions regarding product application.

### AERIAL EQUIPMENT

Unless otherwise specified on this label, use Glyphosate 4 in 3 to 15 gallons of water per acre. For specific Glyphosate 4 rates, review the **WEEDS CONTROLLED** section of this label. Do not exceed 1 quart Glyphosate 4 per acre unless otherwise specified. **Aerial applications of Glyphosate 4 may be made in preharvest applications, fallow and reduced tillage systems, and annual cropping conventional tillage systems.** For recommended volumes and application rates, review the individual use area sections of this label. **FOR AERIAL APPLICATION IN ARKANSAS, CALIFORNIA, OR FRESNO COUNTY, CALIFORNIA, REFER TO THE "SUPPLEMENTAL USES" SECTION AT THE END OF THIS LABEL FOR SPECIFIC RESTRICTIONS, INSTRUCTIONS, AND REQUIREMENTS.**

### AERIAL SPRAY DRIFT MANAGEMENT

To avoid off-target drift movement, the following drift management requirements must be followed during aerial applications:

1. The distance of the outermost nozzles on the boom must not be more than 3/4 the length of the rotor or the wingspan.
2. Nozzles must always be pointed backward parallel with the air stream and must never be pointed downward at more than 45 degrees. Some states have more stringent regulations that must be observed.

### Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see the **Wind, Temperature and Humidity**, and **Temperature Inversion** 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:** Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles:** Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle orientation:** Orienting nozzles so that the spray is released backwards, parallel to the airstream, will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- **Nozzle type:** Use a nozzle type that is designed for the intended

application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.

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

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

### Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the upwind 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 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect 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 pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

**Avoid direct application to any body of water.**

Drift control additives may be used. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

Ensure uniform application – To avoid streaked, uneven or overlapped application, use appropriate marking devices.

After each day of spraying, aircraft must be thoroughly washed—especially the landing gear—to remove product residues that have accumulated from spraying or from spills. UNCOATED STEEL SURFACES ARE SUSCEPTIBLE TO CORROSION FROM PROLONGED EXPOSURE TO THIS PRODUCT. FAILURE OF THE PART DUE TO CORROSION IS ALSO POSSIBLE. LANDING GEAR ARE MOST SUSCEPTIBLE. The application and maintenance of an organic coating of paint that meets aerospace specification MIL-C-38413 may help in preventing corrosion.

NOTE: Aerial application of Glyphosate 4 plus Oust™, 2,4-D or Banvel tank mixtures are not permitted in California.

#### BROADCAST EQUIPMENT

For control of those perennial or annual weeds listed on this label, using broadcast equipment. Unless otherwise specified on this label, use the recommended rates of Glyphosate 4 in 3 to 40 gallons of water per acre. Review the WEEDS CONTROLLED section of this label for specific rate information. As weed density increases, spray volume should increase (within the recommended range) to ensure adequate coverage. Avoid spraying a fine mist by carefully selecting the proper nozzle. Use flat fan nozzles for best results when using ground application equipment. Apply with an even distribution of spray droplets.

#### CONTROLLED DROPLET APPLICATION (CDA)

When applying Glyphosate 4 by vehicle mounted CDA equipment, the rate of this product per acre must not be less than the amount recommended on this label when applied by conventional broadcast equipment. For vehicle mounted CDA equipment, use 3 to 15 gallons of water per acre.

To control labeled annual weeds with hand held CDA equipment, apply a 20 percent solution of Glyphosate 4 at a flow rate of 2 fluid ounces per minute and a walking speed of 2.2 feet/second (equivalent to 1 quart per acre). To control labeled perennial weeds, apply a 20 to 40 percent solution of Glyphosate 4 at a flow rate of 2 fluid ounces per minute with a walking speed of 1.1 feet/second (equivalent to 2 to 4 quarts per acre).

The spray pattern of CDA equipment is not easily visible. Exercise extreme care to avoid spray or drift contacting any foliage or green tissue of desirable vegetation. Severe damage or destruction may result.

#### HAND-HELD and HIGH-VOLUME EQUIPMENT

Use coarse sprays only.

Clean water should be used when mixing this product; then apply to the foliage of vegetation to be controlled. For those applications that are to be made on a spray-to-wet basis, ensure uniform and complete spray coverage. Do not spray product to the point of runoff.

To control annual weeds that are listed on this label, spray a 0.5 percent solution of Glyphosate 4 plus nonionic surfactant to weeds that

are smaller than 6 inches in height or runner length. This product should be applied before seedhead formation in grass, or before bud formation in broadleaf weeds. Do not till or mow for at least three days after application.

Unless otherwise specified, for annual weeds over 6 inches tall, or if additional surfactant is not to be used, use a 1 percent solution. On harder to control perennials (such as dock, field bindweed, hemp dogbane, bermudagrass, milkweed and Canada thistle), best results are obtained by using a 2 percent solution.

If using application methods that result in less than total coverage, a 5 percent solution should be used for perennial and annual weeds, and use a 5 to 10 percent solution for trees and woody brush.

To prepare the desired volume of spray solution, mix the proper amount of Glyphosate 4 in water in accordance with the table below.

#### Spray Solution

| AMOUNT OF GLYPHOSATE 4 |          |          |           |          |          |        |
|------------------------|----------|----------|-----------|----------|----------|--------|
| DESIRED VOLUME         | 1/2%     | 1%       | 1 1/2%    | 2%       | 5%       | 10%    |
| 1 gallon               | 2 1/2 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 |

Note: 2 tablespoons = 1 fluid ounce

When using knapsack sprayers, mix the recommended amount of Glyphosate 4 with water in a larger container. Then fill sprayer with the mixed solution.

#### SELECTIVE EQUIPMENT

Glyphosate 4 may be applied through a recirculating spray system, a wiper applicator, or a shielded applicator after dilution and thorough mixing with water. It may be applied to the weeds listed on this label that are growing in any non-crop site specified on this label, but only when specifically recommended in cropping systems.

A recirculating spray system works by directing the spray solution onto those weeds growing above desirable vegetation. Any spray solution not intercepted by the weeds is then collected and returned to the sprayer for reuse.

A shielded applicator works by directing the herbicide solution onto weeds, while at the same time shielding desirable vegetation from the herbicide.

A wiper applicator works by rubbing weeds with an absorbent material that contains the herbicide solution.

IMPORTANT: DO NOT LET THIS PRODUCT OR SPRAY MIXTURE COME INTO CONTACT WITH DESIRABLE VEGETATION.

If this product comes into contact with desirable vegetation, severe damage or destruction may result. Adjust applicators that are used above desired vegetation to ensure the lowest spray stream or wiper contact point is a minimum of 2 inches above desirable vegetation. Discoloration, stunting or plant destruction may result if mist, foam,

droplets, or splatter of the herbicide solution settles on desirable vegetation.

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.

#### SHIELDED APPLICATORS

When this product is applied in accordance with label instructions for shielded applicators, Glyphosate 4 will control weeds listed in the WEEDS CONTROLLED section of this label.

The following calculation should be used to convert from a broadcast rate per acre to a band rate per acre:

|   |   |  |   |   |
|---|---|--|---|---|
| Band width<br>in inches<br>Row width<br>in inches | X | Herbicide<br>Broadcast<br>RATE<br>per acre     | = | Herbicide<br>Band RATE<br>per acre        |
| Band width<br>in inches<br>Row width<br>in inches | X | Broadcast<br>VOLUME of<br>solution<br>per acre | = | Band<br>VOLUME<br>of solution<br>per acre |

Nozzles that provide uniform coverage within the area treated should be utilized. To protect desirable vegetation, make sure shields on shielded sprayers are adjusted properly. EXERCISE EXTREME CAUTION TO AVOID HERBICIDE CONTACT WITH DESIRABLE VEGETATION.

See the WEEDS CONTROLLED section of this label for specific rates of application and instructions for control of perennial and annual weeds.

#### WIPER APPLICATORS

Wiper applicators are meant to physically wipe an appropriate amount of Glyphosate 4 onto weeds.

Wiper applicator equipment must be designed, operated, and maintained to ensure the herbicide solution does not contact desirable vegetation. This equipment should be operated at ground speeds of 5 mph or less. Improved performance may be attained by reducing speed in areas having heavy weed infestations; this ensures adequate wiper saturation. Better results are possible if 2 applications are made in opposite directions.

Avoid dripping or leaking herbicide onto desirable vegetation. To ensure adequate contact with weed surfaces, adjust the height of the applicator. Wiping surfaces should be kept clean. If applying on sloping ground, this product may migrate, thereby causing dripping on the lower end and wick drying on the upper end of the wiper applicator.

If weeds are wet, do not use wiper equipment.

When mixing the herbicide solution, mix only enough solution to be used during a 1 day period; reduced effectiveness may result from using leftover solution amounts. Wiper parts should be cleaned

immediately by thoroughly flushing with water when application is completed.

Do not add surfactant to the herbicide solution.

For Rope or Sponge Wick Applicators – Mix 1 gallon of this product with 2 gallons of water to prepare a 33 percent solution. Apply this solution to weeds listed in this WIPER APPLICATORS section.

For Porous-Plastic Applicators: Solutions varying from 33 to 100 percent of Glyphosate 4 in water may be used.

Glyphosate 4 CONTROLS the weeds listed below when applied using WIPER APPLICATORS as recommended under this section.

#### ANNUAL GRASSES

Corn  
Zea mays

Panicum, Texas  
Panicum texanum

Rye, common  
Secale cereale

Shattercane  
Sorghum bicolor

#### ANNUAL BROADLEAVES

Sicklepod  
Cassia obtusifolia

Spanishneedles  
Bidens bipinnata

Starbur, bristly  
Acanthospermum hispidum

Glyphosate 4 SUPPRESSES the weeds listed below when applied using WIPER APPLICATORS as recommended under the conditions described in this section.

#### ANNUAL BROADLEAVES

Beggarweed, Florida  
Desmodium tortuosum

Dogfennel  
Eupatorium capilliflorum

Pigweed, redroot  
Amaranthus retroflexus

Ragweed, common  
Ambrosia artemisiifolia

Ragweed, giant  
Ambrosia trifida

Sunflower  
Helianthus annuus

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Thistle, musk  
*Carduus nutans*

Velvetleaf  
*Achillea theophrasti*

#### PERENNIAL GRASSES

Bermudagrass  
*Cynodon dactylon*

Guineagrass  
*Panicum maximum*

Johnsongrass  
*Sorghum halepense*

Smulgrass  
*Sporobolus poiretii*

Vaseygrass  
*Paspalum urvillei*

#### PERENNIAL BROADLEAVES

Dogbane, hemp  
*Apocynum cannabinum*

Milkweed  
*Asclepias syriaca*

Nightshade, silverleaf  
*Solanum elaeagnifolium*

Thistle, Canada  
*Cirsium arvense*

### WEEDS CONTROLLED

This product controls many annual and perennial grasses and broadleaf weeds.

#### ANNUAL WEEDS

- Apply to actively growing grass and broadleaf weeds.
- Allow at least 3 days after treatment before tillage.
- For maximum agronomic benefit, apply when weeds are 6 inches or less in height.
- Apply this product before seedhead formation to prevent seed production.
- Because Glyphosate 4 does NOT provide residual control, delay application until maximum weed emergence. Users may have to repeat treatments to control weeds that germinate later.

#### LOW-VOLUME BROADCAST APPLICATION (LOW-RATE TECHNOLOGY)

Glyphosate 4 CONTROLS the weeds listed below when applied as

follows:

1. Recommended water carrier volumes: 3 to 10 gallons per acre for ground applications; and 3 to 5 gallons per acre when applying by air (For approved sites, review the section of this label titled **APPLICATION EQUIPMENT AND TECHNIQUES**.)

2. A nonionic surfactant may be added at 0.5 to 1 percent by total spray volume. When using surfactants containing a minimum of 70 percent active ingredient, use 0.5 percent surfactant concentration. When using surfactants containing less than 70 percent active ingredient, use a 1 percent surfactant concentration.

#### NOTE:

• Improved performance on annual weeds may be attained with the addition of 2 percent dry ammonium sulfate by weight, or 17 pounds per 100 gallons of water. Review the sections of this label titled **MIXING ADDITIVES** and **APPLICATION INSTRUCTIONS**.

• Unless otherwise specified, do not tank mix with soil residual herbicides when using these rates.

• If weeds have been grazed, cut, or mowed, allow regrowth to occur prior to applying this product.

• For control of additional broadleaf weeds, review the section of this label titled **TANK MIXTURES**.

| WEED SPECIES                                    | MAXIMUM HEIGHT / LENGTH      | RATE PER ACRE* (Fluid Ounces)                              |
|---|------------------------------|--|
| Foxtail<br><i>Setaria spp.</i>                  | 12"                          | 8 oz.  |
| Barnyardgrass<br><i>Echinochloa crus-galli</i>  | 6"<br>(0 to 4")<br>(4 to 6") | 12 oz.<br>(16 oz. <sup>1</sup> )<br>(24 oz. <sup>1</sup> ) |
| Bluegrass, annual<br><i>Poa annua</i>           |                              |  |
| Brome, downy**<br><i>Bromus tectorum</i>        |                              |  |
| Mustard, blue<br><i>Chorispora tenella</i>      |                              |  |
| Mustard, tansy<br><i>Descurainia pinnata</i>    |                              |  |
| Mustard, tumble<br><i>Sisymbrium altissimum</i> |                              |  |
| Mustard, wild<br><i>Sinapis arvensis</i>        |                              |  |
| Spurry, umbrella<br><i>Holosteum umbellatum</i> |                              |  |
| Barley<br><i>Hordeum vulgare</i>                | 12"                          |  |

| WEED SPECIES  | MAXIMUM HEIGHT / LENGTH | RATE PER ACRE* (Fluid Ounces) |
|---|-------------------------|-------------------------------|
| Rye<br><i>Secale cereale</i>                                  | 12"                     | 12 oz.                        |
| Sandbur, field<br><i>Cenchrus spp.</i>                        |                         |                               |
| Shattercane<br><i>Sorghum bicolor</i>                         |                         |                               |
| Stinkgrass<br><i>Eragrostis cilianensis</i>                   |                         |                               |
| Wheat<br><i>Triticum aestivum</i>                             | 18"                     |                               |
| Morningglory<br><i>Ipomoea spp.</i>                           | 2"                      | 16 oz.                        |
| Sicklepod<br><i>Cassia obtusifolia</i>                        |                         |                               |
| Bluegrass, bulbous<br><i>Poa bulbosa</i>                      | 6"                      |                               |
| Cheat<br><i>Bromus secalinus</i>                              |                         |                               |
| Chickweed, common<br><i>Stellaria media</i>                   |                         |                               |
| Chickweed, mouseear<br><i>Cerastium vulgatum</i>              |                         |                               |
| Corn<br><i>Zea mays</i>                                       |                         |                               |
| Goatgrass, jointed<br><i>Aegilops cylindrica</i>              |                         |                               |
| Groundsel, common<br><i>Senecio vulgaris</i>                  |                         |                               |
| Henbit<br><i>Lamium amplexicaule</i>                          |                         |                               |
| Horseweed/Marestail<br><i>Coryza canadensis</i>               |                         |                               |
| Lambsquarters, common<br><i>Chenopodium album</i>             |                         |                               |
| Pennycress, field<br><i>Fanweed</i><br><i>Thlaspi arvense</i> |                         |                               |
| Rocket, London<br><i>Sisymbrium irio</i>                      |                         |                               |
| Ryegrass, Italian<br><i>Lolium multiflorum</i>                |                         |                               |

| WEED SPECIES   | MAXIMUM HEIGHT / LENGTH | RATE PER ACRE* (Fluid Ounces) |
|--|-------------------------|-------------------------------|
| Shepherd's Purse<br><i>Capsella bursa-pastoris</i>     | 6"                      | 16 oz.                        |
| Spurge, annual<br><i>Euphorbia spp.</i>                |                         |                               |
| Buttercup<br><i>Ranunculus spp.</i>                    | 12"                     |                               |
| Cocklebur<br><i>Xanthium strumarium</i>                |                         |                               |
| Crabgrass<br><i>Digitaria spp.</i>                     |                         |                               |
| Dwarf dandelion<br><i>Krigia cespitosa</i>             |                         |                               |
| Falseflax, smallseed<br><i>Camelina microcarpa</i>     |                         |                               |
| Foxtail, Carolina<br><i>Alopecurus carolinianus</i>    |                         |                               |
| Johnsongrass, seedling<br><i>Sorghum halepense</i>     |                         |                               |
| Oats, wild<br><i>Avena fatua</i>                       |                         |                               |
| Panicum, fall<br><i>Panicum dichotomiflorum</i>        |                         |                               |
| Panicum, Texas<br><i>Panicum texanum</i>               |                         |                               |
| Pigweed, redroot<br><i>Amaranthus retroflexus</i>      |                         |                               |
| Pigweed, smooth<br><i>Amaranthus hybridus</i>          |                         |                               |
| Witchgrass<br><i>Panicum capillare</i>                 |                         |                               |
| Sicklepod<br><i>Cassia obtusifolia</i>                 | 3 to 4"                 | 24 oz.                        |
| Signalgrass, broadleaf<br><i>Bracharia platyphylla</i> | 4"                      |                               |
| Horseweed/Marestail<br><i>Coryza canadensis</i>        | 7 to 12"                |                               |
| Lambsquarters, common<br><i>Chenopodium album</i>      |                         |                               |
| Spurge, annual<br><i>Euphorbia spp.</i>                |                         |                               |

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| WEED SPECIES  | MAXIMUM HEIGHT /<br>LENGTH | RATE PER ACRE*<br>(Fluid Ounces) |
|---|----------------------------|----------------------------------|
| 4-leaved<br><i>Chenopodium</i>                          | 4"                         | 32 oz                            |
| Traverted<br><i>Sida spinosa</i>                        |                            |                                  |
| Sprangletop<br><i>Leptochloa spp</i>                    | 6"                         |                                  |
| Geranium, Carolina<br><i>Geranium carolinianum</i>      | 12"                        |                                  |
| Goosegrass<br><i>Eleusine indica</i>                    |                            |                                  |
| Primrose, cutleaf evening<br><i>Oenothera laciniata</i> |                            |                                  |
| Pusley, Florida<br><i>Richardia scabra</i>              |                            |                                  |
| Sicklepod<br><i>Cassia obtusifolia</i>                  | 5 to 12"                   |                                  |
| Spanishneedles<br><i>Bidens bipinnata</i>               |                            |                                  |
| Filariae<br><i>Erodium spp</i>                          | 12"                        | 48 oz.                           |
| Sprangletop<br><i>Leptochloa spp.</i>                   |                            |                                  |

\*Use these rates to control barnyardgrass in Alabama, Arkansas, Mississippi, Missouri, Louisiana and Texas for preplant treatments

\* For those weeds with recommended rates of less than 32 fluid ounces per acre, this product may be used at rates up to 32 fluid ounces per acre where heavy weed densities exist

\*\* Use 16 fluid ounces per acre for control in no-till systems

- **TANK MIXTURES**
- **GLYPHOSATE 4 plus BANVEL plus NONIONIC SURFACTANT**
- **GLYPHOSATE 4 plus 2,4-D plus NONIONIC SURFACTANT**

IN CALIFORNIA, DO NOT APPLY BANVEL OR 2,4-D TANK MIXTURES BY AIR.

These tank mixtures are recommended for use in fallow and reduced tillage areas only. Follow use directions as given in the LOW-VOLUME BROADCAST APPLICATION section.

A mixture of Glyphosate 4 plus 2,4-D or Banvel can be used to control the broadleaf weeds and annual grasses listed for Glyphosate 4 alone at the indicated heights (except applications at 8 fluid ounces per acre).

plus the broadleaf weeds listed below. For weeds listed at 8 fluid ounces per acre of Glyphosate 4 alone, 12 fluid ounces should be used in these tank mixtures.

**NOTE:** For all products used in tank mixtures, review each product's label for crop rotation restrictions and cautionary statements. If Banvel is mixed with Glyphosate 4, short term residual control of selected weed species may result. However, some crop injury is possible if Banvel is applied within 45 days of planting.

To control dense populations of the annual broadleaf weeds listed below (when weeds are less than the indicated height), apply 12 to 16 fluid ounces of Glyphosate 4 plus 0.25 pound active ingredient of Banvel, or 0.5 pound active ingredient of 2,4-D, plus 0.5 to 1 percent nonionic surfactant by total spray volume per acre.

Cocklebur (12")  
*Xanthium strumarium*

Kochia\* (6")  
*Kochia scoparia*

Lambsquarters (12")  
*Chenopodium album*

Lettuce, prickly (6")  
*Lactuca scariola*

Marestail/Horseweed (6")  
*Coryza canadensis*

Morningglory (6")  
*Ipomoea spp*

Pigweed, redroot (12")  
*Amaranthus retroflexus*

Pigweed, smooth (12")  
*Amaranthus hybridus*

Thistle, Russian (12")  
*Salsola kali*

\* Kochia is controlled with a Banvel tank mixture only.

To control the annual broadleaf weeds listed below (when less than 6 inches in height), apply 16 fluid ounces of Glyphosate 4 plus 0.5 pound active ingredient of 2,4-D, plus 0.5 to 1 percent nonionic surfactant by total spray volume per acre.

Ragweed, common  
*Ambrosia artemisiifolia*

Ragweed, giant  
*Ambrosia trifida*

Smartweed, Pennsylvania  
*Polygonum pensylvanicum*

Velvetleaf  
*Abutilon theophrasti*

## HIGH-VOLUME BROADCAST APPLICATIONS

Glyphosate 4 will control weeds listed below when applied as directed using water carrier volumes of 10 to 40 gallons per acre for ground applications.

Apply 1 to 1.5 quarts of Glyphosate 4 per acre plus 0.5 to 1 percent nonionic surfactant by total spray volume. Use 1 quart Glyphosate 4 per acre if weeds do not exceed 6 inches tall, and 1.5 quarts per acre should be used if weeds are more than 6 inches tall. Before application, allow sufficient time for new growth to reach recommended stages if weeds have been cut, grazed, or mowed. These rates will also control weeds mentioned in the LOW VOLUME BROADCAST APPLICATION section of this label.

## WEED SPECIES

Balsamapple\*  
*Momordica charantia*

Bassia, fivehook  
*Bassia hyssopifolia*

Brome  
*Bromus spp.*

Fiddleneck  
*Amsinckia spp.*

Fleabane, hairy  
*Coryza bonariensis*

Fleabane  
*Erigeron spp.*

Kochia  
*Kochia scoparia*

Lettuce, prickly  
*Lactuca scariola*

Panicum  
*Panicum spp.*

Ragweed, common  
*Ambrosia artemisiifolia*

Ragweed, giant  
*Ambrosia trifida*

Smartweed, Pennsylvania  
*Polygonum pensylvanicum*

Sowthistle, annual  
*Sonchus oleraceus*

Sunflower  
*Helianthus annuus*

Thistle, Russian  
*Salsola kali*

Velvetleaf  
*Abutilon theophrasti*

\*Apply with hand-held equipment only.

## PERENNIAL WEEDS

For controlling or destroying most perennial weeds, apply Glyphosate 4 as follows:

**NOTE:** In the event weeds have been tilled or mowed, do not treat plants until they have resumed active growth AND have reached the recommended stages.

It may be necessary to repeat treatments on those weeds that regenerate from underground parts or from seed. These repeat treatments must be applied before crops emerge.

Improved performance on perennial weeds may be attained with the addition of 1 to 2 percent dry ammonium sulfate by weight, or 8.5 to 17 pounds per 100 gallons of water. The increased effectiveness may be most apparent if environmental stress is present. Review the sections of this label titled **MIXING ADDITIVES** and **APPLICATION INSTRUCTIONS**.

Glyphosate 4 will CONTROL the PERENNIAL WEEDS listed below if applied as directed under the conditions described.

Alfalfa  
*Medicago sativa*

Alligatorweed\*  
*Alternanthera philoxeroides*

Anise (fennel)  
*Foeniculum vulgare*

Artichoke, Jerusalem  
*Helianthus tuberosus*

Bahiagrass  
*Paspalum notatum*

Bentgrass  
*Agrostis spp.*

Bermudagrass  
*Cynodon dactylon*

Bermudagrass, water (knotgrass)  
*Paspalum distichum*

Bindweed, field  
*Convolvulus arvensis*

Bluegrass, Kentucky  
*Poa spp.*

Blueweed, Texas  
*Helianthus ciliaris*

Brackenfern  
*Pteridium aquilinum*

Bromegrass, smooth  
*Bromus inermis*

Bursage, woollyleaf  
*Franseria tomentosa*

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Canarygrass, reed  
*Phalaris arundinacea*

Cattail  
*Typha* spp.

Clover, red  
*Trifolium pratense*

Clover, white  
*Trifolium repens*

Cogongrass  
*Imperata cylindrica*

Dallisgrass  
*Paspalum dilatatum*

Dandelion  
*Taraxacum officinale*

Dock, curly  
*Rumex crispus*

Dogbane, hemp  
*Apocynum cannabinum*

Fescues  
*Festuca* spp.

Fescue, tall  
*Festuca arundinacea*

Guineagrass  
*Panicum maximum*

Horsenettle  
*Solanum carolinense*

Horseradish  
*Armoracia rusticana*

Ice plant  
*Mesembryanthemum crystallinum*

Johnsongrass  
*Sorghum halepense*

Kikuyugrass  
*Pennisetum clandestinum*

Knapweed  
*Centaurea repens*

Lantana  
*Lantana camara*

Lespedeza  
*Lespedeza* spp.

Milkweed  
*Asclepias* spp.

Muhly, wirestem  
*Muhlenbergia frondosa*

Mullein, common  
*Verbascum thapsus*

Napiergrass  
*Pennisetum purpureum*

Nightshade, silverleaf  
*Solanum elaeagnifolium*

Nutsedge, purple, yellow  
*Cyperus rotundus*  
*Cyperus esculentus*

Orchardgrass  
*Dactylis glomerata*

Pampasgrass  
*Cortaderia* spp.

Paragrass  
*Bracharia mutica*

Phragmites\*  
*Phragmites* spp.

Poison hemlock  
*Conium maculatum*

Quackgrass  
*Agropyron repens*

Redvine\*  
*Burnnichia ovata*

Reed, giant  
*Arundo donax*

Ryegrass, perennial  
*Lolium perenne*

Smartweed, swamp  
*Polygonum coccineum*

Spurge, leafy\*  
*Euphorbia esula*

Starthistle, yellow  
*Centaurea solstitialis*

Sweet potato, wild\*  
*Ipomoea pandurata*

Thistle, Canada  
*Cirsium arvense*

Thistle, artichoke  
*Cynara cardunculus*

Timothy  
*Phleum pratense*

Torpedograss\*  
*Panicum repens*

Trumpet creeper\*  
*Campsis radicans*

Vaseygrass  
*Paspalum urvillei*

Velvetgrass  
*Holcus* spp.

Wheatgrass, western  
*Agropyron smithii*

\*Partial Control

Glyphosate 4 is NOT registered for use on water bermudagrass in California.

For specific application instructions and labeled uses, review the DIRECTIONS FOR USE and MIXING, ADDITIVES, and APPLICATION INSTRUCTIONS sections of this label.

**Alfalfa:** Use 1 quart of Glyphosate 4 per acre, plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Apply in the fall after the last hay cutting takes place. Alfalfa should be allowed to regrow to a minimum height of 6 to 8 inches prior to application. Follow applications with deep tillage a minimum of 7 days after treatment, but before soil freeze-up.

**Alligatorweed:** Use 4 quarts of Glyphosate 4 per acre, or a 1.5 percent solution with hand held equipment to obtain partial control. Applications should be made when the majority of plants are in bloom. Additional applications will be necessary to maintain control.

**Anise (fennel); Poison hemlock:** Use a 1 to 2 percent solution of Glyphosate 4 as a spray-to-wet treatment. Plants should be treated at the bud to full-bloom stage of growth to obtain best results. In order to control plants arising from seeds, repeat applications may be needed in succeeding years.

**Bentgrass:** Use Glyphosate 4 for suppression in grass seed production areas. For use by ground applications only. Apply 1.5 quarts of Glyphosate 4 plus 0.5 to 1 percent nonionic surfactant by total spray volume, in 10 to 20 gallons of water per acre. Prior to applying in the fall, ensure the entire crown area has resumed growing. Plants should be actively growing, and have a minimum of 3 inches of growth. Avoid tillage prior to application. For optimum results, tillage 7 to 10 days after application is recommended. Ineffective control of bentgrass may result if tillage is not used after treatment.

**Bermudagrass:** Use 5 quarts of Glyphosate 4 per acre for adequate control. Or, 3 quarts per acre will provide partial control. For best results, treat bermudagrass when it is actively growing, and when seedheads are present. A repeat application may be necessary to maintain control. Allow a minimum of 7 days after treatment before tillage.

**Bermudagrass, water (knotgrass):** Use 1.5 quarts of Glyphosate 4 plus 0.5 to 1 percent nonionic surfactant by total spray volume in 5 to 10 gallons of water per acre. Water bermudagrass should be actively growing—and 12 to 18 inches in length—for effective application. Wait a

minimum of 7 days before flooding the field, flushing, or tillage.

For fall treatment only: Use 1 quart of Glyphosate 4 plus 0.5 to 1 percent nonionic surfactant by total spray volume in 5 to 10 gallons of water per acre. Till fallow fields prior to treatment. Apply prior to frost on plants that are actively growing and 12 to 18 inches long. Wait a minimum of 7 days before tillage.

**Bindweed, field:** For control of field bindweed, apply 3 to 4 quarts of Glyphosate 4 per acre east of the Mississippi River, and 4 to 5 quarts per acre west of the Mississippi River. Treatment should be applied when weeds are actively growing and are at or beyond full bloom. If the weed is under drought stress, do not treat—good soil moisture is needed for active growth. Apply in late summer or fall for optimum results, but fall applications must be made before a killing frost. Wait a minimum of 7 days after application before tillage.

For control using ground application equipment only, apply 2 quarts of Glyphosate 4 plus 0.5 pound active ingredient of Banvel in 10 to 20 gallons of water per acre.

The following tank mixtures with 2,4-D may be applied using aerial application equipment (except in California) in fallow and reduced tillage systems only.

To suppress field bindweed on irrigated agricultural land (using ground equipment only), mix and apply 1 to 2 quarts of Glyphosate 4 plus 1 pound of 2,4-D active ingredient in 10 to 20 gallons of water per acre. Apply after harvest, or in fall fallow ground when most of the runners are a minimum of 12 inches long and are actively growing. Use of at least one irrigation will promote active field bindweed growth.

For suppression, apply 16 fluid ounces of this product plus 0.5 pound a.i. of 2,4-D plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre for ground applications and 3 to 5 gallons of water per acre for aerial applications. Applications should be delayed until maximum emergence has occurred and when vines are between 6 to 18 inches in length.

**In California only:** Use 1 to 5 quarts of Glyphosate 4 per acre. Depending on local conditions, the rate needed to suppress or control weeds will vary within this range.

To suppress field bindweed on irrigated land where annual tillage is performed, apply 1 quart of Glyphosate 4 plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Bindweed should be a minimum of 12 inches long before application, with maximum weed emergence and runner growth. Treatments should not be made when weeds are under drought stress; good soil moisture is needed for active growth. Allow a minimum of 3 days after application before tillage.

**Bluegrass, Kentucky; Bromegrass, smooth; Orchard-grass:** Use 2 quarts of Glyphosate 4 in 10 to 40 gallons of water per acre. Apply when grasses are actively growing and when most plants have developed to the boot-to-early seedhead stage. For partial control in pasture or hay crop renovation, use 1 to 1.5 quarts of Glyphosate 4 plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Apply to actively growing weeds when most are 4 to 12 inches high. Wait a minimum of 7 days after treatment before tillage.

**Orchardgrass (sods going to no-till corn):** Use 1 to 1.5 quarts of Glyphosate 4 per acre plus 0.5 to 1 percent nonionic surfactant by total

spray volume in 3 to 10 gallons of water per acre. Orchardgrass should be at least 12 inches high for spring treatment, and 6 inches high for fall treatment. Wait a minimum of 3 days before planting. For best results, a sequential application of atrazine is necessary.

**Texas Blueweed:** Apply 3 to 4 quarts of Glyphosate 4 per acre east of the Mississippi River, and 4 to 5 quarts per acre west of the Mississippi River. Treat when weeds are actively growing and at full bloom or beyond. If weeds are under drought stress, do not treat; good soil moisture is needed for active growth. (If new leaves are developing, this indicates active growth.) Apply in late summer or fall for optimum results. Fall applications must be made before a killing frost. Wait a minimum of 7 days after treatment before tillage.

**Brackenfern:** Using a broadcast spray, apply 3 to 4 quarts of Glyphosate 4 per acre. With hand held equipment, use a 1 to 1.5 percent solution. Treatments should be applied to fully expanded fronds that are a minimum of 18 inches in height.

**Bursage, woollyleaf:** For control, apply 2 quarts of Glyphosate 4 plus 1 pint of Banvel per acre. For partial control, apply 1 quart of Glyphosate 4 plus 1 pint of Banvel per acre. Add 0.5 to 1 percent nonionic surfactant by total spray volume and apply in 3 to 20 gallons of water per acre. Apply when plants are producing new active growth which has been initiated by moisture for at least 2 weeks and when plants are at or beyond flowering.

**Canarygrass, reed; Timothy; Wheatgrass, western:** Apply 2 to 3 quarts of Glyphosate 4 per acre to actively growing plants when most have reached the boot-to-head stage of development. Wait a minimum of 7 days after treatment before tillage.

**Cogongrass:** Use 3 to 5 quarts of Glyphosate plus 0.5 to 1 percent nonionic surfactant applied in 10 to 40 gallons of water per acre. Apply in late summer or fall when weeds are a minimum of 18 inches high and actively growing. Wait a minimum of 7 days after application before mowing or tillage. Because of uneven stages of growth and the dense nature of Cogongrass, good spray coverage is often difficult. Therefore repeat treatments may be needed to maintain adequate control.

**Dandelion / Dock, curly:** Apply 3 to 5 quarts of this product per acre when plants are actively growing and most have reached the early bud stage of growth. Wait 7 or more days after application before tillage.

Another option for control: Apply 16 fluid ounces of Glyphosate 4 plus 0.5 pound of 2,4-D active ingredient plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre.

**Dogbane, hemp:** Apply 4 quarts of Glyphosate 4 per acre when most weeds are actively growing and have reached the late bud to flower stage of development. Before treating after a crop harvest or mowing, allow weeds to regrow to a mature stage of development. Wait a minimum of 7 days after treatment before tillage.

For suppression, using ground applications only, apply 16 fluid ounces of Glyphosate 4 plus 0.5 pounds of 2,4-D active ingredient plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Apply after maximum emergence of dogbane has occurred.

**Fescue, tall:** Apply 3 quarts of Glyphosate 4 in 10 to 40 gallons of water per acre to actively growing plants when most have reached boot-to-early seedhead stage of development.

For applications in fall only: Use 1 quart of Glyphosate 4 plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Apply in fall when weeds are actively growing and have reached 6 to 12 inches of new growth. Wait a minimum of 7 days after treatment before tillage. To improve long term control, and to control seedlings germinating after fall treatments (or the spring that follows), apply a sequential application of 1 pint per acre of Glyphosate 4 plus nonionic surfactant.

**Guineagrass:** Apply 3 quarts of Glyphosate 4 per acre, or when using hand held equipment, use a 1 percent solution. Apply when guineagrass is actively growing and when it has reached at least the 7 leaf stage of development. If using hand held equipment, ensure thorough coverage. Wait a minimum of 7 days after treatment before tillage.

**Johnsongrass; Ryegrass, perennial:** Use 1 to 3 quarts of Glyphosate 4 per acre. Use 1 to 2 quarts of Glyphosate 4 per acre in annual cropping systems. Use 1 quart of this product plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Or use 2 quarts of Glyphosate 4 in 10 to 40 gallons of water per acre. In non-crop areas, or in areas where annual tillage is not performed (no-till), use 2 to 3 quarts of Glyphosate 4 in 10 to 40 gallons of water per acre. Optimum results are obtained when applied to actively growing plants when most have reached the boot-to-head stage of development, or in fall before frost. Wait a minimum of 7 days after treatment before tillage. If using the 1 quart per acre rate, do not tank mix with residual herbicides.

For Johnsongrass burndown, use 1 pint per acre plus 0.5 to 1 percent nonionic surfactant in 3 to 10 gallons of water per acre before the plants grow to a height of 12 inches. Wait a minimum of 3 days after application before tillage.

For spot treatment of Johnsongrass (partial control or suppression): When Johnsongrass has reached a height of 12 to 18 inches, apply a 1 percent solution of Glyphosate 4 plus 0.5 to 1 percent nonionic surfactant by total spray volume. Complete and uniform coverage is essential.

**Kikuyugrass:** Use 2 to 3 quarts of Glyphosate 4 per acre. Spray when the majority of kikuyugrass is actively growing and is at a minimum of 8 inches high (at the 3 or 4 leaf stage of development). Wait a minimum of 3 days after treatment before tillage.

**Knapweed; Horseradish:** Use 4 quarts of Glyphosate 4 per acre when weeds are actively growing and when most have reached the late bud to flower stage of development. If treating after crop harvest or after mowing, allow weeds to regrow to a mature stage of development, then apply. Apply treatment in late summer or fall for optimum results. Wait a minimum of 7 days after treatment before tillage.

**Lantana:** Apply Glyphosate 4 as a 1 to 1.25 percent solution using hand held equipment only. Treat actively growing lantana when it is at or beyond the bloom stage of development. The higher application rate of Glyphosate 4 should be applied for weeds that have reached the woody stage of development. Wait a minimum of 7 days after treatment before tillage.

**Milkweed, common:** Use 3 quarts of Glyphosate 4 per acre when milkweed is actively growing and when most of the weeds have reached the late bud to flower stage of development. If applying after small grain harvest or after mowing, allow milkweed to regrow to a mature stage prior to applying. Wait a minimum of 7 days after

treatment before tillage.

**Muhly, wirestem:** Use 1 to 2 quarts of Glyphosate 4 per acre. Apply 1 quart of Glyphosate 4 plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Use 2 quarts of Glyphosate 4 per acre when using 10 to 40 gallons of water per acre, or when applied in pasture, sod, or non-crop areas. Spray when weed is actively growing and at least 8 inches high. Do not till between harvest and fall applications, or in the fall or spring prior to spring treatments. Wait a minimum of 3 days after treatment before tillage. Glyphosate 4 will not provide residual control of wirestem muhly from seeds which germinate after this product is applied. When using the 1 quart per acre rate, do not tank mix with residual herbicides.

**Nightshade, silverleaf:** For control, use 2 quarts of Glyphosate 4 plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Do not apply until at least 60 percent of the plants have berries. If applying in fall, do so before a killing frost. Wait a minimum of 7 days after treatment before tillage. If the weeds are under drought stress, do not treat—good soil moisture is needed for active growth.

**Nutsedge-purple, yellow:** Using a broadcast spray, apply 3 quarts of Glyphosate 4 per acre. If using hand held equipment, use a 1 to 2 percent solution to control existing nutsedge plants and immature nutlets that are attached to treated plants. Apply when weeds are in flower or when new nutlets are seen at rhizome tips. Nutlets that have not yet germinated will not be controlled and may germinate after treatment. For long term control of ungerminated tubers, repeat treatments will be necessary.

For control, apply sequential applications of 1 to 2 quarts of Glyphosate 4 plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Applications should be made when a majority of the weeds are in the 3 to 5 leaf stage of development (when under 6 inches tall). Repeat this application as necessary when newly emerging weeds reach the 3 to 5 leaf stage of growth. For long term control, subsequent treatments are required.

For suppression or partial control of existing weeds, use 1 pint to 2 quarts of Glyphosate per acre plus 0.5 to 1 percent nonionic surfactant in 3 to 40 gallons of water per acre. Apply when plants are 6 inches tall or less and have 3 to 5 leaves. Additional treatments will be necessary to control subsequent emerging weeds or regrowth of existing weeds. Wait a minimum of 7 days after treatment before mowing or tillage.

**Pampasgrass / Ice plant:** Using hand held equipment, apply Glyphosate 4 as a 1.5 to 2 percent solution to weeds that are actively growing. Apply when pampasgrass is at or beyond the boot stage of development. Thorough coverage is essential.

**Phragmites:** For partial control in Florida and those counties of states that border the Gulf of Mexico, use 5 quarts per acre using broadcast spray equipment, or use a 2 percent solution applied by hand held equipment. For partial control in other areas of the U.S., use 3 quarts per acre using broadcast spray equipment or a 1 percent solution applied by hand held equipment. For optimum results, treat in late summer or fall, or when weeds are actively growing and in the full bloom stage of development. If treated before or after this stage, reduced control may result. The dense nature of the weeds and the uneven stages of growth may prevent good spray coverage; therefore, repeat treatments may be needed to maintain control. Visual control symptoms are slow to develop.

**Quackgrass-in Annual Cropping Systems, or in Pastures and Sods Followed by Deep Tillage:** Use 1 to 2 quarts of Glyphosate 4 per acre. If using the 1 quart rate: Apply 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre; do not tank mix with residual herbicides. If using the 2 quart rate: Apply treatment in 10 to 40 gallons of water per acre. To apply, wait until quackgrass is actively growing and is from 6 to 8 inches high. Do not till between harvest and fall applications, or in fall or spring prior to spring glyphosate treatments. Wait a minimum of 3 days after treatment before tillage. For best results in pastures or sods, a moldboard plow should be used.

**Quackgrass-Pasture or Sod or Other Noncrop Areas Where Deep Tillage is Not Planned Following Application:** Use 2 to 3 quarts of Glyphosate 4 in 10 to 40 gallons of water per acre. Quackgrass should be higher than 8 inches tall and actively growing when treated. Do not till between harvest and fall applications or in fall or spring prior to spring glyphosate treatments. Wait a minimum of 3 days after treatment before tillage.

**Redvine:** For suppression, use 24 fluid ounces of Glyphosate 4 per acre at each of two applications 7 to 14 days apart, or a single application of 2 quarts of Glyphosate 4 per acre. Recommended rates should be applied in 5 to 10 gallons of water per acre, plus 0.5 to 1 percent nonionic surfactant by total volume. Apply to actively growing plants in September or early October, when plants are a minimum of 18 inches tall and have been growing 45 to 60 days since the last tillage. Apply treatments a minimum of 1 week before a killing frost.

**Reed, giant:** For control, use a 2 percent solution of Glyphosate 4 when plants are actively growing. For optimum results, apply in late summer to fall.

**Smartweed, swamp:** Use 3 to 5 quarts of Glyphosate 4 per acre when plants are actively growing, and when most have reached the early bud stage of development. Wait a minimum of 7 days after treatment before tillage.

Another option for control: Use 16 fluid ounces of Glyphosate 4 with 0.5 pound of 2,4-D active ingredient, plus 0.5 to 1 percent nonionic surfactant by total volume in 3 to 10 gallons of water per acre in late summer or fall. Treatments should be applied when weeds are actively growing and when the majority of plants have reached the early bud stage of development. Wait a minimum of 7 days after treatment before tillage.

**Spurge, leafy:** For suppression, use 16 fluid ounces of Glyphosate 4 with 0.5 pound of 2,4-D active ingredient, plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre in late summer or fall. Apply when plants are actively growing. If weeds have been mowed prior to treatment, apply when the majority of the weeds are 12 inches in height. Wait a minimum of 7 days after treatment before tillage.

**Starthistle, yellow:** For best results, apply during periods of active growth, including the rosette, bolting, and early flower stages of development. When using "spray-to-wet" applications, apply Glyphosate 4 as a 2 percent solution. When using broadcast applications, use 2 quarts of Glyphosate 4 per acre in 10 to 40 gallons of water per acre.

**Sweet Potato, wild; Thistle, artichoke:** Using hand held equipment, apply Glyphosate 4 as a 2 percent solution when weeds are actively growing or are beyond the bloom stage of growth. Additional applications may be required. The weeds should be allowed to reach

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the recommended stage of development prior to retreatment. Wait a minimum of 7 days after treatment before tillage.

**Thistle, Canada:** Use 2 to 3 quarts of Glyphosate 4 per acre applied to actively growing thistles when the majority are at or beyond the bud stage of development. In the late summer or fall after harvest, tillage or mowing allow a minimum of 4 weeks for initiation of active growth and rosette development before applying this product. If treating in fall, Glyphosate 4 must be applied before a killing frost. Wait a minimum of 3 days after treatment before tillage.

For suppression of Canada thistle, use 1 quart of Glyphosate 4 per acre, or 1 pint of Glyphosate 4 plus 0.5 pound a.i. 2,4-D per acre, plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre in the late summer or fall after harvest, mowing or tillage. 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.

**Torpedograss:** For partial control, use 4 to 5 quarts of Glyphosate 4 per acre. For applications to be effective, torpedograss must be actively growing, when the majority of weeds are at or beyond the seedhead stage of development. To maintain control, repeat applications are necessary. When applying in fall, treatments must be made before frost. Wait a minimum of 7 days after treatment before tillage.

**Trumpet creeper:** For control, use 2 quarts of Glyphosate 4 per acre in 5 to 10 gallons of water per acre. Apply treatments in late September or October to actively growing plants that are a minimum of 18 inches in height and have been growing 45 to 60 days since the last tillage. Applications should be made a minimum of 1 week before a killing frost.

**For other perennials listed on this label:** Use 3 to 5 quarts of Glyphosate 4 per acre when perennial weeds are actively growing and most have reached early head or early bud stage of development. Wait a minimum of 7 days after treatment before tillage.

#### WOODY BRUSH AND TREES

When applying Glyphosate 4 as directed under the conditions described herein, this herbicide CONTROLS or PARTIALLY CONTROLS the woody brush, trees, and plants listed below.

Alder  
*Alnus spp.*

Ash\*  
*Fraxinus spp.*

Aspen, quaking  
*Populus tremuloides*

Bearmat (Bearclover)  
*Chamaebatia foliolosa*

Beech  
*Fagus grandifolia*

Birch  
*Betula spp.*

Blackberry  
*Rubus spp.*

Blackgum  
*Nyssa spp.*

Bracken  
*Pteridium spp.*

Broom:  
French  
*Cytisus monspessulanus*

Scotch  
*Cytisus scoparius*

Buckwheat, California\*  
*Eriogonum fasciculatum*

Cascara\*  
*Rhamnus purshiana*

Catsclaw\*  
*Acacia greggii*

Ceanothus\*  
*Ceanothus spp.*

Chamise  
*Adenostoma fasciculatum*

Cherry:  
Bitter  
*Prunus emarginata*

Black  
*Prunus serotina*

Pin:  
*Prunus pensylvanica*

Coyote brush  
*Baccharis consanguinea*

Creeper, Virginia\*  
*Parthenocissus quinquefolia*

Dewberry  
*Rubus trivialis*

Dogwood\*  
*Cornus spp.*

Elderberry  
*Sambucus spp.*

Elm\*  
*Ulmus spp.*

Eucalyptus  
*Eucalyptus spp.*

Gorse  
*Ulex europaeus*

Hasardia\*  
*Haplopappus squamosus*

Hawthorn  
*Crataegus spp.*

Hazel  
*Corylus spp.*

Hickory\*  
*Carya spp.*

Holly, Florida / Brazilian Peppertree\*  
*Schinus terebinthifolius*

Honeysuckle  
*Lonicera spp.*

Hornbeam, American\*  
*Carpinus caroliniana*

Kudzu  
*Pueraria lobata*

Locust, black\*  
*Robinia pseudoacacia*

Madrone  
*Arbutus menziesii*

Manzanita  
*Arctostaphylos spp.*

Maple:  
Red\*\*  
*Acer rubrum*

Sugar  
*Acer saccharum*

Vine\*  
*Acer circinatum*

Monkey Flower\*  
*Mimulus guttatus*

Oak:  
Black\*  
*Quercus velutina*

Northern Pin:  
*Quercus palustris*

Post:  
*Quercus stellata*

Red  
*Quercus rubra*

Southern Red  
*Quercus falcata*

White\*  
*Quercus alba*

Persimmon\*  
*Diospyros spp.*

Pine  
*Pinus spp.*

Poison Ivy  
*Rhus radicans*

Poison Oak  
*Rhus toxicodendron*

Poplar, yellow\*  
*Linodendron tulipifera*

Raspberry  
*Rubus spp.*

Redbud, eastern  
*Cercis canadensis*

Rose, multiflora  
*Rosa multiflora*

Russian-olive  
*Elaeagnus angustifolia*

Sage, black, white  
*Salvia spp.*

Sagebrush, California  
*Artemisia californica*

Salmonberry  
*Rubus spectabilis*

Salt cedar  
*Tamarix spp.*

Sassafras  
*Sassafras albidum*

Sourwood  
*Oxydendrum arboreum*

Sumac:  
Poison\*  
*Rhus vernix*

Smooth\*  
*Rhus glabra*

Winged\*  
*Rhus copallina*

Sweetgum  
*Liquidambar styraciflua*

Swordfern\*  
*Polystichum munium*

Tallowtree, Chinese  
*Sapium sebiferum*

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Tan Oak  
*Lithocarpus densiflorus*

Thimbleberry  
*Rubus parviflorus*

Tobacco, tree\*  
*Nicotiana glauca*

Trumpet creeper  
*Campsis radicans*

Waxmyrtle, southern\*  
*Myrica centera*

Willow  
*Salix spp*

\* Partial control

\*\* See below for information on control or partial control

**NOTE:** Do not apply to brush that has been mowed or tilled or to trees that have been cut until regrowth has reached the recommended stages of development.

Glyphosate 4 should be applied when plants are actively growing and after full leaf expansion, unless otherwise directed. The higher rate of application should be used for larger plants and/or dense growth areas. On vines, use the higher rate for plants that have reached the woody stage of development. For optimum results, apply Glyphosate 4 in late summer or fall after fruit has formed.

Best results are obtained in arid areas when Glyphosate 4 is applied in spring to early summer when brush species have a high moisture content and are flowering.

Thorough coverage is essential when using hand held equipment. Control symptoms may not appear before frost or senescence with fall applications.

Wait a minimum of 7 days after treatment before tillage, mowing or removal. Additional treatments may be needed to control plants that regenerate from underground parts or seed. When applying on undesirable deciduous species, some autumn colors are acceptable as long as no major leaf drop has occurred. Reduced effectiveness may result if fall treatments are made after a frost.

Review the sections of this label titled **DIRECTIONS FOR USE** and **MIXING, ADDITIVES**, and **APPLICATION INSTRUCTIONS** for detailed application information.

To control or partially control the woody brush and trees listed below, apply Glyphosate 4 as directed.

**Alder; Dewberry; Honeysuckle; Post Oak; Raspberry:** For control, use 3 to 4 quarts of Glyphosate 4 per acre applied as a broadcast spray, or as a 1 to 1.5 percent solution using hand held equipment.

**Aspen, quaking; Cherry; bitter, black, pin; Hawthorn; Oak, southern red; Sweetgum; Trumpet creeper:** For control, use 2 to 3 quarts of Glyphosate 4 per acre applied as a broadcast spray, or as a 1 to 1.5 percent solution using hand held equipment.

**Birch; Elderberry; Hazel; Salmonberry; Thimbleberry:** For control, use 2 quarts of Glyphosate 4 per acre as a broadcast spray, or as a 1 percent solution using hand held equipment.

**Blackberry:** For control, use 3 to 4 quarts of Glyphosate 4 per acre as a broadcast spray, or as a 1 to 1.5 percent solution with hand-held equipment. Apply after plants have reached full leaf maturity. For best results, apply in late summer or fall. After berries have set or dropped in late fall, blackberry can be controlled by applying a 3/4 percent solution of Glyphosate 4 plus 0.5 to 1 percent nonionic surfactant by total spray volume with hand-held equipment. 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.

**Broom: French, Scotch:** For control, use hand held equipment to apply a 1.5 to 2 percent solution of Glyphosate 4.

**Buckwheat, California; Hasardia; Monkey Flower; Tobacco, tree:** For partial control, use hand held equipment to apply a foliar spray of a 1 to 2 percent solution of Glyphosate 4. Foliage must be thoroughly covered to obtain best results.

**Catsclaw:** For partial control, use a 1 to 1.5 percent solution of Glyphosate 4 applied by hand held equipment.

**Coyote Brush:** For control, use hand held equipment and spray a 1.5 to 2 percent solution of Glyphosate 4 when at least 50 percent of the new leaves are fully developed.

**Eucalyptus:** For controlling eucalyptus resprouts, use hand held equipment and spray a 2 percent solution of Glyphosate 4 when resprouts are 6 to 12 feet in height and plants are actively growing. Complete coverage is required. Avoid use on plants that are drought-stressed.

**Kudzu:** For control, use 4 quarts of Glyphosate 4 per acre applied as a broadcast spray, or use hand held equipment to apply a 2 percent solution. To maintain adequate control, additional applications will be necessary.

**Madrone resprouts:** For suppression or partial control, use a 2 percent solution of Glyphosate 4 applied to resprouts that are less than 3 to 6 feet tall. For optimum results, apply in spring or early summer.

**Maple, red:** For control, use hand held equipment and apply a 1 to 1.5 percent solution of Glyphosate 4 when a minimum of 50 percent of the new leaves of the maple are fully developed. For partial control, use a broadcast spray of 2 to 4 quarts of Glyphosate 4 per acre.

**Maple, sugar; Oak, northern pin; Oak, red:** For control, use hand held equipment and apply a 1 to 1.5 percent solution of Glyphosate 4 when a minimum of 50 percent of the new leaves are fully developed.

**Poison Ivy; Poison Oak:** For control, use 4 to 5 quarts of Glyphosate 4 per acre applied as a broadcast spray or, when using hand held equipment, use a 2 percent solution. To maintain adequate control, additional applications may be necessary. If applying in fall, treatments must be applied before leaves lose their green color.

**Rose, multiflora:** For control, use 2 quarts of Glyphosate 4 per acre applied as a broadcast spray, or if using hand held equipment, apply a 1 percent solution. Treat multiflora rose before leaves begin to deteriorate from leaf-feeding insects.

**Sage, black; Sagebrush, California; Chamise; Tallowtree, Chinese:** For control, apply a 1 percent solution of Glyphosate 4 as a foliar spray with hand-held equipment. Thorough coverage is essential.

**Tan oak resprouts:** For suppression or partial control, use a 2 percent solution of Glyphosate 4 applied to resprouts that are less than 3 to 6 feet tall. For optimum results, apply in fall.

**Willow:** For control, use 3 quarts of Glyphosate 4 per acre applied as a broadcast spray, or if using hand held equipment, use a 1 percent solution.

**Other Trees and Woody Brush listed on this label:** For partial control, use 2 to 5 quarts of Glyphosate 4 per acre applied as a broadcast spray, or if using hand held equipment, use a 1 to 2 percent solution.

## NON-CROP USES

Review the sections of this label titled **GENERAL INFORMATION** and **MIXING, ADDITIVES**, and **APPLICATION INSTRUCTIONS** for important information about Glyphosate 4. Review the following **NON-CROP** sections for specific recommended use information.

**EXERCISE EXTREME CAUTION TO AVOID SPRAY CONTACT WITH THE FOLLOWING: FOLIAGE; EXPOSED NON-WOODY ROOTS OR GREEN STEMS; CROP FRUITS; DESIRABLE TURFGRASSES; SHRUBS; TREES; OR OTHER DESIRABLE VEGETATION. DESTRUCTION OR SEVERE DAMAGE MAY RESULT.**

Additional treatments may be needed to adequately control weeds that regenerate from seeds or underground parts.

If multiple treatments are needed, use a maximum of 10.6 quarts of Glyphosate 4 per acre per year. **NOTE: THE MAXIMUM USE RATES DESCRIBED IN THIS LABEL APPLY TO GLYPHOSATE 4 WHEN COMBINED WITH ALL OTHER HERBICIDES CONTAINING THE ACTIVE INGREDIENTS GLYPHOSATE OR SULFOSATE—WHETHER APPLIED AS A MIXTURE OR APPLIED SEPARATELY USERS MUST CAREFULLY CALCULATE ALL APPLICATION RATES AND MAKE SURE THAT TOTAL USAGE OF GLYPHOSATE 4 AND OTHER PRODUCTS CONTAINING GLYPHOSATE OR SULFOSATE DOES NOT EXCEED THE RECOMMENDED MAXIMUM USAGE RATES.**

Glyphosate 4 does not provide residual control of weeds. Users should follow a label-approved herbicide program for subsequent weed control.

Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used.

Glyphosate 4 provides control of those perennial and annual weeds described on this label, in areas such as dry canals, dry ditches, ditch banks, fencerows, and non-crop areas.

Review the **WEEDS CONTROLLED** section of this label for application rates and other instructions for control of perennial weeds, annual weeds, trees and woody brush.

Recirculating sprayers, wiper applicators, or shielded applicators may be used to apply Glyphosate 4 on any non-crop area described herein. Review the **SELECTIVE EQUIPMENT** section of this label's **APPLICATION EQUIPMENT AND TECHNIQUES** section for equipment calibration and proper use information.

## CONTROL OF EMERGED WEEDS

**NOTE:** Review this label's **HAND HELD AND HIGH VOLUME EQUIPMENT** section for recommended rates when using handgun or back sprayer equipment.

**Annual Weeds:** Use 1 quart of Glyphosate 4 per acre in these tank mixtures when weeds are smaller than 6 inches in height, and 1.5 quarts of Glyphosate 4 per acre when weeds are higher than 6 inches.

**Perennial Weeds:** For partial control using these tank mixtures, use 2 to 5 quarts of Glyphosate 4 per acre. Review and follow the recommendations listed in this label's **WEEDS CONTROLLED** section for rate of application and stage of growth information specific to perennial weeds.

## PRE-EMERGENCE WEED CONTROL

Review individual product labels for specific rates, carrier volumes, specific non-crop sites, and precautionary statement information applicable to pre-emergence weed control.

Mix only the quantity of spray solution that is to be used that same day. These tank mixtures should not be permitted to stand overnight—reduced weed control may result.

## FARMSTEAD WEED CONTROL

When applied as directed for **NON-CROP USES** under the conditions described, Glyphosate 4 controls undesirable vegetation listed on this label around farmstead building foundations, along and in fences, shelterbelts and for general nonselective farmstead weed control.

Review the **WEEDS CONTROLLED** section of this label for instructions and specific rates of application to control various perennial and annual weeds.

## FARM DITCHES

When used in accordance with instructions, Glyphosate 4 will suppress perennial grasses growing along farm ditches. A rate of 6 to 8 fluid ounces per acre should be used. For treating fine fescue, tall (coarse) fescue, orchardgrass or quackgrass covers, 6 fluid ounces per acre should be used. For best results, ammonium sulfate may be added at a rate of 1.7 pounds per 10 gallons of spray solution. Use 6 fluid ounces of Glyphosate 4 per acre without ammonium sulfate when treating Kentucky bluegrass.

Use 10 to 20 gallons of spray solution per acre for actively growing perennial grass covers. Flat fan nozzles should be used for optimum spray coverage and distribution.

Add a nonionic surfactant at a rate of 0.5 percent of the spray solution.

For control or suppression of broadleaf weeds, Glyphosate 4 should be tank mixed with a labeled broadleaf weed herbicide.

## CONSERVATION RESERVE PROGRAM (CRP ACRES)

Use Glyphosate 4 to control undesirable vegetation when rotating out of CRP acres, or for suppressing competitive growth and production of seeds of undesirable vegetation in CRP acreage.

Review the **WEEDS CONTROLLED** section of this label for application rates for various perennial and annual weeds.

Use conventional spray equipment or wiper applicators for CRP uses.

When using broadcast spray equipment for selective applications, use 12 to 16 ounces of Glyphosate 4 per acre in early spring before desirable CRP grasses (such as crested and tall wheatgrass) break dormancy and initiate green growth. Wait until desirable perennial grasses reach dormancy before applying in late fall.

**NOTE:** Some stunting of CRP perennial grasses will occur if treatments are made when plants have not reached dormancy.

#### HABITAT MANAGEMENT

Glyphosate 4 is recommended for use in restoring and/or maintaining wildlife management areas and native habitats. Review this label's **NON-CROP USES** section and use according to the instructions therein.

**Habitat Maintenance and Restoration:** When applied according to instructions, Glyphosate 4 controls exotic and undesirable vegetation in habitat management areas. Treatments can be applied: to allow native plant species to recover; prior to the planting of desirable native plant species; and for similar broadspectrum vegetation control. To enhance or maintain habitat management areas, spot treatments are useful to selectively remove unwanted weeds. However, extreme care should be taken to ensure Glyphosate 4 does not contact desirable plants.

**Wildlife Food Plots:** Glyphosate 4 may be used as a site preparation treatment 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 applying this product before tilling.

#### CHRISTMAS TREES

DO NOT USE GLYPHOSATE 4 AS AN OVER THE TOP BROADCAST SPRAY ON CHRISTMAS TREES.

**NOTE:** Users may protect desirable plants from herbicide spray solutions by using coverings or shields made of cardboard or other impermeable materials.

When applied as instructed for the conditions described for **NON-CROP USES**, Glyphosate 4 controls undesirable vegetation listed on this label prior to planting, within and around greenhouses and shadehouses, and as a postdirected spray around Christmas trees.

Please review the **WEEDS CONTROLLED** section of this label for specific instructions and rates of application for controlling various perennial and annual weeds.

If making multiple applications, do not use more than 10.6 quarts of Glyphosate 4 per acre per year.

**Site Preparation:** Any Christmas tree species may be planted AFTER preplant applications of Glyphosate 4 have been made. Exercise extreme caution to keep spray off nontarget plants during site preparation applications.

**Greenhouse / Shadehouse Use:** For weeds growing in greenhouses,

use Glyphosate 4 to control those weeds listed within this label. Keep desirable vegetation away from herbicide during application, and turn off all air circulation fans.

**Postdirected Spray:** Glyphosate 4 may be used as a postdirected spray around Christmas trees. Exercise extreme caution to keep this product's spray, drift, or mist away from green bark and foliage of established species.

#### CUT STUMP TREATMENTS

Use Glyphosate 4 to control woody vegetation by applying to freshly cut stumps or resprouts of undesirable trees. Use suitable equipment when applying Glyphosate 4 and ensure total coverage of the entire cambium. Vegetation should be cut close to the soil surface. Immediately after cutting, a 50 to 100 percent solution of Glyphosate 4 should be applied to the freshly cut surface; delaying application may result in reduced effectiveness. Optimum results can be attained by applying during periods of active growth and full leaf expansion.

Glyphosate 4, when used according to instructions for cut stump applications, will **CONTROL**, **PARTIALLY CONTROL**, or **SUPPRESS** many types of tree species and woody brush. Some of these species are as follows:

Alder  
*Alnus spp.*

Eucalyptus  
*Eucalyptus spp.*

Madrone  
*Arbutus menziesii*

Oak  
*Quercus spp.*

Reed, giant  
*Arundo donax*

Saltcedar  
*Tamarisk spp.*

Sweetgum  
*Liquidambar styraciflua*

Tan Oak  
*Lithocarpus densiflorus*

Willow  
*Salix spp.*

#### GRASS SEED PRODUCTION

#### PREPLANT AND RENOVATION

When applied as directed for **NON-CROP USES** under conditions described, Glyphosate 4 controls most existing vegetation prior to the planting or renovation of grass seed production areas.

Review the **WEEDS CONTROLLED** section of this label for specific instructions and rates of application for the control of various trees,

woody brush, and perennial and annual weeds.

For best results in controlling existing vegetation, users should delay planting to see if any regrowth occurs from escaped underground plant parts. Where additional treatments are needed, there must be sufficient regrowth prior to application. Summer or fall applications provide best control of warm-season grasses, such as bermudagrass.

**DO NOT DISTURB SOIL OR UNDERGROUND PLANT PARTS BEFORE APPLYING TREATMENT.** Tillage, vertical mowing, slicing, coring, or other renovation techniques must be delayed for at least 7 days after application to facilitate proper translocation into underground plant parts.

Glyphosate 4 should be applied to weeds that are both actively growing and are at the recommended stages of growth described in the **WEEDS CONTROLLED** section of this label. Applications should be made prior to the planting or renovation of turf or forage grass areas that are grown for seed production.

DO NOT permit grazing or feeding of treated areas for a minimum of 8 weeks after treatment.

### CROPPING SYSTEMS

When used in accordance with the instructions and under the conditions described in this label's **CROPPING SYSTEMS** section, Glyphosate 4 controls those perennial and annual weeds listed on this label. Use prior to the emergence of direct seeded crops or prior to transplanting the crops listed on this label.

For product performance information, please review the sections of this label titled **GENERAL INFORMATION** and **MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS**.

**EXERCISE EXTREME CAUTION TO AVOID SPRAY CONTACT WITH FOLIAGE, GREEN STEMS, CROP FRUITS OR OTHER DESIRABLE PLANTS. DESTRUCTION OR SEVERE DAMAGE MAY RESULT.**

To control weeds regenerating from seed or underground parts, multiple treatments may be needed. Unless otherwise stated on this label, all treatments must be made before the crop emerges in accordance with this label's instructions.

Unless otherwise stated in a specific crop section of this label, the maximum, combined total of all treatments cannot exceed 8 quarts of Glyphosate 4 per acre per year.

**NOTE:** THE MAXIMUM USE RATES DESCRIBED IN THIS LABEL APPLY TO GLYPHOSATE 4 WHEN COMBINED WITH ALL OTHER HERBICIDES CONTAINING THE ACTIVE INGREDIENTS GLYPHOSATE OR SULFOSATE—WHETHER APPLIED AS A MIXTURE OR APPLIED SEPARATELY. USERS MUST CAREFULLY CALCULATE ALL APPLICATION RATES AND MAKE SURE THAT TOTAL USAGE OF GLYPHOSATE 4 AND OTHER PRODUCTS CONTAINING GLYPHOSATE OR SULFOSATE DOES NOT EXCEED THE RECOMMENDED MAXIMUM USAGE RATES.

For any crop not listed below, applications must be made at least 30 days prior to planting.

Do not harvest or feed treated vegetation for a minimum of 8 weeks

after application. If applying spot treatments or using selective equipment, wait a minimum of 14 days before grazing domestic livestock or harvesting legumes or grasses.

See the following **CROPPING SYSTEMS** sections for specific recommended uses.

#### ROW CROPS

CORN (ALL)\*  
COTTON\*  
PEANUTS  
SORGHUM (MILO)\*  
SOYBEANS\*  
SUGARCANE\*

#### CEREAL GRAINS

BARLEY\*  
BUCKWHEAT\*  
MILLET (PEARL, PROSO)\*  
OATS\*  
RICE\*\*  
RYE\*  
TRITICALE\*  
WHEAT (ALL)\*  
WILD RICE\*

#### CITRUS

CALAMONDIN  
CHIRONJA  
CITRON  
GRAPEFRUIT  
KUMQUAT  
LEMON  
LIME  
MANDARIN ORANGE  
ORANGE (ALL)  
PUMMELO  
TANGELO  
TANGERINE  
TANGORS

#### TREE NUTS

ALMOND  
BEECHNUT  
BRAZIL NUT  
BUTTERNUT  
CASHEW  
CHESTNUT  
CHINQUAPIN  
FILBERT (HAZELNUT)  
HICKORY NUT  
MACADAMIA  
PECAN  
PISTACHIO  
WALNUT (BLACK, ENGLISH)

#### VINE CROPS

GRAPES  
KIWI FRUIT

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## TREE FRUITS

APPLE  
APRICOTS  
CHERRY (SWEET SOUR)  
LOQUAT  
MAYHAW  
NECTARINE  
OLIVE  
PEACH  
PEAR  
PLUM/PHUNE (ALL)  
QUINCE

## VEGETABLES

ARTICHOKE JERUSALEM  
ASPARAGUS\*  
BEANS (ALL)  
BEET GREENS  
BEETS (RED, SUGAR)  
BROCCOLI (ALL)  
BRUSSELS SPROUTS  
CABBAGE (ALL)  
CABBAGE, CHINESE  
CANTALOUPE\*\*\*  
CARROT  
CAULIFLOWER  
CASABA MELON\*\*\*  
CELERIAC  
CELERY  
CHARD, SWISS  
CHICORY  
COLLARDS  
CRENSHAW MELON\*\*\*  
CUCUMBER\*\*\*  
EGGPLANT\*\*\*  
ENDIVE  
GARLIC\*\*\*  
GOURDS\*\*\*  
GROUND CHERRY\*\*\*  
HONEYDEW MELON\*\*\*  
HONEY BALL MELON\*\*\*  
HORSERADISH  
KALE  
KOHLRABI  
LEEK  
LENTILS  
LETTUCE  
MANGO MELON\*\*\*  
MELONS (ALL)\*\*\*  
MUSKMELON\*\*\*  
MUSTARD GREENS  
OKRA  
ONION  
PARSLEY  
PARSNIPS  
PEAS (ALL)  
PEPPER (ALL)\*\*\*  
PERSIAN MELON\*\*\*  
POTATO (IRISH, SWEET)  
PUMPKIN\*\*\*  
RADISH  
RAPE GREENS

RHUBARB  
RUTABAGA  
SHALLOT  
SPINACH (ALL)  
SQUASH (SUMMER, WINTER)\*\*\*  
TOMATILLO\*\*\*  
TOMATO\*\*\*†  
TURNIP  
WATERCRESS\*\*\*  
WATERMELON\*\*\*  
YAMS

## SMALL FRUITS AND BERRIES

BLACKBERRY  
BLUEBERRY  
BOYSENBERRY  
CRANBERRY  
CURRANT  
DEWBERRY  
ELDERBERRY  
GOOSEBERRY  
HUCKLEBERRY  
LOGANBERRY  
OLALLIEBERRY  
RASPBERRY (BLACK, RED)

## FORAGE CROPS AND LEGUMES

ALFALFA\*  
FORAGE GRASSES\*  
FORAGE LEGUMES\*

## TROPICAL CROPS

ACEROLA  
ATEMOYA  
AVOCADO  
BANANA  
BREADFRUIT  
CANISTEL  
CARAMBOLA  
CHERIMOYA  
COCOA BEANS  
COFFEE  
DATES  
FIGS  
GENIP  
GUAVA  
JABOTICABA  
JACKFRUIT  
LONGAN  
LYCHEE  
MANGO  
PAPAYA  
PASSION FRUIT  
PERSIMMONS  
PLANTAINS  
PINEAPPLE\*\*\*  
POMEGRANATE  
SAPODILLA  
SAPOTE (BLACK, MAMEY, WHITE)  
SOURSOP  
SUGAR APPLE

## TAMARIND TEA

\* Spot treatments allowed.  
\*\* Do not treat rice fields or levees when the fields contain flood water.  
\*\*\* Apply before planting only. Wait a minimum of 3 days between application and planting.  
\*\*\*\* Do not feed or graze treated pineapple forage following application.  
† Use on direct seeded crops only.

## NOTE:

When applying Glyphosate 4 before transplanting crops into plastic mulch, take care to remove residues of this product—which can cause crop injury—from the plastic before transplanting. A single 1/2 inch application of water, by either natural rainfall or a sprinkler irrigation system, will remove residues. If treatments are applied at emergence, injury or death to the emerged seedlings will result.

**Spot Treatment** (only for those crops marked with an \*): Treatments made to growing crops must be made before the following: Heading of small grains and milo; silking of corn; initial pod set in soybeans, or boll opening on cotton.

For information regarding forage grasses and forage legumes, review **SPOT TREATMENT** in the **PASTURES** section of **CROPPING SYSTEMS** of this label.

For information on dilution and application rates using boom or hand-held equipment, review the **MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS** along with the **WEEDS CONTROLLED** section of this label.

**NOTE: FOR TREATING FORAGE GRASSES AND FORGE LEGUMES, DO NOT APPLY TREATMENT TO MORE THAN ONE-TENTH OF ANY ACRE AT ONE TIME FOR ALL OTHER CROPS. NO MORE THAN 10 PERCENT OF THE TOTAL FIELD AREA TO BE HARVESTED SHOULD BE TREATED.**

**CROPS THAT ARE SPRAYED IN TREATED AREAS WILL BE KILLED. EXERCISE CAUTION TO AVOID DRIFT OR SPRAY OUTSIDE THE TARGET AREA—PLANT INJURY OR DESTRUCTION WILL RESULT.**

**Selective Equipment:** For cotton or soybeans, Glyphosate 4 may be applied through shielded applicators, wiper applicators, or recirculating sprayers. Shielded and wiper applicators may also be used in treating grapes and tree crops. Wiper applicators may be used in rutabagas, forage grasses and forage legumes, wheat, pasture sites and grain sorghum (milo).

For specific information on proper use and calibration of equipment, please review the **SELECTIVE EQUIPMENT** section of the **APPLICATION EQUIPMENT AND TECHNIQUES** section of this label.

For the following crops, allow—at a minimum—the noted time interval between application and harvest:

| CROPS  | MINIMUM INTERVAL<br>BETWEEN TREATMENT<br>AND HARVEST |
|--|--|
| Apples, Citrus, Pear   | 1 day  |
| Nut Crops  | 3 days   |
| Cotton, Soybeans   | 7 days   |
| Atemoya, Avocado, Breadfruit, Canistel,<br>Carambola, Cherry, Grapes, Dates, Jaboticaba,<br>Jackfruit, Longan, Lychee, Passion Fruit,<br>Persimmons, Rutabagas, Sapodilla, Sapote,<br>Soursop, Sugar Apple, Tamarind | 14 days  |
| Stone Fruit  | 17 days  |
| Wheat <sup>1</sup>   | 35 days  |
| Sorghum (milo) <sup>1, 2</sup>   | 40 days  |

<sup>1</sup> Do not use roller applications

<sup>2</sup> Do not graze or feed treated milo fodder. Do not ensile treated vegetation.

## ASPARAGUS

When used in asparagus in accordance with the instructions and under the conditions described under **CROPPING SYSTEMS**, Glyphosate 4 controls those weeds listed on this label.

Review the **WEEDS CONTROLLED** section of this label for specific instructions and application rates for controlling various perennial and annual weeds.

**Prior to Crop Emergence:** For controlling emerged annual and perennial weeds mentioned on this label, apply Glyphosate 4 before crop emergence. **DO NOT APPLY THIS PRODUCT WITHIN ONE WEEK BEFORE THE FIRST ASPARAGUS SPEARS EMERGE.**

**Spot Treatment:** Glyphosate 4 should be applied immediately after cutting, but before the emergence of new asparagus spears. No more than 10 percent of the total field area to be harvested should be treated. Wait at least 5 days after treatment before harvesting.

**Postharvest:** Glyphosate 4 should be applied after the final harvest and all asparagus spears have been removed. If spears are permitted to regrow, wait until ferns have developed before applying Glyphosate 4. If treatments are delayed as such, they should be applied as directed sprays or as shielded sprays to avoid herbicide contact with ferns, stems, or spears. **IF GLYPHOSATE 4 COMES INTO DIRECT CONTACT WITH ASPARAGUS, SERIOUS CROP INJURY OR DESTRUCTION MAY RESULT.**

**NOTE:** 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.

## BERRIES AND SMALL FRUITS

For cranberries, wiper applicators may be used in accordance with the instructions in this section.

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For berries other than cranberries, use Glyphosate 4 as a preplant broadcast application, or as a directed spray or wiper application post-planting.

For important product performance information, please review the GENERAL INFORMATION and MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS sections of this label.

For specific information on recommended use and calibration of equipment, please review the SELECTIVE EQUIPMENT section of the label section titled APPLICATION EQUIPMENT AND TECHNIQUES.

Do not harvest cranberries less than 30 days after the last application of Glyphosate 4. For other small fruits, allow at least 14 days after the last application of Glyphosate 4 before harvest.

**For Wick or Other Wiper Applicators:** Prepare a 20 percent solution by mixing 1 gallon of Glyphosate 4 in 4 gallons of water. For severe infestations, reduce ground speed of the application equipment so that adequate amounts of Glyphosate 4 are wiped on weeds. A second application going in the opposite direction may be beneficial.

DO NOT ALLOW GLYPHOSATE 4 SOLUTIONS TO COME INTO CONTACT WITH DESIRABLE VEGETATION, INCLUDING CANES, FOLIAGE, OR GREEN SHOOTS.

#### CORN

**Hooded Sprayers:** For controlling weeds between rows of corn, Glyphosate 4 may be used through hooded sprayers—using only those hooded sprayers that completely enclose the spray pattern.

A hooded sprayer is one type of shielded applicator. When a hooded sprayer is used, the crop is shielded from the spray solution because the spray pattern is completely enclosed by a hood on the top and on all 4 sides. It is extremely important that hooded sprayers are set up and operated in a way that avoids bouncing or raising the hoods off the ground in any way. If hoods are raised, spray may escape and contact the crop, causing crop damage or destruction. Spray hoods must be operated on the ground or while skimming across the ground, and users must adjust tractor speed to avoid spray hood bouncing. Do not operate hooded sprayers on rough or sloping ground where the spray hoods might be raised off the ground.

If applying Glyphosate 4 to corn that is growing on raised beds, the hood must be designed to completely enclose the spray solution. If necessary, the front and rear flaps of the hoods should be extended so that they reach the ground in deep furrows.

To minimize damage to desirable crops and to obtain best results, observe the following:

1. Spray hoods must be operated on the ground or skimming across the ground.
2. Apply no more than 1 quart of Glyphosate 4 per acre per application.
3. Corn must be a minimum of 12 inches tall (measured without extending leaves).
4. Leave at least an 8 inch untreated strip over the drill row. (Example: if the crop row is 38 inches wide, the maximum width of the spray hood should be 30 inches.)
5. Do not exceed a tractor speed of 5 mph.
6. Do not apply if wind speed exceeds 10 mph.

#### 7. Use low drift nozzles.

Crop injury or destruction may result if the foliage of treated weeds comes into contact with the leaves of the desirable crop. Therefore, Glyphosate 4 should not be applied if the leaves of the crop are growing in direct contact with the weeds to be killed. Droplets, foam, splatter or mist from the Glyphosate 4 solution could contact the crop and cause stunting, discoloration, or crop destruction.

SEVERE DAMAGE OR DESTRUCTION MAY RESULT IF THIS PRODUCT COMES INTO CONTACT WITH ANY VEGETATION ON WHICH APPLICATION WAS NOT INTENDED. SUCH DAMAGE SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICATOR.

Please review the WEEDS CONTROLLED section of this label for specific instructions and application rates for controlling various perennial and annual weeds.

If Glyphosate 4 treatments are applied to corn using hooded sprayers, do not graze or feed corn forage or fodder to livestock.

Do not apply more than 3 quarts of Glyphosate 4 per acre per year for hooded sprayer applications.

#### FALLOW AND REDUCED TILLAGE SYSTEMS

FOR AERIAL APPLICATION IN CALIFORNIA AND ARKANSAS, REFER TO THE SECTION TITLED SUPPLEMENTAL USES AT THE END OF THIS LABEL.

For controlling annual weeds prior to emergence of labeled crops, use Glyphosate 4 in fallow and reduced tillage systems. For specific application rates and instructions, please review the WEEDS CONTROLLED section of this label. Treatments of Glyphosate 4 may be applied using aerial or ground spray equipment. Review the APPLICATION EQUIPMENT AND TECHNIQUES section of this label for further information.

#### TANK MIXTURES

- GLYPHOSATE 4 plus BANVEL plus NONIONIC SURFACTANT
- GLYPHOSATE 4 plus 2,4-D plus NONIONIC SURFACTANT
- GLYPHOSATE 4 plus GOAL™ plus NONIONIC SURFACTANT

IN CALIFORNIA, DO NOT APPLY 2,4-D OR BANVEL TANK MIXTURES BY AIR.

Treatments of Banvel or 2,4-D must be applied a minimum of 7 days before planting corn.

A mixture of Banvel with Glyphosate 4 may provide short-term residual control of some weed species. However, some crop injury may result if Banvel is applied within 45 days of planting. Please review the 2,4-D and Banvel labels for use instructions and cropping restrictions.

#### Glyphosate 4 plus Goal (or Generic Equivalent) Tank Mixtures

For controlling the weeds listed below, use Glyphosate 4 alone or in a tank mixture with Goal plus 0.5 to 1 percent nonionic surfactant by total spray volume.

Treatments should be applied when weeds are actively growing and at the height/recommended stage of growth specified below. Avoid application when weeds are under moisture stress, when dust is on foliage, or when straw canopy is covering the weeds as unsatisfactory control may result.

#### GLYPHOSATE 4 @ 12 FL OZ PER ACRE

| Species           | Maximum length / height in inches |
|-------------------|-----------------------------------|
| Wheat             | 18                                |
| Barley            | 12                                |
| Bluegrass, annual | 6                                 |
| Barnyardgrass     | 6                                 |
| Rye               | 6                                 |

#### GLYPHOSATE 4 @ 16 FL OZ PER ACRE

| Species                   | Maximum length / height in inches |
|---------------------------|-----------------------------------|
| Annual Weeds Above, Plus: |                                   |
| Ryegrass, annual          | 6                                 |
| Chickweed                 | 6                                 |
| Groundsel                 | 6                                 |
| Marestail                 | 6                                 |
| Rocket, London            | 6                                 |
| Shepherd's purse          | 6                                 |
| Crabgrass                 | 12                                |
| Johnsongrass, seedling    | 12                                |
| Lambsquarters             | 12                                |
| Oats, wild                | 12                                |
| Pigweed, redroot          | 12                                |
| Mustards                  | 12                                |

NOTE: 32 fluid ounces of Glyphosate 4 per acre should be used where heavy weed densities exist.

#### GLYPHOSATE 4 @ 12 FL OZ / Acre plus GOAL™ @ 2 - 4 FL OZ / Acre

| Species                   | Maximum length / height in inches |
|---------------------------|-----------------------------------|
| Annual Weeds Above, Plus: |                                   |
| Cheeseweed, common        | 3                                 |
| Chickweed                 | 3                                 |
| Groundsel                 | 3                                 |
| Rocket, London            | 6                                 |
| Shepherd's purse          | 6                                 |

#### GLYPHOSATE 4 @ 16 FL OZ / Acre plus GOAL™ @ 2 - 4 FL OZ / Acre

| Species                   | Maximum length / height in inches |
|---------------------------|-----------------------------------|
| Annual Weeds Above, Plus: |                                   |
| Cheeseweed, common        | 6                                 |
| Chickweed                 | 12                                |
| Groundsel                 | 6                                 |
| Rocket, London            | 12                                |
| Shepherd's purse          | 12                                |

\*\* The higher rate of Goal should be used when weeds approach maximum height or stands are dense.

NOTE:  
• Mix 32 fluid ounces of Glyphosate 4 per acre with 2-4 ounces of Goal per acre on heavy weed densities.

Ground or aerial spray equipment may be used to apply recommended tank mixtures. Please review this label's WEEDS CONTROLLED section for instructions and specific application rates.

#### ECOFARMING SYSTEMS

The uses listed in this section are not registered for use in California.

The "Ecofarming System" consists of a rotation of winter wheat, corn/sorghum, and ecofallow.

The following tank mixtures may be used for controlling emerged annual weeds prior to planting corn or sorghum in the Ecofarming System.

#### Glyphosate 4 @ 16 to 20 FL OZ per acre plus 2,4-D at 0.375 to 0.5 pound a.i. per acre plus Atrazine at 0.75 to 1 pound a.i. per acre plus Lasso® herbicide at 2.5 to 3 quarts per acre

The tank mixture listed above should be applied in a liquid fertilizer carrier of 28-0-0 or 32-0-0 analysis at 20 to 30 gallons per acre. Water may be used to dilute the liquid fertilizer to attain the desired carrier volume.

WEEDS CONTROLLED: This tank mixture will control the weeds listed below up to a maximum of 4 inches in height.

Brome, downy  
*Bromus tectorum*

Cheat  
*Bromus secalinus*

Foxtail, green  
*Setaria viridis*

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Foxtail, yellow  
*Setaria lutescens*

Kochia\*  
*Kochia scoparia*

Lettuce, prickly  
*Lactuca serriola*

Pigweed, redroot  
*Amaranthus retroflexus*

Thistle, Russian  
*Salsola kali*

Wheat, volunteer  
*Triticum aestivum*

\* For improved results when applying to kochia, add Banvel at a rate of 4 fluid ounces per acre (0.125 pound of active ingredient per acre) to the above tank mixture.

Users may reduce the risk of crop injury from 2,4-D or Banvel by applying this mixture 7 to 14 days prior to planting.

Refer to the label booklet for Lasso herbicide for pre-emergence weed control with this tank mixture.

Prior to mixing/applying this tank mix, review the specific product labels of all tank mix products for cautionary statements and crop rotation restrictions.

#### AID TO TILLAGE

Glyphosate 4 will control downy brome, volunteer wheat, cheat, foxtail, and tansy mustard when used in conjunction with preplant tillage practices. Apply 8 fluid ounces of Glyphosate 4 plus 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. Apply when weeds are actively growing and before they reach 6 inches in height. Treatments must be followed by conventional tillage practices within 15 days after treatment and before regrowth occurs. Allow a minimum of 1 day after treatment before tillage. Reduced effectiveness may result if tank mixtures with residual herbicides are used.

#### POSTHARVEST GRAIN SORGHUM REGROWTH CONTROL

Glyphosate 4 may be applied to grain sorghum (milo) after harvest for suppression or control of regrowth. For control, apply 1 quart of Glyphosate 4 per acre. For suppression, use 1.5 pints of this product per acre. In both cases, use a 0.5 percent nonionic surfactant in 3 to 10 gallons of spray solution per acre.

#### PASTURES

Apply prior to planting forage grasses and legumes.

**Pasture or Hay Crop Renovation:** Apply Glyphosate 4 as a broadcast spray prior to planting forage grasses or legumes to control the perennial and annual weeds listed in this label. Domestic livestock should be removed prior to application. Wait 8 weeks after treatment before grazing or harvesting.

**Spot Treatment:** Glyphosate 4 can be used as a spot treatment when applied as recommended herein. Spot treatments may be applied to control perennial and annual weeds listed in this label when growing in pastures, forage grasses and forage legumes composed of bermudagrass, bahiagrass, brome, bluegrass, orchardgrass, fescue, ryegrass, wheatgrass, timothy, clover, or alfalfa.

**Wiper Application:** Glyphosate 4, when applied according to instructions, controls or suppresses the weeds listed under **WIPER APPLICATORS** in the **SELECTIVE EQUIPMENT** section of this label.

For both spot treatment and wiper application, apply only in areas where the movement of domestic livestock can be controlled. Treat no more than one-tenth of any acre at one time. Additional treatments may be made in the same area at intervals of 30 days. Domestic livestock should be removed prior to application. Wait 2 weeks after treatment before grazing or harvesting.

#### SUGARCANE

When applied as directed for **CROPPING SYSTEMS**, under the conditions described, Glyphosate 4 controls those emerged annual and perennial weeds listed on this label growing in or around sugarcane or in fields prior to the emergence of plant cane. This product will also control undesirable sugarcane.

**NOTE:** Where multiple treatments are needed, do not apply more than 10.6 quarts of Glyphosate 4 per acre per year. Do not apply this product to plants in or around canals, ditches, or ponds containing water that will be used for irrigation.

**Broadcast Treatment:** Apply Glyphosate 4 to emerged weeds in 10 to 40 gallons of water per acre prior to the emergence of plant cane.

For control of various perennial and annual weeds, please see this label's **WEEDS CONTROLLED** section for specific instructions and rates of application.

For removing last stubble or ratoon cane, apply 4 to 5 quarts of Glyphosate 4 in 10 to 40 gallons of water per acre. Apply to new growth having a minimum of 7 or more new leaves. Wait a minimum of 7 days after treatment before tillage.

**Spot Treatment in or Around Sugarcane Fields:** For use with hand-held equipment, review the dilution and application rate information contained in the **MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS** and **WEEDS CONTROLLED** sections of this label.

To control diseased or volunteer sugarcane, apply a 1 percent solution of Glyphosate 4 in water and spray to wet foliage of plants to be controlled.

**NOTE:** Diseased or volunteer sugarcane should have at least 7 new leaves prior to application.

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

Do not feed or graze treated sugarcane forage following application.

## CONSERVATION TILLAGE, MINIMUM TILLAGE, AND NO-TILL SYSTEMS

### CORN AND SOYBEAN Tank Mixtures

The uses listed in this section are not registered for use in California.

When applied according to the instructions and under the conditions described herein, tank mixtures listed in this section will control many emerged weeds and provide pre-emergence control of many annual weeds where soybeans or corn will be planted directly into a cover crop, established sod or in previous crop residues.

Review crop rotation and cautionary statement information listed on the labels of all products used in these tank mixtures. Review the **MIXING, ADDITIVES, AND APPLICATION INSTRUCTIONS** section of this label for mixing instructions.

Apply these tank mixtures in 10 to 20 gallons of water, or in 10 to 60 gallons of nitrogen solution per acre before, during, or after planting. Do not apply these mixtures after crop emergence.

When tank mixing Glyphosate 4 with residual herbicides, add an agriculturally approved nonionic surfactant at the rate of 0.5 to 1 percent by volume of spray solution. Adding 1 to 2 percent dry ammonium sulfate by weight may improve the effectiveness of this product.

**NOTE:** Do not exceed 4 quarts of Glyphosate 4 per acre when using these tank mixtures.

#### CORN

For residual control, this product may be tank-mixed with the following herbicides or combination of herbicides:

|                     |                         |
|---------------------|-------------------------|
| ATRAZINE            | LISSO/ALACHLOR          |
| BICEP MAGNUM™       | MICRO-TECH <sup>1</sup> |
| BULLET <sup>2</sup> | PARTNER <sup>3</sup>    |
| CYANAZINE           | PROWL™                  |
| DUAL MAGNUM™        | SIMAZINE                |
| LARIAT <sup>4</sup> |                         |

To improve burndown, tank mix Glyphosate 4 with dicamba or 2,4-D. Treatments of 2,4-D or dicamba must be made a minimum of 7 days before planting corn. Please review the **WEEDS CONTROLLED** section of this label for specific rate information.

#### SOYBEANS

For residual control, apply Glyphosate 4 with the following herbicides or combination of herbicides:

|                |               |
|----------------|---------------|
| CANOPY™        | PARTNER       |
| COMMAND™       | PREVIEW™      |
| DUAL MAGNUM    | PROWL         |
| GEMINI™        | PURSUIT™      |
| LISSO/ALACHLOR | PURSUIT PLUS™ |
| LEXONE™        | SCEPTER™      |
| LINURON        | SENCOR™       |
| LOROX™ PLUS    | SQUADRON™     |
| MICRO-TECH     | TURBO™        |

To improve burndown, tank mix Glyphosate 4 with 2,4-D or 2,4-DB. (Review the 2,4-D label for intervals between application and planting.)

#### CORN AND SOYBEANS

**Annual Weeds:** For difficult to control weeds such as barnyardgrass, crabgrass, fall panicum, broadleaf signalgrass and shattercane that are up to 2 inches tall, and for Pennsylvania smartweed that is up to 6 inches tall, apply Glyphosate 4 at the rate of 2 pints per acre in these tank mixtures. For other annual weeds on this label, apply 1 to 1.5 pints of Glyphosate 4 per acre when weeds are smaller than 6 inches tall, and 2 to 3 pints per acre when weeds exceed 6 inches tall. Review this label's **WEEDS CONTROLLED** section for a complete list of annual weeds controlled.

**Perennial Weeds:** When using minimum tillage systems at normal application times, perennial weeds may not be at the proper stage of development for control. To determine the proper stage of development for perennial weeds, review the **WEEDS CONTROLLED** section of this label.

Under these conditions, use 2 to 4 quarts of Glyphosate 4 per acre in the tank mixtures mentioned above to obtain top kill and reduce competition from many emerged perennial broadleaf and grass weeds. See the **WEEDS CONTROLLED** section of this label for information on emerged perennial weeds controlled.

To obtain the desired stage of growth, it may be necessary to apply Glyphosate 4 alone in the late summer or fall and then follow with a label-approved, seedling weed-control program at planting.

**NOTE:** USE OF THESE TANK MIXTURES TO CONTROL JOHNSONGRASS OR BERMUDAGRASS IN MINIMUM TILLAGE SYSTEMS IS NOT RECOMMENDED. To control bermudagrass, review the **CONTROL OF PERENNIAL WEEDS** section of this label and follow its instructions, then use a label-approved, seedling weed-control program in a minimum tillage or conventional tillage system. To control Johnsongrass, review the **CONTROL OF PERENNIAL WEEDS** section and follow its instructions, then use a label-approved, seedling weed-control program with conventional tillage.

#### PREHARVEST APPLICATIONS

Glyphosate 4 will control those perennial and annual weeds listed on this label when applied prior to the harvest of soybeans, cotton, grain sorghum (milo), and wheat. Apply as directed and under the conditions described.

Please review the **WEEDS CONTROLLED** section of this label for specific rates and application instructions to control various perennial and annual weeds.

Use ground or aerial equipment to apply this product. However, DO NOT EXCEED 1 QUART OF GLYPHOSATE 4 PER ACRE WHEN APPLYING BY A/R. For specific instructions on ground and aerial applications, please review the **APPLICATION EQUIPMENT AND TECHNIQUES** section of this label.

**NOTE:** Glyphosate 4 may not be applied to crops grown for seed—a reduction of vigor or of germination may result.

Glyphosate 4 is not registered in California on preharvest grain sorghum (milo).

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## SOYBEANS

Apply Glyphosate 4 after pods have set and have lost all green color. Allow at least 7 days between the application of Glyphosate 4 and harvesting. Exercise caution to avoid excessive seed shatter loss from ground application equipment.

Do not permit livestock to graze, and do not harvest treated crop for feed within 25 days after the last preharvest application.

FOR PREHARVEST APPLICATIONS, DO NOT APPLY MORE THAN 6 QUARTS OF GLYPHOSATE 4 PER ACRE.

## COTTON

**Broadcast Applications.** Use either aerial or ground spray equipment to apply Glyphosate 4. When using broadcast equipment by ground application, apply Glyphosate 4 in 10 to 20 gallons of water per acre. When applying by air, apply treatments in 3 to 10 gallons of water per acre.

When treatments are applied prior to cotton harvest, Glyphosate 4 provides weed control and cotton regrowth inhibition. For cotton regrowth inhibition, apply 1 to 2 quarts of Glyphosate 4 in 3 to 10 gallons of water per acre. For preharvest applications, do not exceed 2 quarts of this product per acre. THE USE OF ADDITIVES FOR PREHARVEST TREATMENTS TO COTTON IS PROHIBITED.

Users may tank mix Glyphosate 4 with Folex™, DEF™ 6, or Prep™ to improve cotton leaf drop.

Allow at least 7 days between the last treatment and cotton harvest.

Apply Glyphosate 4 after sufficient bolls have developed. If applications are made prior to this time, maximum yield potential could be affected.

Do not feed treated cotton forage to livestock or permit livestock to graze treated cotton forage or hay after preharvest applications.

## GRAIN SORGHUM (MILO)

Apply at a minimum of 7 days prior to harvest and at 30 percent or less grain moisture.

Apply up to 2 quarts of Glyphosate 4 per acre.

## WHEAT

Treatments should be applied at a minimum of 7 days prior to harvest, and after the hard-dough stage of grain (a maximum of 30 percent grain moisture).

FOR PREHARVEST APPLICATIONS TO WHEAT, DO NOT EXCEED 1 QUART GLYPHOSATE 4 PER ACRE.

## TREE AND VINE CROPS

Use Glyphosate 4 to control weeds in established vineyards, orchards, and groves, or for site preparation prior to transplanting those crops listed in this section. Unless directed otherwise in this section, treatments can be applied with Controlled Droplet Applicator (CDA), shielded sprayers, boom equipment, hand-held and high-volume wands, lances, orchard guns, or with wiper equipment. For specific information

regarding the use of application equipment, please review the APPLICATION EQUIPMENT AND TECHNIQUES section of this label.

Refer to the WEEDS CONTROLLED section of this label and to specific recommendations in this section for rates to be used.

### NOTE:

To control weeds originating from seeds or from underground parts of untreated weeds, multiple treatments may be needed. Glyphosate 4 does not provide residual control of weeds. Use repeated applications of Glyphosate 4 for subsequent weed control. However, do not exceed 10.6 quarts of this product per acre per year.

EXERCISE EXTREME CARE TO ENSURE THAT THIS PRODUCT'S SOLUTION, SPRAY, DRIFT OR MIST DOES NOT COME INTO CONTACT WITH FOLIAGE OR GREEN BARK OF TRUNK, BRANCHES, SUCKERS, FRUIT OR OTHER PARTS OF TREES OR VINES. IF THIS PRODUCT CONTACTS OTHER THAN MATURED BROWN BARK, SERIOUS CROP DAMAGE OR DESTRUCTION MAY RESULT.

DO NOT PAINT OUT STUMPS WITH GLYPHOSATE 4. ADJACENT TREES MAY BE INJURED FROM ROOT GRAFTING.

Reduced product effectiveness may occur if treatments are applied to perennial or annual weeds that have been grazed, mowed, or cut, and have not been allowed to regrow to the recommended stage for treatment.

Please review the WEEDS CONTROLLED section of this label for instructions and application rate information, along with the specific recommendations below.

## MIDDLES MANAGEMENT

FOR CONTROL OF ANNUAL WEEDS IN MIDDLES BETWEEN ROWS OF TREE AND VINE CROPS.

When applying to citrus crops, treat uniformly between trees.

- GLYPHOSATE 4 ●
- GLYPHOSATE 4 plus GOAL ●

Use Glyphosate 4 alone or in mixtures with Goal to control or suppress the annual weeds listed below.

Glyphosate 4 can be applied alone or in a mixture with Goal at recommended rates, plus 0.5 to 1 percent nonionic surfactant by spray volume in 3 to 10 gallons of water per acre. Treatments should be applied when weeds are actively growing and are less than 6 inches in diameter or height. Irrigate prior to application if weeds are under stress caused by drought. Reduced product effectiveness may result if weeds have been mowed prior to application. Apply a maximum of 48 ounces Glyphosate 4 per acre to control weeds which have been mowed, are stressed, or are growing in dense populations.

| WEED SPECIES                     | MAXIMUM HEIGHT / DIAMETER (in inches) | RATE PER ACRE (Fluid Ounces) |      |
|----------------------------------|---------------------------------------|------------------------------|------|
|                                  |                                       | Glyphosate 4                 | Goal |
| Barley<br><i>Hordeum vulgare</i> | 6                                     | 8                            | --   |

| WEED SPECIES  | MAXIMUM HEIGHT / DIAMETER (in inches) | RATE PER ACRE (Fluid Ounces) |                       |
|---|---------------------------------------|------------------------------|-----------------------|
|   |                                       | Glyphosate 4                 | Goal                  |
| Bluegrass, annual<br><i>Poa annua</i>   | 6                                     | 8                            | --                    |
| Barleygrass<br><i>Echinochloa crus-galli</i><br>Chickweed, common<br><i>Stellaria media</i><br>Red Maids<br><i>Calandrinia ciliata</i>  | 6                                     | 12                           | --                    |
| Crabgrass<br><i>Digitaria spp.</i><br>Fleabane, hairy<br><i>Coryza bonariensis</i><br>Groundsel, common<br><i>Senecio vulgaris</i><br>Junglerice<br><i>Echinochloa colonum</i><br>Lambsquarters, common<br><i>Chenopodium album</i><br>Pigweed, redroot<br><i>Amaranthus retroflexus</i><br>Rocket, London<br><i>Sisymbrium irio</i><br>Ryegrass, common<br><i>Lolium multiflorum</i><br>Shepherd's-purse<br><i>Capsella bursa-pastoris</i><br>Sowthistle, annual<br><i>Sonchus oleraceus</i> | 6                                     | 16<br>OR<br>15 to 32         | --<br><br>+ 4 to 16** |
| Cheeseweed, common<br><i>Malva spp.</i>   | 3                                     | 12 to 32                     | + 4 to 16             |
| Cheeseweed, common<br><i>Malva spp.</i><br>Filaree*<br><i>Erodium spp.</i><br>Horseweed/Marestail<br><i>Coryza canadensis</i><br>Nettle, stinging<br><i>Urtica dioica</i><br>Purslane, common*<br><i>Portulaca oleracea</i>   | 6                                     | 16 to 32                     | + 4 to 16             |

\* For suppression only.

\*\* Mixing this product with Goal is recommended when weeds are stressed or growing in dense populations.

## STRIPS

FOR PERENNIAL AND ANNUAL WEEDS IN STRIPS OF TREE AND VINE CROPS.

## TANK MIXTURES WITH RESIDUAL HERBICIDES

The following mixtures control emerged annual weeds and provide control or suppression of emerged perennial weeds listed on this label. The residual herbicides listed below will provide pre-emergence control of weeds listed on the individual herbicide product labels.

- GLYPHOSATE 4 plus GOAL 2XL
- GLYPHOSATE 4 plus KARMEX® DF
- GLYPHOSATE 4 plus KROVAR I
- GLYPHOSATE 4 plus KROVAR II
- GLYPHOSATE 4 plus SIMAZINE, PRINCEP CALIBER 90
- GLYPHOSATE 4 plus SIMAZINE 4L
- GLYPHOSATE 4 plus SIMAZINE 80W
- GLYPHOSATE 4 plus SOLICAM® 80DF
- GLYPHOSATE 4 plus SURFLAN AS or Oryzalin 4 A.S.
- GLYPHOSATE 4 plus SURFLAN 75W
- GLYPHOSATE 4 plus SIMAZINE (80W, or 4L, or PRINCEP CALIBER 90) plus Oryzalin 4 A.S. or SURFLAN (AS or 75W)
- GLYPHOSATE 4 plus GOAL 2XL plus Oryzalin 4 A.S. or SURFLAN (AS or 75W)
- GLYPHOSATE 4 plus GOAL 2XL plus SIMAZINE (80W, or 4L, or PRINCEP CALIBER 90)
- GLYPHOSATE 4 plus GOAL 2XL plus Oryzalin 4 A.S. or SURFLAN (AS or 75W) plus SIMAZINE (80W, 4L, or PRINCEP CALIBER 90)

These tank mixtures can not be applied in Puerto Rico.

When tank-mixing with residual herbicides, add an agriculturally approved nonionic surfactant at 0.5 to 1 percent by volume of spray solution.

Review the tank mix herbicides' individual product labels for specific crops, application rates, geographical restrictions, and precautionary statements.

Read and carefully observe the cautionary statements, claims, rates, and all other information on product labels of all herbicides used.

## RECOMMENDED RATES

**Annual Weeds:** Use 1 to 5 quarts of Glyphosate 4 per acre in these tank mixtures. Rates at the high end of the recommend range should be used if weeds are stressed, are higher than 12 inches tall, or are growing in dense populations.

**Perennial Weeds:** For control or suppression of perennial weeds, apply 1 pint to 5 quarts of Glyphosate 4 per acre. Review and follow the instructions in the WEEDS CONTROLLED section of this label for application rates and stage of growth information for specific perennial weeds.

GLYPHOSATE 4 plus GOAL plus SIMAZINE/Oryzalin 4 A.S. (or SURFLAN A.S.)

For postemergence control of the weeds listed below, mix Glyphosate 4 with low rates of Goal in 3-way or 4-way mixtures with Simazine and/or Oryzalin 4 A.S. (or Surflan A.S.).

Review the labels for simazine and Oryzalin 4 A.S. (or Surflan A.S.) for important information, including pre-emergence rates, weeds controlled, and precautionary statements.

Use 3 to 40 gallons of water when applying these tank mixtures. Add a nonionic surfactant to the spray solution at the rate of 0.5 to 1 percent by total spray volume.

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For controlling the following weeds, apply 1 to 5 quarts of Glyphosate 4 per acre, plus 4 to 48 fluid ounces of Goal per acre plus the applicable rates of simazine and/or Surflan (or Oryzalin 4 A.S.) listed on their respective labels.

Barley, wild  
*Hordeum leporinum*  
 Bluegrass, annual  
*Poa annua*  
 Cheeseweed, common  
*Malva spp.*  
 Chickweed, common  
*Stellaria media*  
 Filaree\*  
*Erodium spp.*  
 Fleabane, hairy  
*Conyza bonariensis*  
 Groundsel, common  
*Senecio vulgaris*  
 Horseweed/Marestail  
*Conyza canadensis*  
 Nettle, stinging  
*Urtica dioica*  
 Pineappleweed  
*Matricaria matricariodes*  
 Rocket, London  
*Sisymbrium irio*  
 Shepherd's-purse  
*Capsella bursa-pastoris*  
 Sowthistle, annual  
*Sonchus oleraceus*

\* Use at least 1.5 quarts of Glyphosate 4 in these mixtures.

**NOTE:** For pre-emergence weed control, these recommendations do not preclude the use of higher, labeled rates of Goal in these tank mixtures.

#### PERENNIAL GRASS SUPPRESSION IN ORCHARD FLOORS

When applied in accordance with instructions, Glyphosate 4 will suppress vegetative growth as described below.

#### Bahiagrass

Glyphosate 4 will significantly inhibit seedhead emergence and will suppress vegetative growth for approximately 45 days with a single application, and with sequential applications, approximately 120 days. Apply Glyphosate 4 approximately 1-2 weeks after full green-up, or after mowing to a uniform height of 3 to 4 inches. Treatments must be made before seedhead emergence. Apply 6 fluid ounces of Glyphosate 4 with 0.5 to 1 percent nonionic surfactant by total spray volume in 10 to 25 gallons of water per acre.

To extend the period of seedhead and vegetative growth suppression, sequential applications of Glyphosate 4 plus nonionic surfactant may be made at intervals of approximately 45 days. To continue suppression of seedheads, sequential applications must be made before seedheads emerge. Apply a maximum of 2 sequential applications annually. For the first sequential application, apply 4 fluid ounces of Glyphosate 4 with nonionic surfactant. For the second sequential application, 2 to 4 ounces may be used at approximately 45 days after the first application.

#### Bermudagrass

For burndown, apply 1 to 2 quarts of Glyphosate 4 with 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 20 gallons of water per acre. East of the Rocky Mountains: Use 1 quart of Glyphosate 4 in 3 to 20 gallons of water per acre. West of the Rocky Mountains: Use 1 to 2 quarts of Glyphosate 4 in 3 to 10 gallons of water per acre. Apply only if reduction of the bermudagrass stand can be tolerated. If burndown is necessary before harvest, allow a minimum of 21 days to ensure enough time for burndown to take place.

**For suppression only (east of the Rocky Mountains):** No earlier than 1 to 2 weeks after full green-up, apply 6 to 16 fluid ounces of Glyphosate 4 with 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 20 gallons of water per acre. If mowing before applying treatment, ensure a height of at least 3 inches is maintained. For shaded conditions or where a lesser degree of suppression is needed, apply at a rate of 6 to 10 ounces of this product plus nonionic surfactant. In areas where bermudagrass injury and stand reduction can be tolerated, sequential applications may be made when regrowth occurs.

**For suppression only (west of the Rocky Mountains):** No earlier than 1 to 2 weeks after full green-up, apply 16 fluid ounces of Glyphosate 4 with 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre to bermudagrass up to 6 inches tall. If mowing before applying treatment, ensure a height of at least 3 inches is maintained. In areas where bermudagrass injury and stand reduction can be tolerated, sequential applications may be made when regrowth occurs.

#### Cool Season Grass Covers

For suppressing quackgrass, orchardgrass, fine fescue and tall fescue, apply 8 fluid ounces of Glyphosate 4 with 0.5 to 1 percent nonionic surfactant by total spray volume in 10 to 20 gallons of water per acre. Improved results may be obtained by adding ammonium sulfate to the spray solution at the rate of 2 percent by weight or 17 pounds per 100 gallons of spray solution.

For suppressing Kentucky bluegrass covers, apply 6 fluid ounces of Glyphosate 4 with 0.5 to 1 percent nonionic surfactant. Do not add ammonium sulfate to the mix.

For optimum results, mow cool-season grass covers in spring to level their height, then apply the recommended treatment rate of Glyphosate 4 at 3 to 4 days after mowing. Treatment should be avoided for cool season grass covers under poor growing conditions, such as disease, insect damage, or drought stress (drip irrigation).

#### LOW VOLUME APPLICATION (FLORIDA AND TEXAS)

For burndown or control of listed weeds, apply the recommended rates of Glyphosate 4 with 0.5 to 1 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre. In areas where weed foliage is dense, use 10 to 30 gallons of water per acre.

#### Annual Weeds

**Goatweed:** Apply 2 to 3 quarts of Glyphosate 4 per acre with 17 pounds of ammonium sulfate per 100 gallons of water plus 0.5 to 1 percent nonionic surfactant by total spray volume. Apply in 20 to 30 gallons of water per acre when plants are actively growing. When plants are 8 inches tall, use 2 quarts per acre. When plants are taller than 8

inches, use 3 quarts per acre. Adding Krovar II or Karmex when goatweed is taller than 8 inches may improve control. Follow labeled rates of these residual products.

Review the Krovar II and Karmex labels and carefully observe all claims, cautionary statements, application rates, and all other information.

#### Perennial Weeds

Apply when weeds are actively growing and are at the growth stages described in the PERENNIAL WEEDS CONTROLLED section of this label. After mowing, allow weeds to regrow to the recommended stage of development before treating.

| WEED SPECIES                         | GLYPHOSATE 4<br>RATE PER ACRE |        |        |        |
|--------------------------------------|-------------------------------|--------|--------|--------|
|                                      | 1 Qt.                         | 2 Qts. | 3 Qts. | 5 Qts. |
| Bermudagrass                         | B                             | —      | PC     | C      |
| Guineagrass: Texas and Florida Ridge | B                             | C      | C      | C      |
| Guineagrass: Florida Flatwoods       | —                             | B      | C      | C      |
| Pargrass                             | B                             | C      | C      | C      |
| Torpedograss                         | S                             | —      | PC     | C      |

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

#### TREE CROPS

**Citrus Fruits:** Calamondin, chironja, citron, grapefruit, kumquat, lemon, lime, mandarin orange, orange, pummelo, tangelo, tangerine, tangors.

**Nuts:** Almond, bechnut, Brazil nut, butternut, cashew, chestnuts, chinquapin, filbert, hazel nut, hickory nut, macadamia, pecan, pistachio, walnut.

**Pome Fruit:** Apple, loquat, mayhaw, pear, quince.

**Stone Fruit:** Apricots, cherries, nectarines, olives, peaches, plums/prunes

For use on cherries, any application equipment described in this section can be used in all states.

For use on citron and olives, only apply as a directed spray.

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, apply only 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 which 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.

**Tropical Fruit:** Acerola<sup>1</sup>, atemoya<sup>2</sup>, avocado<sup>3</sup>, banana<sup>4</sup>, breadfruit<sup>1</sup>, canistel<sup>1</sup>, carambola<sup>1</sup>, cherimoya<sup>1</sup>, cocoa beans<sup>1</sup>, coffee<sup>1</sup>, dates<sup>1</sup>, figs<sup>1</sup>, genip<sup>1</sup>, guava<sup>1</sup>, jaboticaba<sup>1</sup>, jackfruit<sup>1</sup>, longan<sup>1</sup>, lychee<sup>1</sup>, mango<sup>1</sup>, mayhaw<sup>1</sup>, papaya<sup>1</sup>, passion fruit<sup>1</sup>, persimmons<sup>1</sup>, plantains<sup>1</sup>, pomegranate<sup>1</sup>, sapodilla<sup>1</sup>, sapote<sup>1</sup>, sourp<sup>1</sup>, sugar apple<sup>1</sup>, tamarind<sup>1</sup>, tea<sup>1</sup>. In coffee and banana, delay applications 3 months after transplanting to allow the new coffee or banana plant to become established.

#### NOTES:

- <sup>1</sup> Wait at least 14 days after last application to harvest.
- <sup>2</sup> Wait at least 3 days after last application to harvest.
- <sup>3</sup> Wait at least 17 days after last application to harvest.
- <sup>4</sup> Wait at least 28 days after last application to harvest.
- <sup>5</sup> Wait at least 1 day after last application to harvest.

#### VINE CROPS

##### Kiwi Fruit

**Grapes:** Any variety of table, wine or raisin grape may be treated with any equipment listed in this section.

Applications should not be made when green shoots, canes, or foliage are in the spray zone.

Allow a minimum of 14 days between last application and harvest.

In the northeast and Great Lakes regions, applications must be made prior to the end of bloom stage of grapes to avoid injury.

#### SUPPLEMENTAL USES

The additional label information that follows applies to the specific states, applications, uses, crops, and conditions provided in each. Information within these supplemental instructions is in addition to the instructions, uses, and precautions mentioned above. In the event of a conflict between information in the original label above and the information in the supplemental instructions below, follow the information specified in the supplemental instructions.

Supplemental uses include the following:

1. POSTEMERGENCE APPLICATIONS TO SOYBEANS WITH THE ROUNDUP READY<sup>®</sup> GENE
2. IN-CROP APPLICATIONS TO COTTON WITH THE ROUNDUP READY<sup>®</sup> GENE
3. POSTEMERGENCE APPLICATIONS TO CORN WITH THE ROUNDUP READY<sup>®</sup> GENE
4. CANOLA WITH THE ROUNDUP READY<sup>®</sup> GENE
5. AERIAL APPLICATIONS IN FRESNO COUNTY, CALIFORNIA ONLY (From February 15 through March 31 only)
6. AERIAL APPLICATION IN CALIFORNIA ONLY
7. AERIAL APPLICATIONS IN ARKANSAS ONLY

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## SUPPLEMENTAL USE # 1

### POSTEMERGENCE APPLICATIONS TO SOYBEANS WITH THE ROUNDUP READY® GENE

NOTE: See GENERAL INFORMATION and MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS sections of this label booklet for additional product performance information.

#### GENERAL INFORMATION

FOR POST-EMERGENCE APPLICATION ONLY ON SOYBEAN VARIETIES DESIGNATED AS CONTAINING THE ROUNDUP READY® GENE

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

The Roundup Ready designation indicates that the soybean contains a patented gene which provides tolerance to this herbicide. Information on Roundup Ready soybeans may be obtained from your seed supplier.

#### Application Instructions

This product may be applied postemergence to Roundup Ready soybeans from the cracking stage through flowering. Allow a minimum of 14 days between final application and harvest or feeding of soybean grain, forage or hay.

#### Maximum Allowable Yearly Rates

**Cropping Season:** Do not use more than 8 quarts (256 fluid ounces) Glyphosate 4 per acre.

**Preplant, preemergence:** Do not use more than 5 quarts (160 fluid ounces) Glyphosate 4 per acre prior to crop emergence.

**In-crop:** Do not use more than a total of 3 quarts (96 fluid ounces) Glyphosate 4 per acre in single or multiple in-crop applications from cracking throughout the flowering stage.

**Preharvest:** Do not use more than 1 quart (32 fluid ounces) Glyphosate 4 per acre applied after loss of green color in soybean pods until 14 days before harvest.

When applied as directed, Glyphosate 4 will control 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.

#### Precautions/Restrictions

The combined total application from crop emergence through harvest must not exceed 3 quarts (96 fluid ounces) per acre. Do not use more than 2 quarts (64 fluid ounces) Glyphosate 4 per acre for any single in-crop application. Do not use a combined total of more than 2 quarts (64 fluid ounces) Glyphosate 4 per acre during flowering. Allow a minimum of 14 days between final application and harvest or feeding of soybean grain, forage or hay.

### INSTRUCTIONS FOR USE ON ROUNDUP READY SOYBEANS (cont.)

There are no rotational crop restrictions following applications of this product.

**For ground applications:** Use the recommended rates of Glyphosate 4 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.

**For aerial applications:** Use the recommended rates of Glyphosate 4 in 3 to 15 gallons of spray solution per acre. Do not exceed 1 quart per acre unless otherwise directed. 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 RATE TABLES

The following rate recommendations will provide control of labeled grasses and broadleaf weeds in conventional and no-till soybean production systems. Refer to the WEEDS CONTROLLED section of this label booklet for rate recommendations for specific annual weeds.

**Notations:** Ag II will not warrant crop safety or weed control when Roundup Ready soybeans are treated with herbicides not specified in these supplemental instructions. Because of the potential for: 1) crop injury, 2) poor weed control from antagonism, and/or 3) rotational crop restrictions, herbicides not specified in these supplemental instructions should not be used, whether applied preemergence or applied postemergence as a tank mixture with Glyphosate 4.

Glyphosate 4 may be used up to 64 fluid ounces per acre in any single application for control of annual weeds, where heavy weed densities exist.

**NOTE:** The following recommendations are based on a clean start at planting by using a burn down application or tillage to control existing weeds before crop emergence. In no-till and stale seedbed systems, a preplant burn-down treatment of 16 to 64 fluid ounces per acre of Glyphosate 4 can be used to control existing weeds prior to crop emergence.

#### MIDWEST / MID-ATLANTIC RECOMMENDATIONS

**Narrow row or drilled soybeans:** A single in-crop application of Glyphosate 4 will provide effective control of labeled weeds. For best results, an initial application of 32 fluid ounces 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 fluid ounces Glyphosate 4 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 24 to 32 fluid ounces per acre may be necessary to control late flushes of weeds.

**Wide row soybeans:** An in-crop application of Glyphosate 4 will

### INSTRUCTIONS FOR USE ON ROUNDUP READY SOYBEANS (cont.)

provide effective control of the initial stand of labeled weeds. For best results, an initial application of 32 fluid ounces 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 new flushes of weeds occur, they can be controlled by sequential applications of this product.

#### Initial and Sequential Applications (If Needed)

| Weed Height (inches) | Rate (fl oz Glyphosate 4 per acre) |
|----------------------|------------------------------------|
| 1 to 3               | 24                                 |
| 4 to 8               | 32                                 |
| 8 to 18              | 48                                 |

**Giant ragweed:** Apply 32 fluid ounces Glyphosate 4 per acre when weeds are 8 to 12 inches tall to avoid the need for sequential application.

**Black nightshade, Pennsylvania smartweed, velvetleaf, and waterhemp:** Apply 32 fluid ounces Glyphosate 4 per acre to weeds 3 to 6 inches tall and 48 fluid ounces per acre when weeds are up to 12 inches tall. For morningglory species, apply 32 fluid ounces per acre when weeds are up to 4 inches tall, and 48 fluid ounces per acre when weeds are up to 6 inches tall.

Some weeds (such as black nightshade, woolly cupgrass, shattercane, wild proso millet, burcumber, and giant ragweed) with multiple germination times may require a sequential application of Glyphosate 4. Suppressed or stunted weeds may also require sequential applications. Sequential applications should be made after some regrowth has occurred. Use a minimum of 24 fluid ounces of Glyphosate 4 per acre for sequential applications.

#### SOUTHEAST RECOMMENDATIONS

**Narrow row, drilled, or wide-row soybeans:** An in-crop application of Glyphosate 4 will provide effective control of the initial stand of labeled weeds. For best results, an initial application of 32 fluid ounces per acre, on 3 to 6 inch weeds is recommended. Weeds will generally be 3 to 6 inches tall 2 to 3 weeks after planting.

#### Initial Treatment

| Weed Height (inches) | Rate (fl oz Glyphosate 4 per acre) |
|----------------------|------------------------------------|
| 3 to 6               | 32                                 |
| 6 to 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 Glyphosate 4 at 16 to 32 fluid ounces per acre may be necessary to control late flushes of weeds.

#### Sequential Application (If Needed)

| Weed Height (inches) | Rate (fl oz Glyphosate 4 per acre) |
|----------------------|------------------------------------|
| 2 to 3               | 16                                 |
| 3 to 6               | 24                                 |
| 6 to 12              | 32                                 |

**Florida pusley, hemp sesbania and spurred anode:** Apply 32 fluid ounces per acre to weeds 2 to 4 inches tall for the initial application.

### INSTRUCTIONS FOR USE ON ROUNDUP READY SOYBEANS (cont.)

Apply 32 fluid ounces per acre when these weeds are 3 to 6 inches tall if a sequential application is necessary.

**Morningglory, black nightshade, ground-cherry, and Pennsylvania smartweed:** Apply 24 fluid ounces per acre on 1 to 3 inch weeds, 32 fluid ounces per acre on 3 to 6 inch weeds, or 48 fluid ounces per acre on 6 to 12 inch weeds for the initial application.

Some weeds (such as black nightshade, broadleaf signalgrass, Texas panicum, burcumber, 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 fluid ounces of this product per acre for sequential applications. The combined total of all in-crop postemergence treatments must not exceed 96 fluid ounces per acre.

#### DELTA/MID-SOUTH RECOMMENDATIONS

**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 fluid ounces 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

| Weed Height (inches) | Rate (fl oz Glyphosate 4 per acre) |
|----------------------|------------------------------------|
| 2 to 4               | 32                                 |
| 5 to 12              | 48                                 |

#### Sequential Application (If Needed)

| Weed Height (inches) | Rate (fl oz Glyphosate 4 per acre) |
|----------------------|------------------------------------|
| 2 to 3               | 16                                 |
| 3 to 6               | 24                                 |
| 6 to 12              | 32                                 |

**Hemp sesbania and spurred anode:** Apply a sequential treatment of 32 fluid ounces per acre on 3 to 6 inch weeds if necessary.

Some weeds (such as black nightshade, broadleaf signalgrass, Texas panicum, burcumber, 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 fluid ounces of this product per acre for sequential applications.

#### PERENNIAL WEEDS RATE RECOMMENDATIONS

A 32 to 64 fluid ounces 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, mare's tail (horseweed), nutsedge, quackgrass, rhizome johnsongrass, ryegrass, trumpet creeper, swamp smartweed, and wintergreen mulch.

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## INSTRUCTIONS FOR USE ON ROUNDUP READY SOYBEANS (cont.)

For best results, allow perennial weed species to achieve at least 6 inches of growth before spraying with Glyphosate 4 herbicide. For additional information on perennial weeds, see the **WEEDS CONTROLLED** section of this label. For some perennial species repeat application may be required to eliminate crop competition throughout the growing season.

**NOTE:** Non-ionic surfactants which are labeled for use with postemergence herbicides may be used. When using additional surfactant, use a 0.5 percent surfactant concentration (2 quarts per 100 gallons of spray solution) for surfactants which contain at least 70 percent active ingredient or a 1 percent surfactant concentration (4 quarts per 100 gallons of spray solution) for those surfactants containing less than 70 percent active ingredient.

The addition of certain surfactants to this product may result in some crop response including leaf necrosis, leaf chlorosis or leaf speckling due to the surfactant added to the spray mixture. Read and carefully observe cautionary statements and other information appearing on the surfactant label.

## SUPPLEMENTAL USE # 2

### IN-CROP APPLICATIONS TO COTTON WITH THE ROUNDUP READY™ GENE

**NOTE:** See **GENERAL INFORMATION** and **MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS** sections of this label booklet for essential product performance information. The use of additional surfactant in the spray solution may result in crop injury and reduced yield and is not recommended for over-the-top applications of this product to Roundup Ready cotton.

### GENERAL INFORMATION

**ATTENTION:** FOR USE ONLY OVER-THE-TOP OF OR DIRECTED ONTO IMPROVED COTTON VARIETIES THAT ARE DESIGNATED AS COTTON WITH THE ROUNDUP READY™ GENE. **NOTE:** SEVERE CROP INJURY OR DEATH WILL RESULT IF ANY COTTON VARIETIES NOT PROPERLY DESIGNATED AS HAVING THE ROUNDUP READY GENE ARE SPRAYED WITH THIS PRODUCT.

AVOID CONTACT OF THIS HERBICIDE WITH FOLIAGE, GREEN STEMS, OR FRUIT OF CROPS, OR ANY DESIRABLE PLANTS AND TREES. OTHER THAN CROPS WITH THE ROUNDUP READY GENE, SEVERE INJURY OR DESTRUCTION WILL RESULT.

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

### APPLICATION INSTRUCTIONS

This product will control many troublesome weeds with over-the-top, post-directed, hooded sprayer, or preharvest applications in Roundup Ready cotton.

#### Maximum Allowable Yearly Rates

|  |               |
|--|---------------|
| 1. Combined total per year for all applications      | 8 quarts/acre |
| 2. Preplant, Preemergence applications               | 5 quarts/acre |
| 3. Total in-crop applications from cracking to layby | 4 quarts/acre |
| 4. Maximum preharvest application rate               | 2 quarts/acre |

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 nozzles. Check for even distribution of spray droplets.

For aerial applications, apply this product in 3 to 15 gallons of water per acre.

DO NOT EXCEED A MAXIMUM RATE OF 1 QUART PER ACRE OF THIS PRODUCT WHEN MAKING APPLICATIONS BY AIR, UNLESS OTHERWISE DIRECTED.

FOR AERIAL APPLICATION IN CALIFORNIA OR ARKANSAS, REFER TO THE SUPPLEMENTAL USE INSTRUCTIONS AT THE END OF THIS LABEL FOR SPECIFIC INSTRUCTIONS, RESTRICTIONS AND REQUIREMENTS.

## INSTRUCTIONS FOR USE ON ROUNDUP READY COTTON (cont.)

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. To prevent injury to adjacent desirable vegetation, appropriate buffer zones must be maintained.

There are no rotational crop restrictions following applications 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 to Roundup Ready cotton. Follow the cleaning procedures specified on the label of the product(s) previously used. Cotton is very sensitive to many herbicides at extremely low concentrations and care should be taken to thoroughly clean all equipment prior to use.

In addition to uses listed for cotton in the **CROPPING SYSTEMS** section of this label, the following applications can be made:

**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 four leaf (node) stage of development (until the fifth true leaf reaches the size of a quarter). Over-the-top applications made after the four 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 four 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. The use of additional surfactant in the spray solution may result in crop injury and reduced yield and is not recommended for over-the-top applications of this product to Roundup Ready cotton.

**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 preplant burndown treatment of 16 to 48 fluid ounces of this product per acre.

**Post-directed or hooded applications:** This product may be applied using precision post-directed or hooded sprayers to Roundup Ready cotton through layby. At this stage, post-directed equipment should be used which directs the spray to the base of the cotton plants. Contact of the spray with cotton leaves should be avoided to the maximum extent possible. To minimize spray onto the leaves of the cotton plants, place nozzles in a low position directing a horizontal spray pattern under the cotton leaves to contact weeds in the row, and maintain low spray pressure (less than 30 PSI). For best results, make applications while weeds are small (less than 3 inches). Any single post-directed application should not exceed 1 quart Glyphosate 4 per acre. No more than two applications should be made from the fifth leaf through layby. 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.

## INSTRUCTIONS FOR USE ON ROUNDUP READY COTTON (cont.)

**ATTENTION: USE OF GLYPHOSATE 4 IN ACCORDANCE WITH LABEL DIRECTIONS IS EXPECTED TO RESULT IN NORMAL GROWTH OF ROUNDUP READY COTTON, HOWEVER, VARIOUS ENVIRONMENTAL CONDITIONS, AGRONOMIC PRACTICES AND OTHER FACTORS MAKE IT IMPOSSIBLE TO ELIMINATE ALL RISKS ASSOCIATED WITH THIS PRODUCT, EVEN WHEN APPLICATIONS ARE MADE IN CONFORMANCE WITH THE LABEL SPECIFICATIONS. IN SOME CASES, THESE FACTORS CAN RESULT IN BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS.**

**Salvage Treatment:** This treatment may be used after the four 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 **WEEDS CONTROLLED** section of this label. Glyphosate 4 applied at 1 quart per acre will burndown 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.

**Preharvest applications:** This product may be applied for preharvest annual and perennial weed control as a broadcast treatment to Roundup Ready cotton after 20 percent boll crack. For application rates please see the **WEEDS CONTROLLED** section of this label booklet. This product may be applied using either aerial or ground spray equipment. Aerial and ground applications may be made up to a maximum of 2 quarts per acre. Allow a minimum of 7 days between final application and harvest of cotton or feeding of cotton forage or hay. **THE USE OF ADDITIVES FOR PREHARVEST APPLICATION OF GLYPHOSATE 4 TO ROUNDUP READY COTTON IS PROHIBITED.** **NOTE:** Glyphosate 4 will not enhance the performance of harvest aids when applied to Roundup Ready cotton. **DO NOT APPLY GLYPHOSATE 4 PREHARVEST TO CROPS GROWN FOR SEED.**

### SUPPLEMENTAL USE # 3

#### FOR POSTEMERGENCE APPLICATIONS TO CORN WITH THE ROUNDUP READY™ GENE

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

See GENERAL INFORMATION and MIXING sections of this label booklet for essential product performance information.

#### GENERAL INFORMATION

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

Applying this product to corn hybrids which are not designated as Roundup Ready will result in severe crop injury and yield loss.

The Roundup Ready designation indicates that the corn contains a patented gene which provides tolerance to this herbicide. Information on Roundup Ready corn may be obtained from your seed supplier.

#### APPLICATION INSTRUCTIONS

This product may be applied postemergence to Roundup Ready corn from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 30 inches, whichever comes first. Single in-crop applications of this product must not exceed 1 quart per acre. Sequential in-crop applications of this product from emergence through the V8 stage or 30 inches must not exceed 2 quarts per acre per growing season.

#### Maximum Yearly Rates Allowed

Preplant: Do not apply more than 5 quarts per acre prior to crop emergence.

In-crop: Do not use more than a combined total of 2 quarts Glyphosate 4 per acre in multiple in-crop applications from emergence through the V8 stage or 30 inches.

Preharvest: Do not apply more than 1 quart Glyphosate 4 per acre after maximum kernel fill is complete and the crop is physiologically mature (black layer formation) until 7 days before harvest.

Cropping Season: Do not exceed 8 quarts Glyphosate 4 per acre as a combined total per year for all applications.

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 applications of this product. Applications should be made to actively growing weeds before they reach the maximum size listed in the WEEDS CONTROLLED section of this label booklet. Refer to the MIXING section of this label booklet for proper use instructions.

#### INSTRUCTIONS FOR USE ON ROUNDUP READY CORN (cont.)

The addition of 1 to 2 percent dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this product under hard water conditions, drought conditions or when tank mixed with Bullet, Micro-Tech, or Partner herbicides. Ensure that ammonium sulfate is completely dissolved in the spray tank before adding herbicides. Thoroughly rinse the spray system with clean water after use to reduce corrosion. The addition of other additives, including fertilizers and micro-nutrients are not recommended with this product since this may result in increased potential for crop injury.

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 10 days between in-crop applications of this product. There are no rotational crop restrictions following applications of this product.

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

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

For ground applications: Use the recommended rates of this product in 5 to 20 gallons of spray solution per acre as a broadcast spray. Carefully select correct nozzles and spray pressure to avoid spraying a fine mist. Check for even distribution of spray droplets.

For aerial applications: Use the recommended rates of this product in 3 to 15 gallons of spray solution per acre. Do not exceed 1 quart per acre. See WEEDS CONTROLLED section on this label. 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. TO PREVENT INJURY TO ADJACENT VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.

#### WEED CONTROL RECOMMENDATIONS

Apply 24 to 32 fluid ounces of Glyphosate 4 per acre for control of labeled grasses and broadleaf weeds in conventional and no-till corn production systems. Refer to the WEEDS CONTROLLED section of this label booklet for rate recommendations for specific annual weeds. Glyphosate 4 applied at up to 1 quart per acre will control or suppress the growth of perennial weeds such as: bermudagrass, Canada thistle, common milkweed, field bindweed, hemp dogbane, horse-nettle, nut-sedge, quackgrass, rhizome johnsongrass, redvine, trumpet-creeper, swamp smartweed, and wissem mully. For additional information on perennial weeds, see the PERENNIAL WEEDS portion of the WEEDS CONTROLLED section of this label booklet.

#### Preemergence Followed by Postemergence Weed Control Program

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

#### INSTRUCTIONS FOR USE ON ROUNDUP READY CORN (cont.)

A single in-crop application of this product at the recommended rate will provide control of emerged weeds listed on this label. This product may be applied postemergence to Roundup Ready corn from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 30 inches (free standing), whichever comes first.

#### Postemergence Only Weed Control Program

This product may be applied alone as a postemergence in-crop application to provide control of emerged weeds listed on this label. The postemergence application of this product should be made before the weeds reach a height and/or density that the weeds become competitive with the crop. If new flushes of weeds occur, a sequential application of this product at 24 to 32 fluid ounces per acre will control the labeled grasses and broadleaf weeds. This product may be applied postemergence to Roundup Ready corn from emergence through the V8 stage or until corn height reaches 30 inches (free standing), whichever comes first.

This product may be applied in tank mixture with a labeled rate of Harness™, Harness Xtra, Harness Xtra 5.6L, Micro-Tech, Bullet, Partner, Permit™ or atrazine herbicides. Refer to the specific product label and observe all precautions and limitations on the label for all products used in tank mixtures, including application timing restrictions, soil restrictions, minimum re-cropping interval and rotational guidelines—the more restrictive requirements apply. Tank mixtures with other products may result in increased potential for crop injury and/or weed antagonism. Refer to the table below for height limitation for tank mix partner.

| Tank Mix Partner, | Maximum Height Of Corn<br>For Application |
|-------------------|---|
| Harness           | 11 inches                                 |
| Harness Xtra      |   |
| Harness Xtra 5.6L |   |
| Bullet*           | 5 inches                                  |
| Micro-Tech*       |   |
| Partner*          | 24 inches                                 |
| Permit            |   |
| Atrazine          | 12 inches                                 |

\*Bullet, Micro-Tech and Partner are not registered for use as a postemergence application in Texas.

Bullet, Harness, Micro-Tech and Partner are registered trademarks of Monsanto Company. Permit is a trademark of, and used under license from, Nissen Chemical Industries, Ltd.

### SUPPLEMENTAL USE # 4

#### CANOLA WITH THE ROUNDUP READY™ GENE

See GENERAL INFORMATION and MIXING sections of this label booklet for essential product performance information.

#### GENERAL INFORMATION

USE 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.

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

The Roundup Ready designation indicates the canola contains a patented gene which provides tolerance to this herbicide. Information on Roundup Ready canola may be obtained from your seed supplier.

#### USE RECOMMENDATIONS

This product will control many troublesome emerged weeds when applied preplant, preemergence and/or with over-the-top applications in Roundup Ready canola. Allow a minimum of 60 days between last application and canola harvest.

#### Maximum Allowable Combined Yearly Rate

|  |               |
|--|---------------|
| Preplant and preemergence applications             | 2 quarts/acre |
| Total in-crop application from emergence to 6 leaf | 1 quart/acre  |

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 nozzles. Check for even distribution of spray droplets.

For aerial applications apply this product in 3 to 15 gallons of water 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. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.

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#### INSTRUCTIONS FOR USE ON ROUNDUP READY CANOLA (cont.)

Excessive wind can cause 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**

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.

There are no rotational crop restrictions following applications 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 to Roundup Ready canola. Follow the cleaning procedures specified on the label of the product(s) previously used. Canola can be very sensitive to many herbicides at extremely low concentrations and care should be taken to thoroughly clean all equipment prior to use.

#### Preplant or Preemergent Applications

This product may be applied by aerial or ground application equipment prior to planting or emergence of canola. The maximum combined application rate from all preplant and pre-emergent applications should 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 fluid ounces of this product per acre.

#### Over-the-top Applications

This product may be applied by aerial or ground application equipment postemergence to Roundup Ready canola from emergence through the six leaf stage of development. Applications made during bolting or flowering may result in crop injury and yield loss. To maximize yield potential, make applications early to eliminate competing weeds.

**Single Application:** Apply 16 to 24 ounces per acre no later than the 6-leaf stage for the control of annual weeds. Avoid overlapping applications which may result in temporary yellowing, delayed flowering, and/or growth reduction. Similar injury may result when applications of more than 16 ounces per acre are applied after the 4-leaf stage.

**Sequential Applications:** Apply 16 ounces per acre to 1 to 3 leaf canola followed by a sequential application at a minimum interval of 10 days, but no later than the 6-leaf stage. Sequential applications are recommended for early emerging annual weeds and perennial weeds such as Canada thistle and quackgrass.

#### INSTRUCTIONS FOR USE ON ROUNDUP READY CANOLA (cont.)

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.

No more than two over-the-top broadcast applications may be made from crop emergence through the 6-leaf stage of development and the total in-crop application should not exceed 32 ounces per acre.

#### WEED CONTROL RECOMMENDATIONS

For specific rates of application and instructions for control of various annual and perennial weeds, refer to the **WEEDS CONTROLLED** section of this label booklet.

Tank mixtures 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.

#### SUPPLEMENTAL USE # 5

##### AERIAL APPLICATIONS IN FRESNO COUNTY, CALIFORNIA ONLY (From February 15 through March 31 only)

**NOTE:** For aerial application outside these dates, refer to the **AERIAL APPLICATION IN CALIFORNIA ONLY** statewide supplemental label below.

See the **GENERAL INFORMATION** and **MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS** sections of this label booklet for essential product information.

See the **CROPPING SYSTEMS** section of this label booklet for specific recommendations on the use of this product.

#### APPLICABLE AREA

This supplement applies only 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 aerial application.

Observe the following directions to minimize off-site movement during aerial application of Glyphosate 4. 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 applicable product label(s) and this label have been satisfied.

#### Aerial Applicator Training and Equipment

Aerial application of Glyphosate 4 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 insure 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.

#### INSTRUCTIONS FOR AERIAL APPLICATION IN FRESNO COUNTY, CA (cont.)

**Application 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.

## SUPPLEMENTAL USE # 6

### AERIAL APPLICATION IN CALIFORNIA ONLY

See **GENERAL INFORMATION** and **MIXING** sections of this label booklet for essential product information.

See the **CROPS** section of this label booklet for specific recommendations on the use of this product.

**EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF THE SPRAY WITH FOLIAGE, GREEN STEMS, OR FRUIT OF DESIRABLE CROPS (EXCEPT AS SPECIFIED FOR INDIVIDUAL ROUNDUP READY CROPS), PLANTS, TREES OR OTHER DESIRABLE VEGETATION. SINCE SEVERE DAMAGE OR DESTRUCTION MAY RESULT.**

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. Application to brush and chaparral. Refer to the current supplemental label for directions for this use.
4. Preharvest in alfalfa, corn, cotton, wheat and Roundup Ready corn. Observe this label's specific preharvest application instructions for each individual crop.

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

When applied as recommended under the conditions described, this product controls annual and perennial weeds listed in this label booklet.

**DO NOT EXCEED A MAXIMUM RATE OF 2 QUARTS OF THIS PRODUCT PER ACRE WHEN MAKING APPLICATIONS BY AIR IN FALLOW AND REDUCED TILLAGE SYSTEMS, ALFALFA AND PASTURE RENOVATION AND BRUSH AND CHAPARRAL APPLICATIONS.**

**DO NOT EXCEED A MAXIMUM RATE OF 1 QUART OF THIS PRODUCT PER ACRE WHEN MAKING APPLICATIONS BY AIR IN ALFALFA, CORN, COTTON, WHEAT AND ROUNDUP READY CORN PRIOR TO HARVEST.**

### AERIAL EQUIPMENT

Use the recommended rates of this product in 3 to 15 gallons of water per acre. 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 disposing of equipment wash waters.

**AVOID DRIFT—DO NOT APPLY 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.**

## INSTRUCTIONS FOR AERIAL APPLICATION IN CALIFORNIA, EXCLUDING FRESNO COUNTY (cont.)

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 crop(s).
2. If wind up to 5 miles per hour is blowing toward desirable vegetation or crop(s), 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 crop(s) 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.

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 air-stream and do not increase spray volume by increasing nozzle pressure. Drift control additives may be used. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

**Ensure Uniform Application:** To avoid streaking, uneven, or over-lepped application, use appropriate marking devices. 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.

## SUPPLEMENTAL USE # 7

### AERIAL APPLICATIONS IN ARKANSAS ONLY

**AVOID CONTACT OF THIS HERBICIDE WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, DESIRABLE PLANTS AND TREES, BECAUSE SEVERE INJURY OR DESTRUCTION MAY RESULT.**

See the **GENERAL INFORMATION** and **MIXING** sections of this label booklet for essential product performance information.

### USE DIRECTIONS

**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 recommended rate of this product in 3 to 15 gallons of water per acre.

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

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

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

Nozzles must always discharge backward parallel with the air stream and never discharge downwards more than 45 degrees on fixed wing aircraft or forward of the prevailing air flow 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 mph.

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.

## LIMITED WARRANTY, TERMS OF SALE, AND LIMITATION OF LIABILITY

### IMPORTANT INFORMATION. READ BEFORE USING PRODUCT.

**IMPORTANT.** Read the information below before using this product. If the terms are not acceptable, you should return the unopened product container immediately for a complete refund.

Upon purchase or use of this product, purchaser and user agree to the following terms:

**Warranty:** Nalco Ag II, LLC (the Company) warrants that this product conforms to the chemical description on the label in all material respects and is reasonably fit for the purpose referred to in the directions for use, subject to the exceptions noted below, which are beyond the Company's control. The Company makes no other representation or warranty, express or implied, concerning the product, including no implied warranty of merchantability or fitness for a particular purpose, no such warranty shall be implied by law, and no agent or representative is authorized to make any such warranty on the Company's behalf.

**Term of Sale:** The Company's directions for use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials and the manner of use or application (including failure to adhere to label directions), all of which are beyond the Company's control. All such risks are assumed by the user.

**Limitation of Liability:** The exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damages, and in no event shall damages or any other recovery of any kind exceed the price of the product which caused the alleged loss, damage, injury or other claim. Under no circumstances shall the Company be liable for any special, indirect, incidental or consequential damages of any kind, including loss of profits or income, and any such claims are hereby waived. Some states do not allow the exclusion or limitation of incidental or consequential damages.

The Company and seller offer this product, and the purchaser and user accept this product subject to the foregoing warranty, terms of sale and limitation of liability, which may be varied or modified only by an agreement in writing signed on behalf of the Company by an authorized representative.

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For questions regarding this product  
call Nations Ag at 800-973-8964.

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