UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

June 1, 2015

Carolyn Miter
Registrations Specialist
Albaugh, LLC
PO Box 2127
Valdosta, GA 31604

Subject: Notification per PRN 98-10 – Addition of Marketing Claims
Product Name: Glyphosate 53.8%
EPA Registration Number: 42750-59
Application Date: May 5, 2015
Decision Number: 504915

Dear Ms. Miter:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, you may contact Sarah Meadows at 703-347-0505 or via email at meadows.sarah@epa.gov.

Sincerely,

FOR

Reuben Baris, Product Manager 25
Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

NOTIFICATION

42750-59

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

06/01/2015

Albaugh

GLYPHOSATE 53.8%

(Alternate brand names GLY STAR 5 EXTRA and AQUA STAR)

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

ACTIVE INGREDIENT:

Glyphosate*, N-(phosphonomethyl)glycine, in the form of its isopropylamine salt	53.8%
OTHER INGREDIENTS:	46.2%
TOTAL	100.0%

Group	9	Herbicide

*Contains 648 grams per litre or 5.4 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its isopropylamine salt. Equivalent to 480 grams per litre or 4 pounds per U.S. gallon of the acid, glyphosate.

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

PHYSICAL OR CHEMICAL HAZARDS

Spray solutions of this product must be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

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

FOR CHEMICAL SPILL, LEAK, FIRE, OR EXPOSURE
CALL CHEMTREC (800) 424-9300

EPA Reg. No. 42750-59

EPA Est. No.

Manufactured by:
Albaugh, LLC.
121 NE 18th Street
Ankeny, IA 50021

NET CONTENTS
_____GALS.

PERSONAL PROTECTIVE EQUIPMENT: (PPE)

Applicators and other handlers must wear:
long-sleeved shirt and long pants,
shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE (Personal Protective Equipment). If no such instructions for washables exist, 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 or PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

FOR TERRESTRIAL USE: 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.

FOR AQUATIC USES: Do not contaminate water when disposing of equipment waste waters. Treatment of aquatic weeds can result in oxygen depletion or loss due to decomposition of dead plants. This oxygen loss can cause fish suffocation.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

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

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep people and pets off treated areas until spray solution has dried to prevent transfer of this product onto desirable vegetation.

STORAGE AND DISPOSAL

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

STORAGE: STORE ABOVE 10º F (-12º C) TO KEEP FROM CRYSTALIZING. Crystals will settle to the bottom. If crystals form, allow product to warm above 50º F (10º C) and mix well or recirculate to redissolve.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state, or local procedures. Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

CONTAINER HANDLING: (See the Net Contents section on the container to determine if it non-refillable or refillable.) APPROPRIATE BOX MUST BE CHECKED.

Non-refillable containers (1 and 2.5 gallon): Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Offer for recycling if available or 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.

Non-refillable containers (>5 gallon): Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Offer for recycling if available or 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.

Refillable containers: Refillable container. Refill this container with glyphosate only. Do not reuse this container for any other purpose.

When this container is empty, replace the cap and seal all openings that have been made during usage and return the container to the point of purchase, or to an alternate location designated by the manufacturer at the time of purchase of this product. If not returned, clean container the empty container and offer for recycling, if available.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the re-filler.

To clean the container before final disposal, empty the remaining contents from the container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or re-circulate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing process two more times.

If the container cannot be refilled, offer for recycling if available or 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.

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

Read the “CONDITIONS OF SALE AND WARRANTY” statement at the end of the label before buying or using. If terms are not acceptable, return at once unopened.

USE INFORMATION

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

Surfactant may be included in the tank mixture if desired and should only be done so based on field experience or further instructions from your local extension service, crop consultant or field representative.

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

Stage of Weeds: Annual weeds are easiest to control when they are small. Best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity. Refer to the annual, perennial, woody brush and trees rate tables for recommendations for specific weeds.

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

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

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

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

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

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

When this product comes in contact with soil, it is bound to soil particles. Under labeled use situations, once this product is bound to soil particles, it is not available for plant uptake and will not harm off-site vegetation where roots grow into the treated area or if the soil is transported off-site. The strong affinity of this product to soil particles prevents this product from leaching out of the soil profile and entering ground water.

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

Volatility: GLYPHOSATE 53.8% is non-volatile. Therefore, it cannot move as a vapor after application to affect nearby vegetation.

Toxicology Testing: Exposure to workers and other applicators is expected to pose minimal risks based on results of short-term toxicity studies. Glyphosate has been thoroughly tested and determined not to cause cancer or other adverse long-term health effects.

Tank Mixing: This product does not provide residual weed control. For subsequent residual weed control, follow a label-approved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used. Use according to the most restrictive label directions for each product in the mixture.

Buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are not expressly allowed in this labeling. Mixing this product with herbicides or other materials not labeled on this label may result in reduced performance.

Annual Maximum Use Rate: Except as otherwise specified in a crop section of this label, the combined total of all treatments must not exceed 6 quarts of this product per acre per year.

For noncrop uses, the combined total of all treatments must not exceed 8 quarts of this product per acre per year.

ATTENTION

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

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

NOTE: Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences. Keep container closed to prevent spills and contamination.

MIXING

Clean sprayer parts immediately after using this product by thoroughly flushing with water.

NOTE: REDUCED RESULTS MAY OCCUR IF WATER CONTAINING SOIL IS USED, SUCH AS VISIBLY MUDDY WATER OR WATER THAT IS NOT CLEAR FROM PONDS AND DITCHES.

Mixing with Water

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

Surfactant

Surfactant may be included in the tank mixture if desired and should only be done so based on field experience or further recommendation of your local extension service, crop consultant or field representative.

Tank Mixing Procedure

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

1. Place a 20 to 35-mesh screen or wetting basket over filling port.
2. Through the screen, fill the spray tank one-half full with water and start agitation.
3. If a wettable powder is used, make a slurry with the water carrier, and add it SLOWLY through the screen into the tank. Continue agitation.
4. If a flowable formulation is used, premix one part flowable with one part water. Add diluted mixture SLOWLY through the screen into the tank. Continue agitation.
5. If an emulsifiable concentrate formulation is used, premix one part emulsifiable concentrate with two parts water. Add diluted mixture slowly through the screen into the tank. Continue agitation.
6. Continue filling the spray tank with water and add the required amount of this product near the end of the filling process.
7. When using nonionic surfactant add it to the spray tank before completing the filling process.

8. Add individual formulations to the spray tank as follows: wettable powder, flowable, emulsifiable concentrate, drift control additive, water-soluble liquid followed by surfactant.

Maintain good agitation at all times until the contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed. Keep by-pass line on or near the bottom of the tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50 mesh.

Always predetermine the compatibility of labeled tank mixtures of this product with water carrier by mixing small proportional quantities in advance.

Refer to the "TANK MIXING" section of "USE INFORMATION" for additional precautions.

Mixing for Hand-held Sprayers

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

Spray Solution

Desired Volume	Amount of Glyphosate 53.8%					
	¾%	1%	1 1/2%	2%	5%	10%
1 Gal	1 fl.oz,	1 1/3 fl.oz.	2 fl.oz.	2 2/3 fl.oz.	6 ½ fl.oz.	13 fl.oz.
25 Gal	1 ½ pt	1 qt	1 ½ qt	2 qt	5 qt	10 qt
100 Gal	3 qt	1 gal	1 ½ gal	2 gal	5 gal	10 gal

2 tablespoons = 1 fluid ounce

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

Ammonium Sulfate

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

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

Colorants or Dyes

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

Drift Control Additives

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

APPLICATION EQUIPMENT AND TECHNIQUES

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

This product may be applied with the following application equipment:

Aerial – Fixed Wing and Helicopter
Ground Broadcast Spray – Boom or boomless systems, pull-type sprayer, floaters, pick-up sprayers, spray coupes and other ground broadcast equipment.

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

*This product is not registered in California or Arizona for use in mistblowers.
Selective Equipment – Recirculating sprayers, shielded and hooded sprayers, wiper applicators and sponge bars.

Injection Systems – Aerial or ground injection sprayers.

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

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

Aerial Equipment

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

Use the labeled rates of this herbicide in 3 to 15 gallons of water per acre unless otherwise specified on this label. Unless otherwise specified, do not exceed 24 fluid ounces per acre. Aerial applications of this product may be made in annual cropping conventional tillage systems, fallow and reduced tillage systems and preharvest applications. Refer to the individual use area sections of this label for labeled volumes and application rates.

NOTE: For aerial application in California or Arkansas, refer to the Federal supplemental label for aerial applications in that state for specific instructions, restrictions and requirements. For aerial applications, consult with state or local authorities regarding any additional requirements for aerial treatments. Banvel® tank mixtures may not be applied by air in California.

Avoid direct application to any body of water.

AVOID DRIFT – DO NOT APPLY DURING LOW-LEVEL INVERSION CONDITIONS, WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITION WHICH FAVORS DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.

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

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.

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 ARE MOST SUSCEPTIBLE. The maintenance of an organic coating (paint), which meets aerospace specification MIL-C-38413, may prevent corrosion.

AERIAL SPRAY DRIFT MANAGEMENT

SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions.

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

1. The distance of the outer most nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they must be observed.
The applicator must be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory.

Aerial Drift Reduction Advisory

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

INFORMATION ON DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity, and Temperature Inversions).

CONTROLLING DROPLET SIZE

- Volume – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure – Do not exceed the nozzle manufacturer's specified pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles – Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation – Orient nozzles so that the spray is released parallel to the airstream which produces larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

BOOM LENGTH

For some use patterns, reducing the effective boom length to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT

Applications must not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT

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

WIND

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application must be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS

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

SENSITIVE AREAS

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

Ground Broadcast Equipment

Use the labeled rates of this product in 3 to 40 gallons of water per acre as a broadcast spray unless otherwise specified. As density of weeds increases, spray volume should be increased within the labeled range to ensure complete coverage. Carefully select proper nozzles to avoid spraying a fine mist. For

best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

Hand-Held and High-Volume Equipment

Apply to foliage of vegetation to be controlled. For applications made on a spray-to-wet basis, spray coverage must be uniform and complete. Do not spray to the point of runoff. Use coarse sprays only. For control of weeds listed in the annual weeds rate tables, apply a 1/2 percent solution of this product to weeds less than 6 inches in height or runner length. Apply prior to seedhead formation in grass or bud formation in broadleaf weeds. For annual weeds over 6 inches tall, or unless otherwise specified, use a 1 percent solution.

For best results, use a 1 1/2 percent solution on harder-to-control perennials, such as bermudagrass, dock, field bindweed, hemp dogbane, milkweed and Canada thistle.

When using application methods which result in less than complete coverage, use a 3.75 percent solution for annual and perennial weeds and a 3.75 to 5 percent solution for woody brush and trees.

Selective Equipment

This product may be applied through recirculating spray systems, shielded applicators, hooded sprayers, wiper applicators or sponge bars after dilution and thorough mixing with water to listed weeds growing in any noncrop site specified on this label and only when specifically labeled in cropping systems.
A recirculating spray system directs the spray solution onto weeds growing above desirable vegetation, while spray solution not intercepted by weeds is collected and returned to the spray tank for reuse.
A shielded or hooded applicator directs the herbicide solution onto weeds, while shielding desirable vegetation from the herbicide.

A wiper or sponge applicator applies the herbicide solution onto weeds by rubbing the weed with an absorbent material containing the herbicide solution.

AVOID CONTACT OF HERBICIDE WITH DESIRABLE VEGETATION.

Contact of the herbicide solution with desirable vegetation may result in damage or destruction. Applicators used above desirable vegetation must be adjusted so that the lowest spray stream or wiper contact point is at least 2 inches above the desirable vegetation. Droplets, mist, foam, or splatter of the herbicide solution settling on desirable vegetation may result in discoloration, stunting or destruction. Applications made above the crops should be made when the weeds are a minimum of 6 inches above the desirable vegetation. Better results may be obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. This may occur in dense clumps, severe infestations or when the height of the weeds varies so that not all weeds are contacted. In these instances, repeat treatment may be necessary.

Shielded and hooded applicators

Use nozzles that provide uniform coverage within the treated area. Keep shields on these sprayers adjusted to protect desirable vegetation. EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF HERBICIDE WITH DESIRABLE VEGETATION.

A hooded sprayer is a type of shielded applicator. The spray pattern is completely enclosed on the top and all 4 sides by a hood, thereby shielding the crop from the spray solution. This equipment must be set up and operated in a manner that avoids bouncing or raising the hoods off the ground in any way. If the hoods are raised, spray particles may escape and come into contact with the crop, causing damage or destruction of the crop. The spray hoods must be operated on the ground or skimming across the ground. Tractor speed must be adjusted to avoid bouncing of the spray hoods. Avoid operation on rough or sloping ground where the spray hoods might be raised off the ground.

Wiper applicators and sponge bars

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

Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting desirable vegetation. Operate this equipment at ground speeds no greater than 5 mph. Performance may be improved by reducing speed in areas of heavy weed infestations to ensure adequate wiper saturation. Better results may be obtained if 2 applications are made in opposite directions.
Avoid leakage or dripping onto desirable vegetation. Adjust height of applicator to ensure adequate contact with weeds. Keep wiping surfaces clean. Be aware that, on sloping ground, the herbicide solution may migrate, causing dripping on the lower end and drying of the wicks on the upper end of a wiper applicator.

Do not use wiper equipment when weeds are wet.

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

Include a nonionic surfactant at a rate of 10 percent by volume of total herbicide solution with all wiper applications.

For Rope or Sponge Wick Applicators – Mix 3 quarts of this product in 2 gallons of water to prepare a 25 percent solution. Apply this solution to weeds listed in this section.

For Porous-Plastic Applicators – Solutions ranging from 25 to 100 percent of this product in water may be used in porous-plastic wiper applicators.

When applied as labeled, this product CONTORLS the following weeds:

Corn, volunteer	Sicklepod
Panicum, Texas	Spanishneedles
Rye, common	Starbur, bristly
Shattercane	

When applied as labeled, this product SUPPRESSES the following weeds:

Beggarweed, Florida	Ragweed, common
Bermudagrass	Ragweed, giant
Dogbane, hemp	Smutgrass
Dogfennel	Sunflower
Guineagrass	Thistle, Canada
Johnsongrass	Thistle, musk
Milkweed	Vaseygrass
Nightshade, silverleaf	Velvetleaf
Pigweed, redroot	

Injection Systems

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

CDA Equipment

The rate of this product applied per acre by vehicle-mounted CDA equipment must not be less than the amount labeled in this label when applied by conventional broadcast equipment. For vehicle-mounted CDA equipment, apply 3 to 15 gallons of water per acre.

For the control of annual weeds with hand-held CDA units, apply a 20 percent solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 1.5 mph (1 ½ pints per acre). For the control of perennial weeds, apply a 20 to 40 percent solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 0.75 mph (3 to 6 pints per acre).
Controlled droplet application equipment produces a spray pattern which is not easily visible. Extreme care must be exercised to avoid spray or drift contacting the foliage or any other green tissue of desirable vegetation, as damage or destruction may result.

CROPS (Alphabetical)

This section is organized alphabetically by crop category. There may be several labeled crops listed in a crop category.

Unless otherwise specified, applications may be made to control any weeds listed in the annual, perennial and woody brush tables. Also refer to the “SELECTIVE EQUIPMENT” section.

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

For any crop not listed in this “CROPS” section, applications must be made at least 30 days prior to planting.

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

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

ALFALFA, CLOVER, AND OTHER FORAGE LEGUMES

LABELED CROPS: Alfalfa, clover, kudzu, lespedeza, lupin, sainfoin, trefoil, velvet bean, vetch, crown vetch, milk vetch

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, spot treatment (alfalfa and clover only), wiper applicators (alfalfa and clover only), renovation, preharvest (alfalfa only)
Preplant, Preemergence and At-planting

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

RESTRICTION: Remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

Preharvest (Alfalfa only)

USE INSTRUCTIONS: This product may be used in declining alfalfa stands or any stand of alfalfa where crop destruction is acceptable. This application will severely injure or destroy the stand of alfalfa. This product will control annual and perennial weeds including quackgrass, when applied prior to the harvest of alfalfa. The treated crop and weeds can be harvested and fed to livestock after 36 hours. Allow a minimum of 36 hours between application and harvest. Applications may be made at any time of the year. Make only one application to an existing stand of alfalfa per year. For control of quackgrass, apply in the spring, late summer or fall when quackgrass is actively growing. Treatments for quackgrass must be followed by deep tillage for complete control.

RESTRICTIONS: Do not apply more than 1.5 pints of this product per acre as a preharvest treatment. Do not use for alfalfa grown for seed, as a reduction in germination or vigor may occur.

Spot treatment or Wiper applications (Alfalfa and Clover only)

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

RESTRICTIONS: For spot treatment and wiper applications, this product must be applied in areas where the movement of domestic livestock can be controlled. No more than one-tenth of any acre must be treated at one time. Remove domestic livestock before application and wait 14 days after application before grazing livestock or harvesting.

Renovation

USE INSTRUCTIONS: This product may be applied as a broadcast spray to existing stands of alfalfa, clover, and other labeled forage legumes. Labeled crops may be planted into the treated area.

RESTRICTION: Remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

ASPARAGUS

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

Preplant, Preemergence

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

RESTRICTION: Do not apply within a week before the first spears emerge.

Spot treatment

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

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

Postharvest

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

PRECAUTIONS: Direct contact of the spray with the asparagus may result in serious crop injury. Select and use 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.

CANOLA

TYPES OF APPLICATIONS: Preplant, preemergence.

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

RESTRICTION: Do not apply more than 1.5 quarts of this product per acre by ground.

CEREAL CROPS

LABELED CROPS: Barley, Buckwheat, Millet (Pearl, Proso), Oats, Rice, Rye, Teosinte, Triticale, Wheat (All), Wild rice.

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, spot treatment (except rice), post-harvest, preharvest (wheat only), wiper applicators (wheat only)

Do not treat rice fields or levees when the field contains floodwater.

Preplant, Preemergence and At-planting

USE INSTRUCTIONS: This product may be applied before, during or after planting of cereal crops. Applications must be made prior to emergence of the crop.
Spot treatment (except rice)

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

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

Postharvest

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

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

Preharvest (wheat only)

USE INSTRUCTIONS: This product provides weed control when applied prior to harvest of wheat. Apply after the hard-dough stage of grain (30% or less grain moisture) and at least 7 days prior to harvest. Wheat stubble may be grazed immediately after harvest.

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

RESTRICTIONS: Do not apply more than 1.5 pints of this product per acre. Do not apply to wheat grown for seed, as a reduction in germination or vigor may occur.

Wiper applications (wheat only)

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

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

RED RICE CONTROL PRIOR TO PLANTING RICE: Apply 1.5 pints of this product in 5 to 10 gallons of water per acre. Flush fields prior to application to obtain uniform germination and stand of red rice. Make application when the majority of the red rice plants are in the 2-leaf stage and no more than 4 inches tall.

Red rice plants with less than 2 true leaves may be only partially controlled. Avoid spraying during low humidity conditions, as reduced control may result.

DO NOT TREAT RICE FIELDS OR LEVEES WHEN THE FIELDS CONTAIN WATER. DO NOT RE-FLOOD TREATED FIELDS FOR 8 DAYS FOLLOWING APPLICATION.

CHRISTMAS TREES

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

Post-directed, Spot treatment

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

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

Site preparation

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

PRECAUTIONS: Precautions must be taken to protect nontarget plants during site preparation applications.

CITRUS CROPS

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

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

NOTE: FOR USE DIRECTIONS, SEE THE "TREE, NUT AND VINE (GENERAL)" SECTION. THE FOLLOWING DIRECTIONS ARE SPECIFIC TO CITRUS CROPS.

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

For goatweed, apply 3 to 4.5 pints of this product per acre. Apply in 20 to 30 gallons of water per acre when plants are actively growing. Use 3 pints per acre when plants are less than 8 inches tall and 4.5 pints per acre when plants are greater than 8 inches tall. If goatweed is greater than 8 inches tall, the addition of Krovar® II or Karmex® may improve control. Refer to the individual product labels for specific crops, rates, geographic restrictions and precautionary statements.

Perennial weeds:

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

Weed	GLYPHOSATE 53.8% Rate Per Acre			
Species	1.5 PT	3 PT	4.5 PT	7.5 PT
Bermudagrass	B	-	PC	C
Guineagrass				
Texas and Florida Ridge	B	C	C	C
Florida Flatwoods	-	B	C	C
Paragrass	B	C	C	C
Torpedograss	S	-	PC	C

Allow a minimum of 1 day between last application and harvest.

CONSERVATION RESERVE PROGRAM (CRP)

TYPES OF APPLICATIONS: Renovation (rotating out of CRP), site preparation, dormant, wiper
Rotating out of CRP, Site preparation

USE INSTRUCTIONS: This product may be used to prepare CRP land for crop production.

Dormant, Wiper

USE INSTRUCTIONS: This product may be used to suppress competitive growth and seed production of undesirable vegetation in CRP acres. Such applications may be made with wiper application equipment or as a broadcast or spot treatment to dormant CRP grasses. For selective applications with broadcast spray equipment, apply 9 to 12 fluid ounces of this product per acre in early spring before desirable CRP grasses, such as crested and tall wheatgrass, break dormancy and initiate green growth. Late fall applications can be made after desirable perennial grasses have reached dormancy.

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

CORN

TYPES OF CORN: Field corn, seed corn, sweet corn and popcorn

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, spot treatment, hooded sprayers, preharvest, post-harvest

Preplant, Preemergence and At-planting

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

The following tank mixtures may be applied before, during or after planting in conventional tillage systems, into a cover crop, established sod or in previous crop residue.

Apply these tank mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre. For Southern states, do not apply in nitrogen solutions to tough-to-control grasses such as barnyardgrass, fall panicum, broadleaf signalgrass, annual ryegrass and any perennial weeds. See the map in the “ANNUAL WEEDS” section of this label for areas included in this recommendation.

ATRAZINE
DICAMBA DMA SALT
BICEP®
BICEP® II
BROADSTRIKE®
BULLET®
DUAL®
DUAL® II
EXTRAZINE®
FRONTIER®
GUARDSMAN®
HARNESS®
HARNESS® XTRA
HARNESS® EXTRA 5.6L
LARIAT®
LASSO®/ALACHLOR
LINEX®
LOROX®
MICRO-TECH®
PARTNER®
PROWL®
SIMAZINE
SURPASS®
SURPASS® 100
TOPNOTCH®

For improved burndown, this product may be tank mixed with 2,4-D or dicamba.

Annual weeds – for difficult-to-control weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this

product at 1.5 pints per acre in these tank mixtures. For other labeled annual weeds, apply 12 fluid ounces to 18 fluid ounces of this product per acre when weeds are less than 6 inches tall, and 1.5 to 2.25 pints when weeds are over 6 inches tall.

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

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

Hooded Sprayers

USE INSTRUCTIONS: This product may be used through hooded sprayers for weed control between the rows of corn. Only hooded sprayers that completely enclose the spray pattern may be used.

When applying to corn that is grown on raised beds, ensure that the hood is designed to completely enclose the spray solution. If necessary, extend the front and rear flaps of the hoods to reach the ground in deep furrows.

Follow these requirements:
- The spray hoods must be operated on the ground or skimming across the ground.
- Do not apply more than 1.5 pints of this product per acre per application.
- Corn must be at least 12 inches tall, measured without extending leaves.
- Leave at least an 8 inch untreated strip over the drill row. For example, if the crop row width is 38 inches, the maximum width of the spray hood should be 30 inches.
- Maximum tractor speed: 5 mph.
- Maximum wind speed: 10 mph.
- Use low-drift nozzles.

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

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

RESTRICTIONS: Do not graze or feed corn forage or fodder following applications of this product through hooded sprayers. Do not apply more than 4.5 pints of this product per acre per year for hooded sprayer applications.

Spot treatment

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

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

Preharvest

USE INSTRUCTIONS: Make applications at 35 percent grain moisture or less. Ensure that maximum kernel fill is complete and the corn is physiologically mature (black layer formed). For ground applications, apply up to 4.5 pints of this product per acre. For aerial applications, apply up to 1.5 pints of this product per acre.

RESTRICTIONS: Allow a minimum of 7 days between application and harvest. Do not treat corn grown for seed because a reduction in germination or vigor may result.

Post-harvest

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

RESTRICTION: Do not harvest or feed treated vegetation for 8 weeks following application.

COTTON

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, hooded sprayer, selective equipment, spot treatment, preharvest

Preplant, Preemergence, and At-planting

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

Hooded sprayer, Selective equipment

USE INSTRUCTIONS: This product may be applied through hooded sprayers, recirculating sprayers, shielded applicators or wiper applicators in cotton. Allow at least 7 days between application and harvest.
PRECAUTIONS: See the "SELECTIVE EQUIPMENT" part of the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information on proper use and calibration of this equipment.

Spot treatment

USE INSTRUCTIONS: For spot treatments, apply this product prior to boll opening of cotton.

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

Preharvest

USE INSTRUCTIONS: This product provides weed control and cotton regrowth inhibition when applied prior to harvest of cotton. For weed control, apply at rates given in the annual, perennial and woody brush tables. Apply 12 fluid ounces to 3 pints of this product per acre for cotton regrowth inhibition. Allow a minimum of 7 days between application and harvest of cotton.

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

Apply after sufficient bolls have developed to produce the desired yield of cotton. Applications made prior to this time could affect maximum yield potential.

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

RESTRICTIONS: Do not feed or graze treated cotton forage or hay following preharvest applications. DO NOT APPLY MORE THAN 1.5 PINTS OF THIS PRODUCT PER ACRE BY AIR. Do not apply more than 1.5 quarts of this product per acre by ground. Do not apply to cotton grown for seed, as a reduction in germination or vigor may occur.

FALLOW SYSTEMS

TYPES OF APPLICATIONS: Chemical fallow, preplant fallow beds, aid-to-tillage.

Chemical fallow

USE INSTRUCTIONS: This product may be applied during the fallow period prior to planting or emergence of any crop listed on this label. For any crop not listed on this label, applications must be made at least 30 days prior to planting. This product may be used as a substitute for tillage to control annual weeds in fallow fields. Also, broadcast or spot treatments will control or suppress many perennial weeds in fallow fields. Ground or aerial application equipment may be used. Tank mixtures with 2,4-D and dicamba may be used.

RESTRICTION: DO NOT APPLY BANVEL® TANK MIXTURES BY AIR IN CALIFORNIA.

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

Preplant fallow beds

USE INSTRUCTIONS: This product may be applied to fallow beds prior to planting or emergence of any crop listed on this label. For any crop not listed on this label, applications must be made at least 30 days prior to planting. This product will control weeds listed in the annual, perennial and woody brush tables. In addition, 9 fluid ounces of this product plus 2 to 4 oz of Goal® 2XL per acre will control the following weeds with the maximum height or length indicated: 3" – common cheeseweed, chickweed, groundsel; 6" – London rocket, shepherd's purse.

12 fluid ounces of this product plus 2 to 4 oz of Goal® 2XL per acre will control the following weeds with the maximum height or length indicated: 6" – common cheeseweed, groundsel, marestail *(Conyza canadensis)*, 12" – chickweed, London rocket, shepherd's purse.

Aid-to-tillage

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

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

GRAIN SORGHUM (MILO)

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, spot treatment, wiper applicators, hooded sprayers, preharvest, post-harvest

Preplant, Preemergence, At-planting

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

Spot treatment and Wiper applications

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

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

For wiper applicators, allow at least 40 days between application and harvest. Do not use roller applicators. Do not feed or graze treated milo fodder. Do not ensile treated vegetation.

Hooded Sprayers

USE INSTRUCTIONS: This product may be used through hooded sprayers for weed control between the rows of milo. Only hooded sprayers that completely enclose the spray pattern may be used.

When applying to milo that is grown on raised beds, ensure that the hood is designed to completely enclose the spray solution. If necessary, extend the front and rear flaps of the hoods to reach the ground in deep furrows.

Follow these requirements:

- The spray hoods must be operated on the ground or skimming across the ground.
- Do not apply more than 1.5 pints of this product per acre per application.
- Milo must be at least 12 inches tall, measured without extending leaves. Treat before milo sends tillers between the drill rows. If such tillers are contacted with the spray solution, the main plant may be killed.
- Leave at least an 8 inch untreated strip over the drill row. For example, if the crop row width is 38 inches, the maximum width of the spray hood should be 30 inches.
- Maximum tractor speed: 5 mph.
- Maximum wind speed: 10 mph.
- Use low-drift nozzles.

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

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

RESTRICTIONS: Do not graze or feed milo forage or fodder following applications of this product through hooded sprayers. Do not apply more than 4.5 pints of this product per acre per year for hooded sprayer applications.

Preharvest

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

RESTRICTIONS: Do not apply more than 3.0 pints of this product per acre. Allow a minimum of 7 days between application and harvest of sorghum. Do not treat sorghum grown for seed, as a reduction in germination or vigor may occur. The use of this product for preharvest grain sorghum (milo) is not registered in California.

Post-harvest

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

This product may be applied to grain sorghum (milo) stubble following harvest to suppress or control regrowth. Apply 1.5 pints of this product per acre for control, or 1.25 pints of this product per acre for suppression.

RESTRICTION: Do not harvest or feed treated vegetation for 8 weeks following application.

GRASS SEED PRODUCTION

TYPES OF APPLICATIONS: Preplant, preemergence, renovation, site preparation, shielded sprayers, wiper applicators, spot treatments, creating rows in annual ryegrass.

USE INSTRUCTIONS: This product may be applied before, during, or after planting or renovation of turf or forage grass areas grown for seed production. Applications MUST be made prior to the emergence of the crop to avoid crop injury. For maximum control of existing vegetation, delay planting to determine if any regrowth from escaped underground plant parts occurs. Where repeat treatments are necessary, sufficient regrowth must be attained prior to application. For warm-season grasses, such as bermudagrass, summer or fall applications provide best control.

RESTRICTION: Do not disturb soil or underground plant parts before treatment.

Tillage or renovation techniques such as vertical mowing, coring or slicing should be delayed for 7 days after application to allow proper translocation into underground plant parts.

Do not feed or graze treated areas for 8 weeks following application.

Shielded Sprayers

USE INSTRUCTIONS: Apply 1.5 pints to 4.5 pints of this product as a broadcast spray in 10 to 20 gallons of water per acre to control weeds in the rows. Uniform planting in straight rows aids in shielded sprayer applications. Best results are obtained when the grass seed crop is small enough to easily pass by or through the protective shields.

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

Wiper Applications

PRECAUTIONS: Contact of the herbicide solution with desirable vegetation may result in damage or destruction. Applicators must be adjusted so that the wiper contact point is at least two (2) inches above

the desirable vegetation. Weeds should be a minimum of six (6) inches above the desirable vegetation. Better results may be obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. This may occur in dense clumps, severe infestations, or when height of weeds varies so that not all weeds are contacted. In these instances, repeat treatments may be necessary. Better results may be obtained if 2 applications are made in opposite directions.

Spot Treatments

USE INSTRUCTIONS: Use a 1 to 5 percent solution on a volume to volume basis with water. See the "SELECTIVE EQUIPMENT" section for additional application recommendations.

RESTRICTIONS: Apply this product prior to heading of grasses. Do not treat more than 10 percent of the total field to be harvested. The crop receiving the spray in the treated area will be killed. Do not allow drift or spray outside the target area for the same reason.

Creating Rows in Annual Ryegrass

USE INSTRUCTIONS: Use 12-24 fluid ounces of this product per acre mixed with water. Use the higher rate when the ryegrass is greater than 6 inches tall. Best results are obtained when applications are made before the ryegrass reaches 6 inches in height.

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

Grower assumes all responsibility for crop losses from misapplication.

HERBS

TYPES OF HERBS: Peppermint, spearmint

USE INSTRUCTIONS: This product may be used as a spot treatment in spearmint and peppermint. Apply spray-to-wet with hand-held equipment, such as backpack and knapsack sprayers, pump-up pressure sprayers, hand-guns, hand-wands or any other hand-held or motorized spray equipment used to direct the spray solution on to a limited area. Further applications may be made in the same area at 30-day intervals.

RESTRICTIONS: You must allow at least 7 days between application and harvest. Do not treat more than one-tenth of any acre must be treated at one time. The crop receiving spray in the treated area will be killed. Do not allow drift or spray outside the target area for this reason.

PASTURES

TYPES OF PASTURES: Bahiagrass, bermudagrass, bluegrass, brome, fescue, orchardgrass, ryegrass, timothy, wheatgrass, alfalfa and clover

TYPES OF APPLICATIONS: Spot treatment, wiper application, preplant, preemergence, pasture renovation

Spot treatment and Wiper Application

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

For spot treatment and wiper applications, apply in areas where the movement of domestic livestock can be controlled.

RESTRICTIONS: No more than one-tenth of any acre must be treated at one time. Remove domestic livestock before application and wait 14 days after application before grazing livestock or harvesting.

Preplant, Preemergence and Pasture renovation

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

Remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

PEANUTS

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting

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

SMALL FRUITS AND BERRIES

LABELED CROPS: Blackberry, Blueberry, Boysenberry, Cranberry, Currant, Dewberry, Elderberry, Gooseberry, Huckleberry, Loganberry, Olallieberry, Raspberry (Black, Red), Youngberry

TYPES OF APPLICATIONS: Preplant, preemergence, directed spray (except cranberry), wiper application

USE INSTRUCTIONS: This product may be applied as a preplant or preemergence broadcast application or as a wiper application for crops listed in this section. Directed sprays may be applied to any crop except cranberries. For wick or wiper applicators, mix 3 quarts of this product in 4 gallons of water. In severe infestations, reduce equipment ground speed to ensure that adequate amounts of this product are wiped on the weeds. A second treatment in the opposite direction may be beneficial.

RESTRICTIONS: Do not permit herbicide solution to contact desirable vegetation, including green shoots, canes or foliage. Allow a minimum of 30 days between last application and harvest of cranberries. For other small fruits and berries, allow a minimum of 14 days between last application and harvest.

SOYBEANS

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, spot treatment, preharvest, selective equipment, hooded sprayers
Preplant, Preemergence and At-planting

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

The following tank mixtures may be applied before, during or after planting in conventional tillage systems, into a cover crop, established sod or in previous crop residue.

CANOPY®	LASSO®/ALACHLOR	PROWL®
COMMAND®	LINEX®	PURSUIT®
DUAL®	LOROX®/LINURON	PURSUIT® PLUS
DUAL® II	LOROX® PLUS	SCEPTER®
FRONTIER®	MICRO-TECH®	SENCOR®/LEXONE®
FUSION®	PARTNER®	SQUADRON®
GEMINI®	PREVIEW®	TURBO®

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

Annual weeds: For difficult-to-control weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 1.5 pints per acre in these tank mixtures. For other labeled annual weeds, apply 12 fluid ounces to 18 fluid ounces of this product per acre when weeds are less than 6 inches tall, and 1.5 to 2.25 pints when weeds are over 6 inches tall.

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

Spot treatment

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

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

Preharvest

USE INSTRUCTIONS: This product provides weed control when applied prior to harvest of soybeans. Apply at rates given in the annual, perennial and woody brush tables. This product may be applied using either aerial or ground spray equipment. For ground applications, apply this product in 10 to 20 gallons of water per acre. For aerial applications, apply this product in 3 to 10 gallons of water per acre.

Apply after pods have set and lost all green color. Allow a minimum of 7 days between application and harvest of soybeans. Care must be taken to avoid excessive seed shatter loss due to ground application equipment.

RESTRICTIONS: Do not graze or harvest treated crop for livestock feed within 25 days of last preharvest application. DO NOT APPLY MORE THAN 4 QUARTS PER ACRE OF THIS PRODUCT FOR PREHARVEST APPLICATIONS. DO NOT APPLY MORE THAN 1.5 PINTS PER ACRE OF THIS PRODUCT BY AIR. Do not apply to soybeans grown for seed as a reduction in germination or vigor may occur.

Selective equipment

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

PRECAUTIONS: See the “SELECTIVE EQUIPMENT” part of the “APPLICATION EQUIPMENT AND TECHNIQUES” section of this label for information on proper use and calibration of this equipment.

SUGARCANE

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

Preplant, Preemergence

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

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

Spot Treatment

USE INSTRUCTIONS: This product may be applied as a spot treatment in sugarcane. For control of volunteer or diseased sugarcane, make a 3/4 percent solution of this product in water and spray to wet the foliage of vegetation to be controlled. Volunteer or diseased sugarcane should have at least 7 new leaves.

RESTRICTIONS: Avoid spray contact with healthy cane plants since severe damage or destruction may result. Do not feed or graze treated sugarcane foliage following application.

Fallow treatments

USE INSTRUCTIONS: This product may be used as a replacement for tillage in fields that are lying fallow between sugarcane crops. This product may also be used to remove the last stubble of ratoon cane. For removal of last stubble of ratoon cane, apply 3 to 3 3/4 quarts of this product in 10 to 40 gallons of water per acre to new growth having at least 7 new leaves. Allow 7 or more days after application before tillage.

Hooded sprayers

USE INSTRUCTIONS: This product may be used through hooded sprayers for weed control between the rows of sugarcane. A hooded sprayer is a type of shielded applicator. The spray pattern is completely enclosed on the top and all 4 sides by a hood, thereby shielding the crop from the spray solution. Minimize the potential for spray particles to escape from under the hood by operating the sprayer at appropriate ground speeds, nozzle pressures and wind speeds. Operation on rough or sloping ground may result in spray particles escaping from the hood.

When applying to sugarcane that is grown on raised beds, ensure that the hood is designed to completely enclose the spray. If necessary, extend the front and rear flaps of the hoods to reach the ground in furrows between the rows.

Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting the crop. Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage. Such damage shall be the sole responsibility of the applicator.

PRECAUTION: Droplets, mist, foam or splatter of the herbicide solution settling on the crop may result in discoloration, stunting or destruction.

RESTRICTION: Do not allow treated weeds to come in contact with the crop.

SUNFLOWERS

TYPES OF APPLICATIONS: Preplant, preemergence

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

Applications must be made prior to emergence of the crop.

A tank mixture with Prowl® may be applied before, during or after planting in conventional tillage systems, into a cover crop, established sod or in previous crop residue.

RESTRICTIONS: Do not apply more than 24 fluid ounces (1.5 pints) of this product per acre for sunflowers. Make only one preplant or preemergent application per year. Do not feed or graze sunflower forage following application of this product.

TREE AND VINE CROPS (GENERAL)

TYPES OF APPLICATIONS: Weed control, middles (between rows of trees), strips (in row of trees), selective equipment (except kiwi), perennial grass suppression

NOTE: THIS SECTION GIVES DIRECTIONS THAT APPLY TO ALL CITRUS CROPS, TREE FRUITS, TREE NUTS AND VINE CROPS. SEE THE INDIVIDUAL CROP SECTIONS FOR INSTRUCTIONS, PREHARVEST INTERVALS, PRECAUTIONS AND RESTRICTIONS FOR SPECIFIC CROPS.

This product may be applied in middles, strips and for weed control in established citrus groves, tree fruit and tree nut orchards, and vineyards. Apply at rates given in the annual, perennial and woody brush tables. Repeat applications may be made up to a maximum of 8 quarts per acre per year. This product may also be used for site preparation prior to transplanting these crops. Allow a minimum of 3 days between application and transplanting. Applications may be made with boom equipment, CDA, shielded sprayers, hand-held and high-volume wands, lances, orchard guns or with wiper applicator equipment, except as directed.

Middles (between rows)

USE INSTRUCTIONS: This product will control or suppress annual and perennial weeds and ground covers growing between the rows of labeled tree and vine crops. If weeds are under drought stress, irrigate prior to application. Reduced control may result if weeds have been mowed prior to application. A tank mixture of this product plus Goal® 2 XL may be used for annual weeds in middles between rows of citrus crops, tree fruits, tree nuts and vine crops. This mixture is recommended when weeds are stressed or growing in dense populations. 12 to 24 oz/A of this product plus 3 to 12 oz/A of Goal® 2 XL will control annual weeds with a maximum height or diameter of 6 inches, including crabgrass, hairy fleabane *(Conyza bonariensis)*, common groundsel, junglerice, common lambsquarters, redroot pigweed, London rocket, common ryegrass, shepherd's purse, annual sowthistle, common cheeseweed (malva), filaree (suppression), horseweed/marestail *(Conyza canadensis)*, stinging nettle and common purslane (suppression). 9 to 24 oz/A of this product plus 3 to 12 oz/A of Goal® 2 XL will control common cheeseweed (malva) with a maximum height or diameter of 3 inches.

Strips (in rows)

USE INSTRUCTIONS: This product may be applied in rows of tree or vine crops and may also be tank mixed with the following products.

DEVRINOL® 50 DF	PRINCEP® CALIBER 90
DIREX® 4L	SIMAZINE 4L
GOAL® 2XL	SIMAZINE 80W
KARMEX® DF	SIM-TROL™ 4L
KROVAR® I	SOLICAM® DF
KROVAR® II	SURFLAN® AS
PROWL®	SURFLAN® 75W

Do not apply these tank mixtures in Puerto Rico.

Refer to the individual product labels for specific crops, rates, geographic restrictions and precautionary statements.

Apply 12 fluid ounces to 7.5 pints of this product per acre in these tank mixtures. Use rates at the higher end of the labeled rate range when weeds are stressed, growing in dense populations or are greater than 12 inches tall.

Perennial grass suppression

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

For suppression of tall fescue, fine fescue, orchardgrass and quackgrass, apply 6 fluid ounces of this product in 10 to 20 gallons of water per acre.

For suppression of Kentucky bluegrass covers, apply 4.5 fluid ounces of this product per acre. Do not add ammonium sulfate.

For best results, mow cool season grass covers in the spring to even their height and apply this product 3 to 4 days after mowing.

For suppression of vegetative growth and seedhead inhibition of bahiagrass for approximately 45 days, apply 4.5 fluid ounces of this product in 10 to 25 gallons of water per acre. Apply 1 to 2 weeks after full green-up or after mowing to a uniform height of 3 to 4 inches. This application must be made prior to seedhead emergence.

For suppression up to 120 days, apply 3 fluid ounces of this product per acre, followed by an application of 1.5 to 3 fluid ounces per acre about 45 days later. Make no more than 2 applications per year.

For burndown of bermudagrass, apply 1.5 pints to 3 pints of this product in 3 to 20 gallons of water per acre. Use this treatment only if reduction of the bermudagrass stand can be tolerated. When burndown is required prior to harvest, allow at least 21 days to ensure sufficient time for burndown to occur.

For suppression of bermudagrass, apply 4.5 to 12 fluid ounces of this product per acre east of the Rocky Mountains and 12 fluid ounces of this product per acre west of the Rocky Mountains. Apply in a total spray volume of 3 to 20 gallons per acre, no sooner than 1 to 2 weeks after full green-up. If the bermudagrass is mowed prior to application, maintain a minimum of 3 inches in height. Sequential applications may be made when regrowth occurs and bermudagrass injury and stand reduction can be tolerated. East of the Rocky Mountains, rates of 4.5 to 7.5 fluid ounces per acre must be used in shaded conditions or where a lesser degree of suppression is desired.

Selective equipment

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

RESTRICTIONS: For citron and olives, apply as a post-directed spray only.
EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF HERBICIDE SOLUTION, SPRAY, DRIFT OR MIST WITH FOLIAGE OR GREEN BARK OF TRUNK, BRANCHES, SUCKERS, FRUIT OR OTHER PARTS OF TREES AND VINES. CONTACT OF THIS PRODUCT WITH OTHER THAN MATURED BROWN BARK CAN RESULT IN SERIOUS CROP DAMAGE.

AVOID PAINTING CUT STUMPS WITH THIS PRODUCT AS INJURY RESULTING FROM ROOT GRAFTING MAY OCCUR IN ADJACENT TREES.

TREE FRUITS

LABELED CROPS: Apple, Apricot, Cherry (Sweet, Sour), Crabapple, Loquat, Mayhaw, Nectarine, Olive, Peach, Pear, Plum/Prune (All), Quince

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

NOTE: FOR USE DIRECTIONS, SEE THE "TREE, NUT AND VINE (GENERAL)" SECTION.

THE FOLLOWING DIRECTIONS ARE SPECIFIC TO TREE FRUITS.

Restrictions on application equipment

For cherries, any application equipment listed in this section may be used in all states.

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

For PEACHES grown in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee only, apply with a shielded boom sprayer or shielded wiper applicator, which prevents any contact of this product with the foliage or bark of trees. Apply no later than 90 days after first bloom. Applications made after this time may result in severe damage. Remove suckers and low-hanging limbs at least 10 days prior to application. Avoid applications near trees with recent pruning wounds or other mechanical injury. Apply only near trees 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.

Allow a minimum of 1 day between last application and harvest for apple, crabapple, loquat, mayhaw, pear, quince.

Allow a minimum of 17 days between last application and harvest for apricot, cherry, nectarine, olive, peach, plum/prune.

TREE NUTS

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

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

NOTE: FOR USE DIRECTIONS, SEE THE "TREE, NUT AND VINE (GENERAL)" SECTION. THE FOLLOWING DIRECTIONS ARE SPECIFIC TO TREE NUTS.

Allow a minimum of 3 days between last application and harvest of tree nuts.

TROPICAL CROPS

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

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

Allow a minimum of 14 days between last application and harvest of acerola, atemoya, avocado, banana, breadfruit, canistel, carambola, cherimoya, cocoa beans, coconuts, dates, figs, genip, jaboticaba, jackfruit, longan, lychee, mango, mayhaw, passion fruit, persimmon, pomegranate, sapodilla, sapote, soursop, sugar apple, tamarind, and tea.

Allow a minimum of 28 days between last application and harvest of coffee.

Allow a minimum of 1 day between last application and harvest of banana, guava, papaya and plantain. Do not feed or graze treated pineapple forage following application.

VEGETABLE CROPS

LABELED CROPS: Amaranth, Arrugula, Artichoke (Jerusalem), Beans (All), Beet greens, Garden beets, Broccoli (All), Brussels sprouts, Cabbage (All), Cabbage (Chinese), Cantaloupe, Cardoon, Cavalo Broccolo, Carrot, Cauliflower, Casaba melon, Celery, Celery (Chinese), Celeriac, Celtuce, Chard (Swiss), Chayote, Chervil, Chick peas, Chicory, Chrysanthemum, Collards, Corn salad, Crenshaw melon, Cress, Cucumber, Dandelion, Dock (sorrel), Eggplant, Endive, Fennel (florence), Garlic, Gherkin, Ginseng, Gourds, Ground cherry, Guar, Honeydew melon, Honey ball melon, Horseradish, Kale, Kohlrabi, Leek, Lentils, Lettuce, Mango melon, Melons (All), Mizuna, Muskmelon, Mustard greens, Okra, Onion, Oriental radish, Parsley, Parsnips, Peas (All), Pepinos, Pepper (All), Persian melon, Potato (Irish), Pumpkin, Purslane, Radish, Rape greens, Rhubarb, Rutabaga, Salsify, Shallot, Spinach (All), Mustard Spinach, Squash (Summer, Winter), Sugar beets, Sweet potato, Tomatillo, Tomato, Turnip, Watercress, Watermelon, Yams.

USE INSTRUCTIONS: This product may be applied prior to the emergence of direct seeded vegetables or prior to transplanting vegetables.

PRECAUTIONS: Residues can be removed by a single 0.5 inch application of water, either by natural rainfall or via a sprinkler system. Applications made at emergence will result in injury or death to emerged seedlings.

When applying this product prior to transplanting crops into plastic mulch, care must be taken to remove residues of this product, which could cause crop injury, from the plastic prior to transplanting.

For the following crops, apply only prior to planting. Allow at least 3 days between application and planting of cantaloupe, casaba melon, crenshaw melon, cucumber, eggplant, gherkin, gourds, ground cherry, honeydew melon, honey ball melon, mango melon, melons (all), muskmelon, pepper (all), persian melon, pumpkin, squash (summer, winter), tomatillo, watercress, and watermelon.

Wiper applicators may be used in rutabagas. Allow at least 14 days between application and harvest.

VINE CROPS

LABELED CROPS: Grape (raisin, table, wine), Kiwi fruit

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

NOTE: FOR USE DIRECTIONS, SEE THE “TREE, NUT AND VINE (GENERAL)” SECTION.

THE FOLLOWING DIRECTIONS ARE SPECIFIC TO VINE CROPS.

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

In the northeast and Great Lakes regions, applications must be made prior to the end of bloom stage of grapes to avoid injury, or make applications with shielded sprayers or wiper equipment.

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

ROUNDUP READY® CROPS

The following instructions include applications which can be made onto Roundup Ready® crops during the complete cropping season. Do NOT combine these instructions with other recommendations made for crop varieties which do not contain the Roundup Ready® gene, in the CROPS (ALPHABETICAL) section of this label.

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

Applying this product to crop 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 crop variety contains a patented gene which provides tolerance to Albaugh's GLY STAR brand herbicides. Information on Roundup Ready® crop varieties may be obtained from your seed supplier.

Spray Drift Management

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

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

DO NOT exceed a maximum rate of 24 fluid ounces per acre of this product when making applications by air unless otherwise directed. For aerial application in California or Arkansas, refer to the federal supplemental label for aerial applications in that state for specific instructions, restrictions and requirements.

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.

Sprayer Preparation: It is important that sprayer, lines, filters, and mixing equipment be clean and free of pesticide residue before making applications of this product to Roundup Ready® crops. Follow the cleaning procedures specified on the label of the product(s) previously used. Many crops can be very sensitive to herbicides at extremely low concentrations and care must be taken to thoroughly clean all equipment prior to use.

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 18 to 48 fluid ounces per acre of this product is required to control existing weeds prior to crop emergence.

There are no rotational crop restrictions following the application of this product.

For over-the-top uses on Roundup Ready® crop varieties, crop safety and weed control performance are not warranted by Albaugh when this product is used in conjunction with "brown bag" or "bin run" seed saved from previous year's production and replanted.

CANOLA WITH THE ROUNDUP READY® GENE

TYPES OF APPLICATIONS: Preplant, preemergence, postemergence

USE INSTRUCTIONS:

Maximum Allowable Combined Application Quantities Per Season

1. Preplant and preemergence applications	48 fluid ounces per acre
2. Total in-crop application from emergence to 6-leaf	24 fluid ounces per 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.
Preplant or Pre-emergent applications: This product may be applied by aerial or ground application equipment prior to planting or emergence of canola.

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. To maximize yield potential spray canola early to eliminate competing weeds. Any single over-the-top broadcast application must not exceed 10 fluid ounces per acre. No more than two over-the-top broadcast applications may be made from crop emergence through the six leaf stage of development. Sequential over-the-top applications of this product must be at least 10 days apart.

Weeds controlled. For specific rates of application and instructions for control of various annual and perennial weeds, refer to the “ANNUAL” and “PERENNIAL” weed rate tables of this labeling.
Some weeds with multiple germination times or suppressed (stunted) weeds may require sequential applications of this product for control. The second application must be made after some regrowth has occurred and at least 10 days after a previous application of this product.

This product will control or suppress, most perennial weeds. For some perennial weeds, repeat applications may be required to eliminate crop competition throughout the growing season.

Allow a minimum of 60 days between last application and canola harvest.

CORN WITH THE ROUNDUP READY® GENE

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, postemergence, spot treatment, post-harvest

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 must be made to actively growing weeds before they reach the maximum size listed in the "ANNUAL" and "PERENNIAL" weed rate tables. Refer to the "MIXING" section of this labeling for proper use instructions.

This product may be applied postemergence to Roundup Ready® corn from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 30 inches, whichever comes first. Single in-crop applications of this product are not to exceed 24 fluid ounces per acre. Sequential in-crop applications of this product from emergence through the V8 stage or 30 inches must not exceed 48 fluid ounces per acre per growing season.

Maximum Allowable Application Rates

1. Combined total per year for all applications	6 quarts per acre
2. Preplant, Preemergence applications	3.75 quarts per acre
3. Total in-crop applications from emergence through the V8 stage or 30 inches	48 fluid ounces per acre
4. Maximum preharvest application rate after maximum kernal fill is complete and the crop is physiologically mature (black layer formation) until 7 days before harvest	24 fluid ounces per acre

The addition of 1 to 2 percent dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this product under hard water conditions, drought conditions or when tank mixed with Bullet®, 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 micronutrients are not recommended with this product since this may result in increased potential for crop injury.

For ground applications: Use the labeled 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 labeled rates of this product in 3 to 15 gallons of spray solution per acre.

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.

Weed Control Directions

Apply 18 to 24 fluid ounces of GLYPHOSATE 53.8% per acre for control of labeled grasses and broadleaf weeds in conventional and no-till corn production systems. Refer to the "ANNUAL WEED RATE TABLE" of the labeling rates for specific annual weeds. GLYPHOSATE 53.8% applied at up to 24 fluid ounces per acre will control or suppress the growth of perennial weeds such as: bermudagrass, Canada thistle, common milkweed, field bindweed, hemp dogbane, Horsenettle, nutsedge, quackgrass, rhizome Johnsongrass, redvine, Trumpetcreeper, swamp smartweed, and wirestem muhly. For additional information on perennial weeds, see the "PERENNIAL WEED RATE TABLE" in this labeling.

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 must be made before the weeds reach a height and/or density that the weeds become competitive with the crop. A single in-crop application of this product at the labeled 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 must 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 18 to 24 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. Refer to the specific product label and observe all precautions and limitations on the label for all products used in tank mixtures, including application timing restrictions, soil restrictions, minimum recropping interval and rotational guidelines – the more restrictive requirements apply.

Tank Mix Partner	Maximum Height of Corn For Application
Harness® Harness® Xtra Harness® Xtra 5.6	11 inches
Bullet®* Micro-Tech®* Partner®*	5 inches
Permit®	24 inches
Atrazine	12 inches

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

COTTON WITH THE ROUNDUP READY® GENE

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, over-the-top, post-directed, hooded sprayer, preharvest

ATTENTION: This product is for use only over-the-top of or directed onto improved cotton varieties that are designated as cotton with the Roundup Ready® gene. SEVERE INJURY OR DEATH OF COTTON WILL RESULT IF ANY COTTON VARIETIES NOT PROPERLY DESIGNATED AS HAVING THE ROUNDUP READY® GENE ARE SPRAYED WITH THIS PRODUCT.

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.

USE INSTRUCTIONS:

Maximum Allowable Yearly Rates

1. Combined total per year for all applications	6 quarts per acre
2. Preplant, Preemergence applications	3.75 quarts per acre
3. Total in-crop applications from cracking to layby	3 quarts per acre
4. Maximum preharvest application rate	1.5 quarts per 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.

The combined total application from crop emergence until harvest must not exceed 4.5 quarts per acre.

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 must not exceed 24 fluid ounces 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.

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 must 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 must not exceed 24 fluid ounces per acre of this product. No more than two applications can 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.

ATTENTION: USE OF GLYPHOSATE 53.8% 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 must only be used where weeds threaten to cause the loss of the crop. 24 fluid ounces per acre may be applied either as an over-the-top application or as a post-directed treatment sprayed higher on the cotton plants and over the weeds.

NOTE: SALVAGE TREATMENTS WILL RESULT IN SIGNIFICANT BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS. MAKE NO MORE THAN ONE SALVAGE TREATMENT PER GROWING SEASON.

Weeds controlled: For specific rates of application and instructions for control of specific weed species, refer to the "ANNUAL" and "PERENNIAL" weed rate tables of this label. GLYPHOSATE 53.8% applied at 24 fluid ounces 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.

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% boll crack. Allow a minimum of 7 days between final application and harvest of cotton or feeding of cotton forage or hay.

NOTE: GLYPHOSATE 53.8% will not enhance the performance of harvest aids when applied to Roundup Ready® cotton. DO NOT apply GLYPHOSATE 53.8% preharvest to crops grown for seed.

ROUNDUP READY FLEX COTTON

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

TYPES OF APPLICATION: Preplant, At-Planting, Preemergence, Postemergence (In-crop), Preharvest

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

Maximum Application Rates	
Combined total per year for all applications	6 quarts per acre
Total of all Preplant, At-Planting, Preemergence applications	3.75 quarts per acre
Total of all In-crop applications from cracking to 60 percent open bolls	4.5 quarts per acre
Total of all In-crop applications between layby and 60 percent open bolls	1.5 quarts per acre
Total of all In-crop applications from 60 percent open bolls to 7 days prior to harvest	1.5 quarts per acre
Total of all In-crop applications from emergence through harvest	4.5 quarts per acre

See the "ROUNDUP READY CROPS" section of the container label for precautionary instructions for use in Roundup Ready crops. See the "USE INFORMATION" section of the container label for more information on Maximum Application Rates.

Preplant, At-Planting, Preemergence

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

TANK MIXTURES: This product may be tank-mixed with 2,4-D or Clarity and applied prior to planting only. This product may be tank-mixed with the following products and applied prior to crop emergence.

Ensure that the specific product being used is labeled for application prior to emergence of cotton. Read and follow label directions of all products in the tank mixture.

[Insert active ingredient(s) or brand name of product(s) containing the following active ingredients that, at the time of printing, are registered for use prior to the emergence of cotton:

2,4-D,
clomazone (Aim),
dicamba,
diuron (Direx, Karmex),
flumioxan (Chateau, Valor),
fluometuron (Cotoran, Meturon),
fomesafen (Reflex),

metolachlor,
norflurazone (Solicam)
s-metolachlor (Dual Magnum, Dual II Magnum),
pendimethalin (Prowl, Prowl H2O),
prometyrn (Caparol, Cotton-Pro),
pyrithiobac-sodium (Staple)

Maximum quantity of this product that may be applied for all preplant, at-planting and preemergence applications combined is 3.75 quarts per acre per season. Refer to individual tank-mix product label for restrictions and precautions; use according to the most restrictive precautionary statements for each product in the tank mixture.

Postemergence (In-crop)

USE INSTRUCTIONS: This product may be applied to control annual grasses and broadleaf weeds listed on this label in Roundup Ready Flex cotton. To maximize yield potential, eliminate competing weeds early. Many perennial weeds will be controlled or suppressed with one or more applications of this product. Use an initial application of 25 fluid ounces per acre on 1 to 3 inch tall annual grass and broadleaf weeds. This product may be applied postemergence to Roundup Ready Flex cotton using ground application equipment at rates up to 36 fluid ounces per acre per application. In addition to broadcast application, post-directed spray equipment may be used to achieve more thorough weed coverage.

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

[Insert active ingredient(s) or brand name of product(s) containing the following active ingredients that, at the time of printing, are registered for use postemergence (in-crop) to cotton:

clethodim,
fluazifop-P-butyl (Fusilade DX),
fomesafen (Reflex),
metolachlor Stalwart),
s-metolachlor (Dual Magnum),
pyrithiobac-sodium (Staple),
quizalofop-p-ethyl (Assure II),
sethoxydim (Poast Plus),
trifloxysulfuron-sodium (Envoke)

[*Optional text:* Staple may cause leaf yellowing and/or leaf crinkling when applied postemergence (in-crop) in Roundup Ready Flex cotton. Dual MAGNUM and Stalwart applied over the top of Roundup Ready Flex cotton may cause leaf injury in the form of necrotic spotting.]

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

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

[Insert active ingredient(s) or brand name of product(s) containing the following active ingredients that, at the time of printing, are registered for use postemergence (in-crop) to cotton:

carfentrazone-ethyl (Aim),
diuron (Direx),
flumioxazin (Chateau, Valor),
fluometuron Cotoran),
linuron (Layby-Pro),
pendimethalin Prowl H2O,
prometyrn (Caparol),
pyrithiobac-sodium (Staple),
trifloxysulfuron-sodium (Envoke)

The maximum single, in-crop application rate of this product to Roundup Ready Flex cotton using ground application equipment is 36 fluid ounces per acre. In-crop application rates above 25 fluid ounces per acre made alone or with the addition of other crop chemical products containing surfactant may cause a crop response including leaf speckling or leaf necrosis. Do not exceed a maximum rate of 25 fluid ounces of this product per acre when making application by air. Between layby and 60 percent open bolls, the maximum combined total application rate of this product is 48 fluid ounces per acre. The maximum combined total of all applications of this product made from crop emergence to 60 percent open bolls must not exceed 4.5 quarts per acre. DO NOT ADD ADDITONAL SURFACTANT OR ADDITIVES CONTAINING SURFACTANT TO THIS PRODUCT FOR OVER-THE-TOP APPLICATION TO ROUNDUP READY FLEX COTTON.

Preharvest

USE INSTRUCTIONS: This product may be applied to Roundup Ready Flex cotton at up to 48 fluid ounces per acre for annual and perennial weed control prior to harvest after 60 percent boll crack.

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

Allow a minimum of 7 days between application and harvest of Roundup Ready Flex cotton.

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

SOYBEANS WITH THE ROUNDUP READY® GENE

TYPES OF APPLICATIONS: Preplant, preemergence, at-planting, postemergence, preharvest, post-harvest

USE INSTRUCTIONS: When applied as directed, this product 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 of this product.

Maximum Allowable Application Rates	
1. Combined total per year for all applications	6 quarts per acre
2. Preplant, Preemergence applications	3.75 quarts per acre
3. Total in-crop applications from emergence from cracking throughout flowering	2.25 quarts per acre
4. Maximum preharvest application rate	24 fluid ounces per acre

RESTRICTIONS: The combined total application from crop emergence through harvest must not exceed 2.25 quarts per acre. The maximum rate for any single in crop application is 48 fluid ounces per acre. The maximum combined total of this product which can be applied during flowering is 48 fluid ounces per acre. Allow a minimum of 14 days between final application and harvest or feeding of soybean grain, forage or hay.

NOTE: The use of this product for in-crop applications over Roundup Ready® soybeans is not registered in California.

Annual Weed Rate Tables

The following rates will provide control of labeled grasses and broadleaf weeds in conventional and no-till Roundup Ready® soybean production systems. Refer to the “ANNUAL WEED RATE TABLES” of this label for rates for specific annual weeds.

Albaugh will not warrant crop safety or weed control when Roundup Ready® soybeans are treated with herbicides not specified on this label. Because of the potential for: 1) crop injury, 2) poor weed control from antagonism, and/or 3) rotational crop restrictions, herbicides not specified on this label should not be used, whether applied preemergence or applied postemergence as a tank mixture with GLYPHOSATE 53.8% herbicide.

This product may be used up to 48 fluid ounces per acre in any single in-crop application for control of annual weeds, where heavy weed densities exist.

Midwest/Mid-Atlantic Instructions

Narrow row or drilled soybeans: A single in-crop application of this product will provide effective control of labeled weeds. Use an initial application of 24 fluid ounces per acre, on 4-8” weeds. Weeds will generally be 4-8” tall 3 to 5 weeks after planting. If the initial application is delayed and weeds are 8-18” tall, use 36 fluid ounces per acre.

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 18 to 24 fluid ounces per acre may be necessary to control late flushes of weeds.

Wide row soybeans: An in-crop application of this product will provide effective control of the initial stand of labeled weeds. Use an initial application of 24 fluid ounces per acre, on 4-8” weeds. Weeds will generally be 4-8” 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 (if needed) Applications

Weed Height (inches)	Rate (fl oz/A)
1-3	18
4-8	24
8-18	36

Giant ragweed: Apply 24 fluid ounces per acre when the weed is 8-12" tall to avoid the need for sequential application.

Black nightshade, Pennsylvania smartweed, ladysthumb smartweed, velvetleaf and waterhemp: Apply 24 fluid ounces per acre to weeds 3-6" tall and 36 fluid ounces per acre when weeds are up to 12 inches tall. For Morningglory species apply 24 fluid ounces per acre when weeds are up to 4 inches tall, and 36 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 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 18 fluid ounces of this product per acre for sequential applications.

Southeast Instructions

Narrow row, drilled, or wide-row soybeans: An in-crop application of this product will provide effective control of the initial stand of labeled weeds. Use an initial application of 24 fluid ounces per acre, on 3-6" weeds. Weeds will generally be 3-6" tall 2 to 3 weeks after planting.

Initial Treatment

Weed Height (inches)	Rate (fl oz/A)
3-6	24
6-12	36

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 12 to 24 fluid ounces per acre may be necessary to control late flushes of weeds.

Sequential Application (if needed)

Weed Height (inches)	Rate (fl oz/A)
2-3	12
3-6	18
6-12	24

Florida pusley, hemp sesbania and spurred anoda: Apply 24 fluid ounces per acre to weeds 2-4" for the initial application. Apply 24 fluid ounces per acre when these weeds are 3-6" tall if a sequential application is necessary.

Morningglory, black nightshade, groundcherry, and Pennsylvania smartweed: Apply 18 fl ounces per acre on 1-3" weeds, 24 fluid ounces per acre on 3-6" weeds, or 36 fluid ounces per acre on 6-12" 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 of this product should be made after some regrowth has occurred. Use a minimum of 12 fluid ounces of this product per acre for sequential applications.

Delta/Mid-South Instructions

Narrow row, drilled, or wide row soybeans: An in-crop application of this product will provide effective control of the initial stand of labeled weeds. A sequential application will be required to control new flushes of weeds. Use an initial application of 24 fluid ounces per acre, on 2-4" weeds. Weeds will generally be 2-4" tall 2 to 3 weeks after planting.

Initial Treatment

Weed Height (inches)	Rate (fl oz/A)
2-4	24
5-12	36

Sequential Application

Weed Height (inches)	Rate (fl oz/A)
2-3	12
3-6	18
6-12	24

Hemp sesbania and spurred anoda: Apply a sequential treatment of 24 fl ounces per acre on 3-6" 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 12 fluid ounces of this product per acre for sequential applications.

Perennial Weeds Rate Instructions

A 24 to 48 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, marestail (horseweed), nutsedge, quackgrass, rhizome johnsongrass, redvine, trumpetcreeper, swamp smartweed, and wirestem muhly.

Allow perennial weed species to achieve at least 6" of growth before spraying with GLYPHOSATE 53.8% herbicide.

FARMSTEADS

TYPES OF APPLICATIONS: Nonselective weed control, trim-and-edge, chemical mowing, cut stumps, habitat management

Nonselective weed control, Trim-and-edge

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

This product may be tank mixed with the following products. Refer to these product labels for approved farmstead sites and application rates. For annual weeds, use 1.5 pints per acre of this product when weeds are less than 6 inches tall and 2.25 pints per acre when weeds are greater than 6 inches tall. For perennial weeds, apply 3 to 7.5 pints per acre in these tank mixes. For tank mixtures with these products through backpack sprayers, handguns or other high-volume spray-to-wet applications, see the "HAND-HELD AND HIGH VOLUME EQUIPMENT" section of this label for labeled rates.

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

Banvel® mixtures may not be applied by air in California.

Greenhouse/Shadehouse

This product may be used to control weeds in and around greenhouses and shadehouses. Desirable vegetation must not be present during application and air circulation fans must be turned off.

Chemical mowing

USE INSTRUCTIONS: This product will suppress perennial grasses listed in this section to serve as a substitute for mowing. Apply this product at a rate of 4.5 to 6 fluid ounces per acre. Use 6 fluid ounces of this product per acre when treating tall fescue, fine fescue, orchardgrass or quackgrass covers. Use 4.5 fluid ounces of this product per acre when treating Kentucky bluegrass. Apply treatments in 10 to 20 gallons of spray solution per acre. Chemical mowing applications may be made along farm ditches and other parts of farmsteads.

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

Cut Stumps

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

USE INSTRUCTIONS: This product will control regrowth of cut stumps and resprouts of many types of woody brush and tree species, some of which are listed below. Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut trees or resprouts close to the soil surface.

Apply a 50 to 100 percent solution of this product to the freshly cut surface immediately after cutting. Delays in application may result in reduced performance. For best results, applications must be made during periods of active growth and full leaf expansion.

Alder
Eucalyptus
Madrone
Oak
Reed, giant
Salt-cedar
Sweetgum
Tan oak
Willow

RESTRICTIONS: DO NOT MAKE CUT STUMP APPLICATIONS WHEN THE ROOTS OF DESIRABLE WOODY BRUSH OR TREES MAY BE GRAFTED TO THE ROOTS OF THE CUT STUMP. INJURY RESULTING FROM ROOT GRAFTING MAY OCCUR IN ADJACENT WOODY BRUSH OR TREES.

Habitat Management

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

Habitat restoration and maintenance

USE INSTRUCTIONS: This product may be used to control exotic and other undesirable vegetation in habitat management areas. Applications can be made to allow recovery of native plant species, prior to planting desirable native species, and for similar broadspectrum vegetation control requirements in habitat management areas. Spot treatments can be made to selectively remove unwanted plants for habitat maintenance and enhancement. The tank mixtures listed in this section of the label may be used for habitat restoration and maintenance.

Wildlife food plots

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

Rangelands

TYPES OF APPLICATIONS: Postemergence

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

Preventing viable seed production is key to the successful control and invasion of annual grassy weeds in rangelands. Follow-up applications in sequential years should eliminate most of the viable seeds. Grazing of treated areas should be delayed to encourage growth of desirable perennials. Allowing desirable perennials to flower and reseed in the treated area will encourage successful transition.

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

Postemergence

Apply 9-12 fluid ounces of this product to control or suppress many weeds, including downy brome, cheat grass, cereal rye and jointed goatgrass in rangelands. Apply when most mature brome plants are in early flower and before the plants including seedheads turn color. Allowing for secondary weed flushes to occur in the spring following rain events further depletes the seed reserve, and encourages perennial

grass conversion on weedy sites. Fall applications are possible, and recommended where spring moisture is usually limited and fall germination allows for good weed growth.

Apply 12 fluid ounces when the medusahead has reached the 3-leaf stage. Delaying applications beyond this stage will result in reduced or unacceptable control. Fire may be useful in eliminating the thatch layer produced by slow decaying culms prior to application. Allow new growth to occur before spraying after a burn. Repeat applications in subsequent years may be necessary to eliminate the seedbank before reestablishing desirable perennial grasses in medusahead-dominated rangelands.

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

SILVICULTURAL SITES AND UTILITY RIGHTS-OF-WAY

TYPES OF APPLICATIONS: This product is labeled for the control or partial control of woody brush, trees and herbaceous weeds. This product is labeled for use in forestry and utility sites. This product is also labeled for use in preparing or establishing wildlife openings within these sites and maintaining logging roads, and for side trimming along utility rights-of-way.

In forestry, this product is labeled for use in site preparation prior to planting any tree species, including Christmas trees and silvicultural nursery sites.

In utilities, this product is labeled for use along electrical power, pipeline and telephone rights-of-way, and in other utility sites associated with these rights-of-way, such as substations.

APPLICATION RATES AND TIMING:

Application	GLYPHOSATE 53.8%	Spray Volume (Gal of Spray Solution/A)
Broadcast		
Aerial	1.5 to 7.5 qts/A	5 to 30
Ground	1.5 to 7.5 qts/A	10 to 60
Spray-to-Wet		
Handgun, Backpack, Mistblower	0.6% to 2% by volume	spray-to-wet
Low Volume Directed Spray		
Handgun, Backpack, Mistblower	4% to 7.5% by volume	partial coverage*

*For low volume directed spray applications, coverage must be uniform with at least 50 percent of the foliage contacted. Coverage of the top one-half of the plant is important for best results.
In forestry site preparation and utility rights-of-way applications, this product requires use with a nonionic surfactant. Use a nonionic surfactant with greater than 80 percent active ingredient and labeled for use with herbicides. Use of this product without surfactant will result in reduced performance. See the "MIXING" section of this labeling for more information.

Mix 2 or more quarts of the nonionic surfactant per 100 gallons of spray solution (0.5 percent or more by spray volume). Do not use surfactant concentrations greater than 1.5 percent by spray volume with handgun applications or 2.5 percent by spray volume with broadcast applications.

Use higher rates of this product within the labeled range for control or partial control of woody brush, trees and hard-to-control perennial herbaceous weeds. For best results, apply to actively growing woody brush and trees after full leaf expansion and before fall color and leaf drop. Increase rates within the labeled range for control of perennial herbaceous weeds any time after emergence and before seedheads, flowers or berries appear.

Use the lower rates of this product within the labeled range for control of annual herbaceous weeds and actively growing perennial herbaceous weeds after seedheads, flowers or berries appear. Apply to the foliage of actively growing annual herbaceous weeds any time after emergence.

This product has no herbicidal or residual activity in the soil. Where repeat applications are necessary, do not exceed 8 quarts of this product per acre per year.

Tank Mixtures

Tank mixtures of this product may be used to increase the spectrum of vegetation controlled. When tank mixing, read and carefully observe the label claims, cautionary statements and all information on the labels of both products used. Use according to the most restrictive precautionary statements for each product in the mixture. Any labeled rate of this product may be used in a tank mix.

NOTE: For forestry site preparation, make sure the tank-mix product is approved for use prior to planting the desired species. Observe planting interval restrictions. For side trimming treatments in utility rights-of-way, tank mixtures with Arsenal® 2WSL are not recommended. For side trimming treatments, it is recommended that this product be used alone as specified.

Product	Broadcast Rate	Use Sites
Arsenal® Applicators Concentrate**	2 to 16 fl oz/a	Forestry site preparation
Chopper®	4 to 32 fl oz/a	Forestry site preparation
Escort®**	½ to 3 ½ fl oz/a	Forestry site preparation
Oust®	1 to 4 fl oz/a	Forestry site preparation, Utility sites
Garlon® 3A*, Garlon® 4	1 to 4 qts	Forestry site preparation, Utility sites
Arsenal® 2WSL**	4 to 32 fl oz/a	Utility sites

Product	Spray-to-Wet Rates	Use Sites
Arsenal® Applicators Concentrate**	1/32 % to ½ % by volume	Forestry site preparation
Arsenal® 2WSL**	1/16 % to ½ % by volume	Utility sites

Product	Low Volume Directed Spray Rates	Use Sites
Arsenal® Applicators Concentrate**	1/8 % to ½ % by volume	Forestry site preparation
Arsenal® 2WSL**	1/8 % to ½ % by volume	Utility sites

*Ensure that Garlon® 3A is thoroughly mixed with water according to label directions before adding this product. Have spray mixture agitating at the time this product is added to avoid spray compatibility problems.

**Arsenal® and Escort® are not registered in the state of California.

For control of herbaceous weeds, use the lower labeled tank mixture rates. For control of dense stands or tough-to-control woody brush and trees, use the higher labeled rates.

FORESTRY CONIFER AND HARDWOOD RELEASE

Directed Spray and Selective Equipment

This product may be applied as a directed spray or by using selective equipment in forestry conifer and hardwood sites, including Christmas tree plantations and silvicultural nurseries. Mix 2 to 6 quarts of a nonionic surfactant per 100 gallons of spray solution (0.5 to 1.5 percent by spray volume) for all spray applications. Use a surfactant with greater than 80 percent active ingredient.

In hardwood plantations, tank mixtures with Oust® may be used. In pine plantations, tank mixtures with Garlon® 4 or Arsenal® AC may be used. Comply with all site restrictions, forestry species limitations and precautions on the tank mix product label.

Avoid contact of spray, drift, mist or drips with foliage, green bark or non-woody surface roots of desirable species.

See all sections in the "APPLICATON EQUIPMENT AND TECHNIQUES" portion of this labeling for specific equipment recommendations and precautions.

For spray-to-wet applications, use a 1.5 percent spray solution for the control of undesirable woody brush and trees. To control herbaceous weeds, use a 0.75 to 1.5 percent solution.

For low volume directed spray applications, use a 4 to 7.5 percent spray solution. Coverage must be uniform with at least 50 percent of the foliage contacted. Coverage of the top one-half of the unwanted vegetation is important.

For equipment calibrated for broadcast applications, use 1.5 to 7.5 quarts of this product per acre. Apply in 10 to 60 gallons of clean water per acre. Shielded application equipment may be used to avoid contact of the spray solution with desirable plants. Shields must be adjusted to prevent spray contact with the foliage or green bark of desirable vegetation.

Wiper application equipment may be used. See the "SELECTIVE EQUIPMENT" portion of this labeling for equipment and rate directions.

Broadcast Spray

Except where specifically labeled below, use only where conifers have been established for more than one year.

Application must be made after formation of final conifer resting buds in the fall or prior to initial bud swelling in the spring.

Injury may occur to conifers treated for release, especially where spray patterns overlap or the higher rates are applied. Damage can be accentuated if applications are made when conifers are actively growing, or are under stress from drought, flood water, improper planting, insects, animal damage or diseases.

This product may require use with a surfactant. Follow the instructions under the "MIXING" portion of this labeling.

For release of the following conifer species outside the Southeastern United States:

Douglas fir	Pines*
Pseudotsuga menziesii	*Pinus spp.*
Fir	Redwood, California**
Abies spp.	*Sequoia spp.*

Hemlock**	Spruce
Tsuga spp.	*Picea spp.*

*Includes all species except loblolly pine, longleaf pine, shortleaf pine or slash pine.

**Do not use a surfactant for release of hemlock species or California redwood. In mixed conifer stands, injury to these species may result if a surfactant is used.

Apply 0.75 to 1.5 quarts of this product per acre as a broadcast spray.

Note: For release of Douglas fir with this product or labeled tank mixtures of this product, Entry™ II or a nonionic surfactant labeled for over-the-top foliar sprays may be used. To avoid possible conifer injury, Entry™ II rates should not exceed 20 fluid ounces per acre at elevations above 1500 feet, or 10 fluid ounces per acre in the coastal range or at elevations below 1500 feet in Washington and Oregon. Nonionic surfactants may be used at 2 fluid ounces per acre at elevations above 1500 feet, or 1 fluid ounce per acre in the coastal range or at elevations below 1500 feet. Use of surfactant rates exceeding those listed above may result in unacceptable conifer injury and are not allowed. Ensure that the nonionic surfactant has been adequately tested for Douglas fir safety before use.

In Maine, up to 2.25 quarts per acre of this product or a tank mix with 1 fl oz/a of Arsenal® Applicators Concentrate may be used for the control of difficult species.

To release Douglas fir, pine and spruce species at the end of the first growing season (except in California), apply 0.75 to 1.125 quarts of this product per acre. Ensure that the conifers are well hardened off.

Oust® Tank Mixtures – To release jack pine, white pine and white spruce, apply 0.75 to 1.5 quarts of this product with 1 to 3 fl oz (1 to 1.5 for white pine) of Oust® per acre. Make applications to actively growing weeds as a broadcast spray over the top of established conifers. Applications at these rates must be made after formation of conifer resting buds in the late summer or fall.

Arsenal® Applicators Concentrate Tank Mixtures – This product may be tank mixed with Arsenal® Applicators Concentrate for release of Douglas fir. Use 0.75 to 1.125 quarts of this product tank mixed with 2 to 6 fluid ounces of Arsenal® per acre. For release of balsam fir and red spruce, apply a mixture of 1.5 quarts of this product and 1 to 2.5 fluid ounces of Arsenal® Applicators Concentrate per acre.
For release of the following conifer species in the Southeastern United States:

Eastern white pine	Shortleaf pine
Pinus strobus	*Pinus echinata*
Loblolly pine	Slash pine
Pinus taeda	*Pinus elliottii*
Longleaf pine	Virginia pine
Pinus palustris	*Pinus virginiana*

Apply 1.125 to 1.875 quarts of this product per acre as a broadcast spray during late summer or early fall after the conifers have hardened off. For applications at the end of the first growing season, use 0.75 quart per acre of this product alone or in a labeled tank mixture.

Arsenal® Applicators Concentrate Tank Mixtures – Apply 0.75 to 1.5 quarts of this product with 2 to 16 fluid ounces of Arsenal® Applicators Concentrate per acre as a broadcast spray for conifer release. Use only on conifer species that are labeled for over-the-top sprays for both products. Use the higher labeled rates for dense, tough-to-control woody brush and trees.

Read and carefully observe the label claims, cautionary statements and all information on the labels of each product used in these tank mixtures. Use according to the most restrictive precautionary statements for each product in the mixture.

Herbaceous Release

When applied as directed, this product plus listed residual herbicides provides postemergence control of the annual weeds and control or suppression of the perennial weeds listed in this label, and residual control of the weeds listed in the residual herbicide label. Make applications to actively growing weeds as a broadcast spray over the top of labeled conifers.

Oust® Tank Mixtures – To release loblolly pines, apply 12 to 18 fluid ounces of this product, plus 2 to 4 ounces of Oust® per acre. To release slash pines, apply 9 to 12 fluid ounces of this product, plus 2 to 4 ounces of Oust® per acre.

Mix up to 3.2 fluid ounces per acre of Entry™ II with the labeled rate of this product plus Oust®. Applications can be made over newly planted pines after the emergence of herbaceous weeds in the spring or early summer. Best results are obtained from applications made in May and June.

Weed control may be reduced if water volumes exceed 25 gallons per acre for these treatments.
Atrazine Tank Mixtures – To release Douglas fir, apply 0.75 quart of this product, plus 4 pounds active ingredient of atrazine per acre. Apply only over Douglas fir that has been established for at least one full growing season. Apply in the early Spring, usually mid-March through early April. Injury will occur if applications are made after bud swell in the Spring. Do not add surfactant to this mix for this use.

Always read and follow the manufacturer's label directions for all herbicides and surfactants used.

ANNUAL WEEDS RATE TABLES ALPHABETICALLY BY SPECIES

Water carrier volumes of 3 to 10 gallons per acre for ground applications and 3 to 5 gallons per acre for aerial applications are required.

Do not tank mix with soil residual herbicides when using these rates unless otherwise specified.

For weeds that have been mowed, grazed or cut, allow regrowth to occur prior to treatment.

For those rates less than 36 fluid ounces per acre, this product may be used up to 36 fluid ounces per acre where heavy weed densities exist.

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

ANNUAL WEEDS RATE TABLE, NORTH AND SOUTH REGIONS

			RATE
WEED			(FLUID OUNCES PER ACRE)

SPECIES		REGION		9	12	18	24	30	36
				MAXIMUM HEIGHT/LENGTH					
Annoda, spurred				-	1”	2”	3”	5”	8”
Barley				-	18”	18”+	-	-	-
Barnyardgrass		South		-	3”	5”	7”	9”	12”
		North		-	-	6”	12”	-	-
Bassia, fivehook				-	-	-	6”	-	-
Bittercress				-	12”	20”	-	-	-
Bluegrass, annual				-	10”	-	-	-	-
Brome, downy				6”	-	-	-	-	-
Brome, Japanese				-	6”	-	24”	-	-
Browntop panicum				-	6”	8”	12”	-	24”
Burcucumber				-	-	6”	12”	-	-
Buttercup				-	12”	20”	-	-	-
Carolina foxtail				-	20”	-	-	-	-
Carolina geranium				-	-	-	4”	-	9”
Carpetweed				-	-	6”	12”	-	-
Cheat				-	6”	20”	-	-	-
Chervil				-	20”	-	-	-	-
Chickweed				-	12”	18”	-	-	-
Cocklebur				-	12”	18”	24”	-	-
Copperleaf, hophornbeam				-	1”	2”	3”	4”	6”
Copperleaf, Virginia				-	1”	2”	3”	4”	6”
Corn				-	12”	20”	-	-	-
Corn speedwell				-	12”	-	-	-	-
Crabgrass				-	12”	18”	-	-	-
Cutleaf evening primrose				-	-	-	3”	3”	6”
Dwarfdandelion				-	20”	-	-	-	-
Eastern mannagrass				-	8”	12”	-	-	-
Eclipta				-	4”	8”	12”	-	-
Fall panicum		South		-	4”	6”	8”	12”	24”
		North		-	6”	12”	18”	-	-
Falsedandelion				-	20”	-	-	-	-
Falseflax, smallseed				-	12”	-	-	-	-
Fiddleneck				-	-	-	6”	6”	12”
Field pennycress				-	6”	12”	-	-	-
Filaree				-	-	-	-	-	12”
Fleabane, annual				-	6”	20”	-	-	-
Fleabane, hairy *(Conyza bonariensis)*				-	6”	-	-	-	-
Fleabane, rough				-	3”	6”	12”	-	-
Florida pusley				-	-	-	4”	4”	6”
Foxtail		South		-	8”	12”	20”	-	-
		North		18”	18”+	-	-	-	-
Goatgrass, jointed				-	6”	-	-	-	-

WEED SPECIES		RATE (FLUID OUNCES PER ACRE)						
	REGION	9	12	18	24	30	36	
		MAXIMUM HEIGHT/LENGTH						
Goosegrass		-	3”	5”	8”	-	18”	
Grain sorghum (milo)		-	6”	12”	20”	-	-	
Groundsel, common		-	6”	-	-	-	-	
Hemp sesbania		-	-	2”	4”	6”	8”	
Henbit		-	-	-	6”	-	20”	
Horseweed/Marestail *(Conyza canadensis)*	South	-	-	12”	30”	-	-	
	North	-	6”	12”	18”	-	-	
Itchgrass		-	6”	12”	18”	-	-	
Johnsongrass, seedling	South	-	-	18”	-	-	-	
	North	-	12”	18”	-	-	-	
Junglerice		-	3”	5”	7”	9”	12”	
Knotweed		-	3”	8”	12”	-	20”	
Kochia[1]		-	3 to 6”	12”	-	-	-	
Lambsquarters		-	6”	8”	12”	-	20”	
Little barley		-	20”	-	-	-	-	
London rocket		-	6”	-	-	-	-	
Mayweed		-	-	2”	6”	12”	18”	
Morningglory *(Ipomoea spp.)*		-	-	2”	4”	-	6”	
Mustard, blue		6”	-	-	-	-	-	
Mustard, tansy		6”	12”	20”	-	-	-	
Mustard, tumble		6”	-	-	-	-	-	
Mustard, wild		6”	12”	18”	-	-	-	
Nightshade, black		-	6”	12”	-	-	-	
Nightshade, hairy		-	6”	12”	-	-	-	
Oats		-	-	6”	20”	-	-	
Pigweed		-	12”	18”	24”	-	-	
Prickly lettuce		-	6”	12”	20”	-	-	
Purslane		-	-	-	6”	6”	12”	
Ragweed, common	South	-	4”	6”	8”	-	11”	
	North	-	6”	12”	18”	-	-	
Ragweed, giant		-	-	4”	6”	-	11”	
Red rice		-	-	-	4”	-	-	
Russian thistle		-	-	-	6”	-	-	
Rye	South	-	6”	20”	60”	-	-	
	North	-	18”	18”+	-	-	-	
Ryegrass		-	-	-	6”	-	7”+	
Sandbur, field		12”	-	-	-	-	-	
Shattercane		-	12”	18”	-	-	-	
Sheperd’s purse		-	6”	12”	-	-	-	
Sicklepod		-	-	2”	4”	-	8”	

WEED SPECIES		REGION		RATE (FLUID OUNCES PER ACRE) MAXIMUM HEIGHT/LENGTH					
				9	12	18	24	30	36
Signalgrass, broadleaf				-	3”	5”	7”	9”	12”
Smartweed, ladysthumb				-	4”	6”	8”	-	12”
Smartweed, Pennsylvania				-	4”	6”	8”	-	12”
Sowthistle, annual				-	-	-	6”	-	12”
Spanishneedles				-	-	-	8”	-	18”
Speedwell, purslane				-	12”	-	-	-	-
Sprangletop				-	6”	12”	20”	-	-
Spurge, prostrate				-	6”	12”	20”	-	-
Spurge, spotted				-	6”	12”	20”	-	-
Spurry, umbrella				6”	-	-	-	-	-
Stinkgrass				12”	-	-	-	-	-
Sunflower				-	12”	18”	-	-	-
Teaweed/Prickly sida				-	1”	2”	3”	4”	6”
Texas panicum				-	6”	8”	12”	-	24”
Velvetleaf		South		-	2”	3”	4”	5”	8”
		North		-	3”	6”	12”	-	-
Virginia pepperweed				-	18”	-	-	-	-
Waterhemp				-	-	6”	12”	-	-
Wheat		South		-	6”	30”	-	-	-
		North		-	18”	18”+	-	-	-
Wheat (overwintered)				-	6”	18”	-	-	-
Wild oats				-	12”	-	-	-	-
Wild Proso Millet				-	-	6”	12”	12”	18”
Witchgrass				-	12”	-	-	-	-
Woolly cupgrass				-	6”	12”	-	-	-
Yellow rocket				-	-	12”	20”	-	-

[1]Do not treat kochia in the button stage.

ANNUAL WEEDS RATE TABLE, WEST REGION

WEED SPECIES		RATE (FLUID OUNCES PER ACRE) MAXIMUM HEIGHT/LENGTH				
		9	12	18	24	36
Barley		12”	-	-	-	-
Barnyardgrass		6”	-	-	-	-
Bluegrass, annual		6”	-	-	-	-
Bluegrass, bulbous		-	6”	-	-	-
Brome, downy[1]		6”	-	-	-	-
Buttercup		-	12”	-	-	-
Cheat		-	6”	-	-	-
Chickweed		-	6”	-	-	-

WEED SPECIES	RATE (FLUID OUNCES PER ACRE)				
	9	12	18	24	36
	MAXIMUM HEIGHT/LENGTH				
Cocklebur	-	12”	-	-	-
Corn	-	6”	-	-	-
Crabgrass	-	12”	-	-	-
Dwarfdandelion	-	12”	-	-	-
Fall panicum	-	12”	-	-	-
Falseflax, smallseed	-	12”	-	-	-
Field pennycress	-	6”	-	-	-
Filaree	-	-	-	-	12”
Fleabane, hairy *(Conyza bonariensis)*	-	6”	-	-	-
Florida pusley	-	-	-	12”	-
Foxtail	6 fl. oz. for up to 12”				
Goatgrass, jointed	-	6”	-	-	-
Groundsel, common	-	6”	-	-	-
Henbit	-	6”	-	-	-
Horseweed/Marestail *(Conyza canadensis)*	-	6”	-	-	-
Johnsongrass, seedling	-	12”	-	-	-
Lambsquarters	-	6”	-	-	-
London rocket	-	6”	-	-	-
Morningglory *(Ipomoea spp.)*	-	2”	-	-	-
Mustard, blue	6”	-	-	-	-
Mustard, tansy	6”	-	-	-	-
Mustard, tumble	6”	-	-	-	-
Mustard, wild	6”	-	-	-	-
Pigweed	-	12”	-	-	-
Rye	12”	-	-	-	-
Ryegrass, Italian	-	6”	-	-	-
Sandbur, field	12”	-	-	-	-
Shattercane	12”	-	-	-	-
Sheperd’s purse	-	6”	-	-	-
Sowthistle, annual	-	6”	-	-	-
Spurge, annual	-	6”	-	-	-
Stinkgrass	12”	-	-	-	-
Texas panicum	-	12”	-	-	-
Wheat	18”	-	-	-	-
Wild oats	-	12”	-	-	-
Witchgrass	-	12”	-	-	-

[1]For control of Downy brome in no-till systems, use 12 fluid ounces per acre.

Annual Weeds – 10 to 40 Gallons Per Acre in Water

Apply 1-½ pints to 2 ¼ pints of this product per acre. Use 1-½ pints per acre if weeds are less than 6 inches tall and 2 ¼ pints per acre if weeds are over 6 inches tall.

These rates will provide control of weeds listed in the annual weed control tables when water carrier volumes are 10 to 40 gallons per acre for ground applications.

Annual Weeds – Tank Mixtures with 2,4-D or Banvel®

9 to 12 fluid ounces of this product plus 0.25 pounds a.i. of Banvel® or 0.5 pounds a.i. of 2,4-D per acre will control the following weeds with the maximum height or length indicated: 6" – prickly lettuce, marestail/horseweed (*Conyza canadensis*), morningglory (*Ipomoea spp*.), kochia (Banvel® only); 12" – cocklebur, lambsquarters, pigweed, Russian thistle.

12 fluid ounces of this product plus 0.5 pounds a.i. of 2,4-D per acre will control the following weeds when they are a maximum height or length of 6 inches: common ragweed, giant ragweed, Pennsylvania smartweed, and velvetleaf.

9 fluid ounces of the product plus 0.25 pounds a.i. of Banvel® or 0.5 pounds a.i. of 2,4-D per acre will control foxtail up to 18".

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

DO NOT APPLY BANVEL® TANK MIXTURES BY AIR IN CALIFORNIA.

PERRENIAL WEEDS RATE TABLE ALPHABETICALLY BY SPECIES

Apply to actively growing perennial weeds.

NOTE: If weeds have been mowed or tilled, do not treat until plants have resumed active growth and have reached the labeled stages.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seed. Repeat treatments must be made prior to crop emergence.

Unless otherwise stated, allow 7 or more days after application before tillage.

Best results are obtained when soil moisture is adequate for active weed growth.

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Comments
Alfalfa	1.5-3	3-10	1.5%	Make applications after the last hay cutting in the fall. Allow alfalfa to regrow to a height of 6 to 8 inches or more prior to treatment. Applications should be followed with deep tillage at least 7 days after treatment, but before soil freeze-up.
Alligatorweed	6	3-20	1.25%	Partial control. Apply when most of the plants are in bloom. Repeat applications will be required to maintain control.
Anise (fennel)	-	-	.75-1.5%	Apply as a spray-to-wet treatment. Optimum results are obtained when plants are treated at the bud to full-bloom stage of growth.
Bahiagrass	4.5-7.5	3-20	1.5%	Apply when most plants have reached the early head stage.
Bentgrass	2.25	10-20	1.5%	For suppression in grass seed production areas. For ground applications only. Ensure entire crown area has resumed growth prior to a fall application. Bentgrass should have at least 3 inches of growth. Tillage prior to treatment should be avoided. Till 7 to 10 days after application for best results.
Bermudagrass	4.5-7.5	3-20	1.5%	For control, apply 7.5 pints of this product per acre. For partial control, apply 4.5 pints per acre. Treat

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Comments
				when bermudagrass is actively growing and seedheads are present. Retreatment may be necessary to maintain control.
Bermudagrass, water (knotgrass)	1.5-2.25	5-10	1.5%	Apply 2.25 pints of this product in 5 to 10 gallons of water per acre. Apply when water bermudagrass is 12 to 18 inches in length. Allow 7 or more days before tilling, flushing or flooding the field. Fall applications only: Apply 1.5 pints of this product in 5 to 10 gallons of water per acre. Fallow fields should be tilled prior to application. Apply prior to frost on water bermudagrass that is 12 to 18 inches in length. This product is not registered in California for use on water bermudagrass.
Bindweed, field	.75-7.5	3-20	1.5%	Do not treat when weeds are under drought stress as good soil moisture is necessary for active growth. For control, apply 6 to 7.5 pints of this product per acre west of the Mississippi River and 4.5 to 6 pints east of the Mississippi River. Apply when the weeds are at or beyond full bloom. For best results, apply in late summer or fall. Fall treatments must be applied before a killing frost. Also for control, apply 3 pints of this product plus 0.5 pounds a.i. of Banvel® in 10 to 20 gallons of water per acre. Do not apply by air. For suppression on irrigated agricultural land, apply 1.5 to 3 pints of this product plus 1 pound a.i. of 2,4-D in 10 to 20 gallons of water per acre with ground equipment only. Applications should be made following harvest or in fall fallow ground when the bindweed is actively growing and the majority of runners are 12 inches or more in length. The use of at least one irrigation will promote active bindweed growth. For suppression, apply 12 fluid ounces of this product plus 0.5 pound a.i. 2,4-D in 3 to 10 gallons of water per acre for ground applications and 3 to 5 gallons of water per acre for aerial applications. Apply by air in fallow and reduced tillage systems only. Delay applications until maximum emergence has occurred and when vines are between 6 to 18 inches in length. In California only, apply 1.5 to 7.5 pints of this product per acre. Actual rate needed for suppression or control will vary within this range depending on local conditions. For suppression on irrigated land where annual tillage is performed, apply 1.5 pints of this product in 3 to 10 gallons of water per acre. Apply to bindweed that has reached a length of 12 inches or greater. Allow maximum weed emergence and runner growth. Allow 3 or more days after application before tillage.
Bluegrass, Kentucky	1.5-3	3-40	1.5%	Apply 3 pints of this product in 10 to 40 gallons of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 1.5 to 2.25 pints of this product in 3 to 10 gallons of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height.
Blueweed, Texas	4.5-7.5	3-40	1.5%	Apply 6 to 7.5 pints of this product per acre west of the Mississippi River and 4.5 to 6 pints per acre east of the

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Comments
				Mississippi River. Apply when plants are at or beyond full bloom. New leaf development indicates active growth. For best results, apply in late summer or fall. Fall treatments must be applied before a killing frost.
Brackenfern	4.5-6	3-40	.75-1.5%	Apply to fully expanded fronds which are at least 18 inches long.
Bromegrass, smooth	1.5-3	3-40	1.5%	Apply 3 pints of this product in 10 to 40 gallons of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 1.5 to 2.25 pints of this product in 3 to 10 gallons of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height.
Bursage, woolly-leaf	-	3-20	1.5%	For control, apply 3 pints of this product plus 1 pint of Banvel® per acre. For partial control, apply 1.5 pints of this product plus 1 pint of Banvel® 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	3-4.5	3-40	1.5%	For best results, apply when most plants have reached the boot-to-head stage of growth.
Cattail	4.5-7.5	3-40	1.5%	Apply when most plants have reached the early head stage.
Clover; red, white	4.5-7.5	3-20	1.5%	Apply when most plants have reached the early bud stage.
Cogongrass	4.5-7.5	10-40	1.5%	Apply when cogongrass is at least 18 inches tall in late summer or fall. Due to uneven stages of growth and the dense nature of vegetation preventing good spray coverage, repeat treatments may be necessary to maintain control.
Dallisgrass	4.5-7.5	3-20	1.5%	Apply when most plants have reached the early head stage.
Dandelion	4.5-7.5	3-40	1.5%	Apply when most plants have reached the early bud stage of growth. Also for control, apply 12 fluid ounces of this product plus 0.5 pound a.i. 2,4-D in 3 to 10 gallons of water per acre.
Dock, curly	4.5-7.5	3-40	1.5%	Apply when most plants have reached the early bud stage of growth. Also for control, apply 12 fluid ounces of this product plus 0.5 pound a.i. 2,4-D in 3 to 10 gallons of water per acre.
Dogbane, hemp	6	3-40	1.5%	Apply when most plants have reached the late bud to flower stage of growth. Following crop harvest or mowing, allow weeds to regrow to a mature stage prior to treatment. For best results, apply in late summer or fall. For suppression, apply 12 fluid ounces of this product plus 0.5 pound a.i. of 2,4-D in 3 to 10 gallons of water per acre for ground applications and 3 to 5 gallons of water per acre for aerial applications. Delay applications until maximum emergence of dogbane has occurred.
Fescue (except tall)	4.5-7.5	3-20	1.5%	Apply when most plants have reached the early head stage.
Fescue, tall	1.5-4.5	3-40	1.5%	Apply 4.5 pints of this product per acre when most plants have reached boot-to-early seedhead stage of development.

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Comments
				Fall applications only: Apply 1.5 pints of this product in 3 to 10 gallons of water per acre. Apply to fescue in the fall when plants have 6 to 12 inches of new growth. A sequential application of 12 fluid ounces per acre of this product will improve long-term control and control seedlings germinating after fall treatments or the following spring.
Guineagrass	4.5	3-40	.75%	Apply when most plants have reached at least the 7-leaf stage of growth. Ensure thorough coverage when using hand-held equipment.
Horsenettle	4.5-7.5	3-20	1.5%	Apply when most plants have reached the early bud stage.
Horseradish	6	3-40	1.5%	Apply when most plants have reached the late bud to flower stage of growth. For best results, apply in late summer or fall.
Iceplant	-	-	1.5%	Iceplant should be at or beyond the early bud stage of growth. Thorough coverage is necessary for best control.
Jerusalem artichoke	4.5-7.5	3-20	1.5%	Apply when most plants are in the early bud stage.
Johnsongrass	.75-4.5	3-40	.75%	In annual cropping systems apply 1.5 to 3 pints of this product per acre. Apply 1.5 pints of this product in 3 to 10 gallons of water per acre. Use 3 pints of this product when applying 10 to 40 gallons of water per acre. In noncrop, or areas where annual tillage (no-till) is not practiced, apply 3 to 4.5 pints of this product in 10 to 40 gallons of water per acre. For best results, apply when most plants have reached the boot-to-head stage of growth or in the fall prior to frost. Allow 7 or more days after application before tillage. Do not tank -mix with residual herbicides when using the 1-quart per acre rate. For burndown of Johnsongrass, apply 12 fluid ounces of this product in 3 to 10 gallons of water per acre before the plants reach a height of 12 inches. For this use, allow at least 3 days after treatment before tillage. Spot treatment (partial control or suppression) – Apply a 3/4 percent solution of this product when Johnsongrass is 12 to 18 inches in height. Coverage must be uniform and complete.
Kikuyugrass	3-4.5	3-40	1.5%	Spray when most kikuyugrass is at least 8 inches in height (3 or 4-leaf stage of growth). Allow 3 or more days after application before tillage.
Knapweed	6	3-40	1.5%	Apply when most plants have reached the late bud to flower stage of growth. For best results, apply in late summer or fall.
Lantana	-	-	.75-1.0%	Apply at or beyond the bloom stage of growth. Use the higher application rate for plants that have reached the woody stage of growth.
Lespedeza	4.5-7.5	3-20	1.5%	Apply when most plants have reached the early bud stage.
Milkweed, common	4.5	3-40	1.5%	Apply when most plants have reached the late bud to flower stage of growth.
Muhly, wirestem	1.5-3	3-40	1.5%	Use 1.5 pints of this product in 3 to 10 gallons of water per acre. Use 3 pints of this product when applying 10 to 40 gallons of water per acre or in pasture, sod, or noncrop areas. Spray when the wirestem muhly is 8 inches or more in height. Do not till between harvest and fall applications or in the fall or spring prior to

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Comments
				spring applications. Allow 3 or more days after application before tillage.
Mullein, common	4.5-7.5	3-20	1.5%	Apply when most plants are in the early bud stage.
Napiergrass	4.5-7.5	3-20	1.5%	Apply when most plants are in the early head stage.
Nightshade, silverleaf	3	3-10	1.5%	Applications should be made when at least 60 percent of the plants have berries. Fall treatments must be applied before a killing frost.
Nutsedge; purple, yellow	.75-4.5	3-40	.75-1.5%	Apply 4.5 pints of this product per acre or apply a ¾ to 1 ½ percent solution for control of nutsedge plants and immature nutlets attached to treated plants. Treat when plants are in flower or when new nutlets can be found at rhizome tips. Nutlets which have not germinated will not be controlled and may germinate following treatment. Repeat treatments will be required for long-term control of ungerminated tubers. Sequential applications: 1.5 to 3 pints of this product in 3 to 10 gallons of water per acre will also provide control. Make applications when a majority of the plants are in the 3 to 5-leaf stage (less than 6 inches tall). Repeat this application, as necessary, when newly emerging plants reach the 3 to 5-leaf stage. Subsequent applications will be necessary for long-term control. For partial control of existing plants, apply 12 fluid ounces to 3 pints of this product in 3 to 40 gallons of water per acre. Treat when plants have 3 to 5 leaves and most are less than 6 inches tall. Repeat treatments will be required to control subsequent emerging plants or regrowth of existing plants.
Orchardgrass	1.5-3	3-40	1.5%	Apply 3 pints of this product in 10 to 40 gallons of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 1.5 to 2.25 pints of this product in 3 to 10 gallons of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height. Orchardgrass sods going to no-till corn: Apply 1.5 to 2.25 pints of this product in 3 to 10 gallons of water per acre. Apply to orchardgrass that is a minimum of 12 inches tall for spring applications and 6 inches tall for fall applications. Allow at least 3 days following application before planting. A sequential application of atrazine will be necessary for optimum results.
Pampasgrass	-	-	1.5%	Pampasgrass should be at or beyond the boot stage of growth. Thorough coverage is necessary for best control.
Paragrass	4.5-7.5	3-20	1.5%	Apply when most plants are in the early head stage.
Phragmites	4.5-7.5	10-40	.75-1.5%	For partial control. For best results, treat during late summer or fall months or when plants are actively growing and in full bloom. Treatment before or after this stage may lead to reduced control. Due to the dense nature of the vegetation, which may prevent good spray coverage or uneven stages of growth, repeat treatments may be necessary to maintain control. Visual control symptoms will be slow to develop.
Poison hemlock	-	-	.75-1.5%	Apply as a spray-to-wet treatment. Optimum results are obtained when plants are treated at the bud to full-bloom stage of growth.

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Comments
Pokeweed, common	1.5	3-40	1.5%	Apply to actively growing plants up to 24 inches tall.
Quackgrass	1.5-4.5	3-40	1.5%	In annual cropping systems, or in pastures and sods followed by deep tillage: Apply 1.5 pints of this product in 3 to 10 gallons of water per acre. For 10 to 40 gallons of water per acre, apply 3 pints of this product. Do not tank mix with residual herbicides when using the 1.5 pint rate. Spray when quackgrass is 6 to 8 inches in height. Do not till between harvest and fall applications or in fall or spring prior to spring application. Allow 3 or more days after application before tillage. In pastures or sods, use a moldboard plow for best results. In pastures, sods or noncrop areas where deep tillage does not follow application: Apply 3 to 4.5 pints of this product in 10 to 40 gallons of water per acre when the quackgrass is greater than 8 inches tall.
Redvine	1.25-3	5-10	1.5%	For suppression, apply 18 fluid ounces of this product per acre at each of two applications 7 to 14 days apart or a single application of 3 pints per acre. Apply labeled rates in 5 to 10 gallons of water per acre. Apply in late September or early October to plants which are at least 18 inches tall and have been growing 45 to 60 days since the last tillage operation. Make applications at least 1 week before a killing frost.
Reed, giant	-	-	1.5%	Best results are obtained when applications are made in late summer to fall.
Ryegrass, perennial	1.5-4.5	3-40	.75%	In annual cropping systems apply 1.5 to 3 pints of this product per acre. Apply 1.5 pints of this product in 3 to 10 gallons of water per acre. Use 3 pints of this product when applying 10 to 40 gallons of water per acre. In noncrop, or areas where annual tillage (no-till) is not practiced, apply 3 to 4.5 pints of this product in 10 to 40 gallons water per acre. For best results, apply when most plants have reached the boot-to-head stage of growth or in the fall prior to frost. Do not tank-mix with residual herbicides when using the 1.5 pint per acre rate.
Smartweed, swamp	4.5-7.5	3-40	1.5%	Apply when most plants have reached the early bud stage of growth. Also for control, apply 12 fluid ounces of this product plus 0.5 pound a.i. 2,4-D in 3 to 10 gallons of water per acre in the late summer or fall.
Sowthistle, perennial	3-4.5	3-40	1.5%	Apply when most plants are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late summer or fall, allow at least 4 weeks for initiation of active growth and rosette development prior to the application of this product. Fall treatments must be applied before a killing frost. Allow 3 or more days after application before tillage.
Spurge, leafy	-	3-10	1.5%	For suppression, apply 12 fluid ounces of this product plus 0.5 pound a.i. 2,4-D in 3 to 10 gallons of water per acre in the late summer or fall. If mowing has occurred prior to treatment, apply when most of the plants are 12 inches tall.
Starthistle, yellow	3	10-40	1.5%	Best results are obtained when applications are made during the rosette, bolting and early flower stages.
Sweet potato, wild	-	-	1.5%	Partial control. Apply to plants that are at or beyond the bloom stage of growth. Repeat applications may

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Comments
				be required.
Thistle, artichoke	-	-	1.5%	Partial control. Apply to plants that are at or beyond the bloom stage of growth. Repeat applications may be required.
Thistle, Canada	3-4.5	3-40	1.5%	Apply when most plants are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late summer or fall, allow at least 4 weeks for initiation of active growth and rosette development prior to the application of this product. Fall treatments must be applied before a killing frost. Allow 3 or more days after application before tillage. For suppression, apply 1.5 pints of this product, or 12 fluid ounces of this product plus 0.5 pound a.i. 2,4-D, 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.
Timothy	3-4.5	3-40	1.5%	For best results, apply when most plants have reached the boot-to-head stage of growth.
Torpedograss	6-7.5	3-40	1.5%	For partial control. Apply when most plants are at or beyond the seedhead stage of growth. Repeat applications will be required to maintain control. Fall treatments must be applied before frost.
Trumpetcreeper	3	5-10	1.5%	Partial control. Apply in late September or October, to plants which are at least 18 inches tall and have been growing 45-60 days since the last tillage operation. Make applications at least 1 week before a killing frost.
Vaseygrass	4.5-7.5	3-20	1.5%	Apply when most plants are in the early head stage.
Velvetgrass	4.5-7.5	3-20	1.5%	Apply when most plants are in the early head stage.
Wheatgrass, western	3-4.5	3-40	1.5%	For best results, apply when most plants have reached the boot-to-head stage of growth.

WOODY BRUSH AND TREES RATE TABLE ALPHABETICALLY BY SPECIES

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

In arid areas, best results are obtained when applications are made in the spring to early summer when brush species are at high moisture content and are flowering.

Ensure thorough coverage when using hand-held equipment. Symptoms may not appear prior to frost or senescence with fall treatments.

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

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Comments
Alder	4.5-6	3-40	.75-1.5%	For control

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Comments
Ash	3-7.5	3-40	.75-1.5%	Partial control
Aspen, quaking	3-4.5	3-40	.75-1.5%	For control
Bearmat (Bearclover)	3-7.5	3-40	.75-1.5%	Partial control
Beech	3-7.5	3-40	.75-1.5%	Partial control
Birch	3	3-40	.75%	For control
Blackberry	4.5-6	10-40	.75-1.5%	For control. Make applications after plants have reached full leaf maturity. Best results are obtained when applications are made in late summer or fall. Applications may also be made after leaf drop and until a killing frost or as long as stems are green. After berries have set or dropped in late fall, blackberry can be controlled by applying a ¾ percent solution of this product. For control of blackberries after leaf drop and until a killing frost or as long as stems are green, apply 4.5 to 6 pints of this product in 10 to 40 gallons of water per acre.
Blackgum	3-7.5	3-40	.75-1.5%	For control
Bracken	3-7.5	3-40	.75-1.5%	For control
Broom; French, Scotch	-	-	1.5%	For control
Buckwheat, California	-	-	.75-1.5%	For partial control. Thorough coverage of foliage is necessary for best results.
Cascara	3-7.5	3-40	.75-1.5%	Partial control
Catsclaw	-	-	.75-1.5%	Partial control
Ceanothus	3-7.5	3-40	.75-1.5%	Partial control
Chamise	-	-	.75%	For control. Thorough coverage of foliage is necessary for best results.
Cherry; bitter, black, pin	3-4.5	3-40	.75-1.5%	For control
Coyote brush	-	-	1.5%	For control. Apply when at least 50 percent of the new leaves are fully developed.
Dogwood	3-7.5	3-40	.75-1.5%	Partial control
Elderberry	3	3-40	.75%	For control
Elm	3-7.5	3-40	.75-1.5%	Partial control
Eucalyptus	-	-	1.5%	For control of eucalyptus resprouts, apply when resprouts are 6 to 12 feet tall. Ensure complete coverage. Avoid application to drought-stressed plants.
Florida holly (Brazilian Peppertree)	3-7.5	3-40	.75-1.5%	Partial control
Gorse	3-7.5	3-40	.75-1.5%	Partial control
Hasardia	-	-	.75-1.5%	Partial control. Thorough coverage of foliage is necessary for best results.
Hawthorn	3-4.5	3-40	.75-1.5%	For control
Hazel	3	3-40	.75%	For control
Hickory	3-7.5	3-40	.75-1.5%	Partial control
Honeysuckle	3-6	3-40	.75-1.5%	For control
Hornbeam, American	3-7.5	3-40	.75-1.5%	Partial control
Kudzu	6	3-40	1.5%	For control. Repeat applications may be required to maintain control.
Locust, black	3-6	3-40	.75-1.5%	Partial control

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Comments
Madrone resprouts	-	-	1.5%	Partial control. Apply to resprouts that are 3 to 6 feet tall. Best results are obtained with spring/early summer treatments.
Manzanita	3-7.5	3-40	.75-1.5%	Partial control
Maple, red	3-6	3-40	.75-1.5%	For control, apply a 0.75 to 1.5 percent solution when at least 50 percent of the new leaves are fully developed. For partial control, apply 3 to 6 pints of this product per acre.
Maple, sugar	-	-	.75-1.5%	For control. Apply when at least 50 percent of the new leaves are fully developed.
Monkey flower	-	-	.75-1.5%	Partial control. Thorough coverage of foliage is necessary for best results.
Oak; black, white	3-6	3-40	.75-1.5%	Partial control
Oak, post	4.5-6	3-40	.75-1.5%	For control
Oak; northern, pin	-	-	.75-1.5%	For control. Apply when at least 50 percent of the new leaves are fully developed.
Oak, southern, red	3-4.5	3-40	.75-1.5%	For control
Persimmon	3-7.5	3-40	.75-1.5%	Partial control
Pine	3-7.5	3-40	.75-1.5%	For control
Poison ivy/Poison oak	6-7.5	3-40	1.5%	For control. Repeat applications may be required to maintain control. Fall treatments must be applied before leaves lose green color.
Poplar, yellow	3-7.5	3-40	.75-1.5%	Partial control
Redbud, eastern	3-7.5	3-40	.75-1.5%	For control
Rose, multiflora	3	3-40	.75%	For control. Treatments should be made prior to leaf deterioration by leaf-eating insects.
Russian olive	3-7.5	3-40	.75-1.5%	Partial control
Sage, black	-	-	.75%	For control. Thorough coverage of foliage is necessary for best results.
Sage, white	3-7.5	3-40	.75-1.5%	Partial control
Sage brush, California	-	-	.75%	For control. Thorough coverage of foliage is necessary for best results.
Salmonberry	3	3-40	.75%	For control
Salt-cedar	3-7.5	3-40	.75-1.5%	For control
Sassafras	3-7.5	3-40	.75-1.5%	Partial control
Sourwood	3-7.5	3-40	.75-1.5%	Partial control
Sumac; poison, smooth, winged	3-6	3-40	.75-1.5%	Partial control
Sweetgum	3-4.5	3-40	.75-1.5%	For control
Swordfern	3-7.5	3-40	.75-1.5%	Partial control
Tallowtree, Chinese	-	-	.75%	For control. Thorough coverage of foliage is necessary for best results.
Tan oak resprouts	-	-	1.5%	For partial control. Apply to resprouts that are less than 3 to 6 feet tall. Best results are obtained with fall applications.
Thimbleberry	3	3-40	.75%	For control
Tobacco, tree	-	-	.75-1.5%	Partial control
Trumpetcreeper	3-4.5	3-40	.75-1.5%	For control
Vine maple	3-7.5	3-40	.75-1.5%	Partial control
Virginia creeper	3-7.5	3-40	.75-1.5%	For control
Waxmyrtle, southern	3-7.5	3-40	.75-1.5%	Partial control
Willow	4.5	3-40	.75%	For control

CONDITIONS OF SALE AND WARRANTY

The DIRECTIONS FOR USE of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, 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, or the manner of use or application, all of which are beyond the control of ALBAUGH, its Supplemental Distributors, or the Seller. All such risks shall be assumed by the Buyer.

ALBAUGH, its Supplemental Distributors and the Seller warrant that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks referred to above. To the extent consistent with applicable law NEITHER ALBAUGH NOR ITS SUPPLEMENTAL DISTRIBUTORS MAKE ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS.

To the extent consistent with applicable law BUYER'S EXCLUSIVE REMEDY AND THE EXCLUSIVE LIABILITY OF ALBAUGH, ITS SUPPLEMENTAL DISTRIBUTORS AND THE SELLER FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF OR THE REPAYMENT OF THE PURCHASE PRICE FOR THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. When Buyer suffers losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability, or other legal theories), Buyer must promptly notify Seller in writing of any claims to be eligible to receive either remedy stated above. To the extent consistent with applicable law IN NO CASE SHALL ALBAUGH, ITS SUPPLEMENTAL DISTRIBUTORS, OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. ALBAUGH, its Supplemental Distributors, and the Seller offer this product, and the Buyer accepts it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of ALBAUGH

No employee or agent of ALBAUGH, its Supplemental Distributor, or the Seller is authorized to vary or exceed the terms of this Warranty in any other manner.

[Alternate Brand Name for non-ag aquatic label]

Albaugh
AQUA STAR™

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

Editor's Note: Optional marketing text in brackets.
[Ultra Concentrate Controls Down to the Root!!]
[Water treated with Aqua Star™ may be used for SWIMMING, FISHING, DRINKING, LIVESTOCK and IRRIGATION.]
[Control of Aquatic and Landscape Vegetation]
[Treatment of Shoreline and Surface Aquatic and Landscape Weeds]

ACTIVE INGREDIENT:	
Glyphosate*, N-(phosphonomethyl)glycine, in the form of its isopropylamine salt	53.8%
OTHER INGREDIENTS:	46.2%
TOTAL	100.0%

*Contains 648 grams per litre or 5.4 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its isopropylamine salt. Equivalent to 480 grams per litre or 4 pounds per U.S. gallon of the acid, glyphosate.

Group	9	Herbicide

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

PHYSICAL OR CHEMICAL HAZARDS

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

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

FOR CHEMICAL SPILL, LEAK, FIRE, OR EXPOSURE CALL CHEMTREC (800) 424-9300

EPA Reg. No. 42750-59 EPA Est. No.

Manufactured by: NET CONTENTS

Albaugh, LLC.
Ankeny, IA 50021

_____GALS.

ENVIRONMENTAL HAZARDS

FOR TERRESTRIAL USE: 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.

FOR AQUATIC USES: Do not contaminate water when disposing of equipment waste waters. Treatment of aquatic weeds can result in oxygen depletion or loss due to decomposition of dead plants. This oxygen loss can cause fish suffocation.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

STORAGE AND DISPOSAL

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

STORAGE: STORE ABOVE 10º F (-12º C) TO KEEP FROM CRYSTALIZING. Crystals will settle to the bottom. If crystals form, allow product to warm above 50º F (10º C) and mix well or recirculate to redissolve.

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

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

To clean the container before final disposal, empty the remaining contents from the container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing process two more times.

CONTAINER HANDLING: (See the Net Contents section on the container to determine if it non-refillable or refillable.) APPROPRIATE BOX MUST BE CHECKED.

Non-refillable containers (1 and 2.5 gallon): Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Offer for recycling if available or 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.

Non-refillable containers (>5 gallon): Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Offer for recycling if available or 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.

Refillable containers: Refillable container. Refill this container with glyphosate only. Do not reuse this container for any other purpose.

When this container is empty, replace the cap and seal all openings that have been made during usage and return the container to the point of purchase, or to an alternate location designated by the manufacturer at the time of purchase of this product. If not returned, clean container the empty container and offer for recycling, if available.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the re-filler.

To clean the container before final disposal, empty the remaining contents from the container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or re-circulate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing process two more times.

If the container cannot be refilled, offer for recycling if available or 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.

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

Not all products labeled on this product are registered for use in California. Check the registration status of each product in California before using.

Read the “CONDITIONS OF SALE AND WARRANTY” statement at the end of the label before buying or using. If terms are not acceptable, return at once unopened.

USE INFORMATION

This product, a water-soluble liquid, mixes readily with water and nonionic surfactant to be applied as a foliar spray for the control or destruction of many herbaceous and woody plants.

This product moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 2 to 4 days but on most perennial brush species may not occur for 7 days or more. Extremely cool or cloudy weather following treatment may slow the activity of this product and delay visual effects of control. Visible effects are a gradual wilting and yellowing of the

plant which advances to complete browning of above-ground growth and deterioration of underground plant parts.

Unless otherwise directed on this label, delay application until vegetation has emerged and reached the stages described for control of such vegetation under the “Weeds Controlled” section of this label. Unemerged plants arising from unattached underground rhizomes or root stocks of perennials or brush will not be affected by the spray and will continue to grow. For this reason best control of most perennial weeds or brush is obtained when treatment is made at late growth stages approaching maturity.

Always use the higher rate of this product per acre within the specific range when vegetation is heavy or dense.

Do not treat weeds or brush under poor growing conditions such as drought stress, disease or insect damage, as reduced control may result. Reduced results may also occur when treating weeds or brush heavily covered with dust.

Reduced control may result when applications are made to any weed or brush species that have been mowed, grazed or cut, and have not been allowed to regrow to the specific stage for treatment.

Rainfall or irrigation occurring within 6 hours after application may reduce effectiveness. Heavy rainfall or irrigation within 2 hours after application may wash the product off the foliage and a repeat treatment may be required.

When this product comes in contact with soil (on the soil surface or as suspended soil or sediment in water) it is bound to soil particles. Under use situations, once this product is bound to soil particles, it is not available for plant uptake and will not harm off-site vegetation where roots grow into the treatment area or if the soil is transported off-site. Under use conditions, the strong affinity of this product to soil particles prevents this product from leaching out of the soil profile and entering ground water. The affinity between this product and soil particles remains until this product is degraded, which is primarily a biological degradation process carried out under both aerobic and anaerobic conditions by soil microflora.

This product does not provide residual weed control. For subsequent residual weed control, follow a label-approved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used.

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

Buyer and all users are responsible for all loss or damage in connection with the use or handling or mixtures of this product or other materials that are not expressly in this label. Mixing this product with herbicides or other materials not in this label may result in reduced performance.

ATTENTION

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

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

AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE.

NOTE: Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences. Keep container closed to prevent spills and contamination.

MIXING AND APPLICATION INSTRUCTIONS

APPLY THESE SPRAY SOLUTIONS IN PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING DESIRED VOLUMES. HAND-GUN APPLICATIONS SHOULD BE PROPERLY DIRECTED TO AVOID SPRAYING DESIRABLE PLANTS. NOTE: REDUCED RESULTS MAY OCCUR IF WATER CONTAINING SOIL IS USED, SUCH AS WATER FROM PONDS AND UNLINED DITCHES.

Mixing

This product mixes readily with water. Mix spray solutions of this product as follows: fill the mixing or spray tank with the required amount of water while adding the required amount of this product (see the "Directions for Use" and "Weeds Controlled" sections of this label). Near the end of the filling process, add the required surfactant and mix well. Remove hose from tank immediately after filling to avoid siphoning back into the water source. During mixing and application, foaming of the spray solution may occur. To prevent or minimize foam, avoid the use of mechanical agitators, place the filling hose below the surface of the spray solution, terminate by-pass and return lines at the bottom of the tank and if needed use an approved anti-foam or defoaming agent.

Keep by-pass line on or near bottom of tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50 mesh. Carefully select correct nozzle to avoid spraying a fine mist. For best results with conventional ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

When using this product, mix 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution. Use a nonionic surfactant labeled for use with herbicides. The surfactant must contain 50 percent or more active ingredient.

Always read and follow the manufacturer's surfactant label directions for best results.

These surfactants should not be used in excess of 1 quart per acre when making broadcast applications.

Colorants or marking dyes approved for use with herbicides may be added to spray mixtures of this product. Colorants or dyes used in spray solutions of this product may reduce performance, especially at lower rates or dilutions. Use colorants or dyes according to the manufacturer's label directions. Clean sprayer and parts immediately after using this product by thoroughly flushing with water and dispose of rinsate according to labeled use or disposal instructions.

Carefully observe all cautionary statements and other information appearing in the surfactant label.

APPLICATION EQUIPMENT AND TECHNIQUES

Aerial Equipment

Use the specified rates of this product and surfactant in 3 to 20 gallons of water per acre as a broadcast spray, unless otherwise specified. See the "Weeds Controlled" section of this label for specific rates. Aerial applications of this product may only be made as specified in this label.
AVOID DRIFT – DO NOT APPLY DURING INVERSION CONDITIONS, WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITION WHICH WILL ALLOW DRIFT. DRIFT MAY CAUSE DAMAGE TO

ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.
Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations which dispense spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure.

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 in the additive label.

Ensure uniform application – To avoid streaked, uneven or overlapped 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 ARE MOST SUSCEPTIBLE. The maintenance of an organic coating (paint) which meets aerospace specification MIL-C 38413 may prevent corrosion.

AERIAL SPRAY DRIFT MANAGEMENT

SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.

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

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

1. The distance of the outer most nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
3. Where states have more stringent regulations, they must be observed.

The applicator must be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory.

Aerial Drift Reduction Advisory

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

INFORMATION ON DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity, and Temperature Inversions).

CONTROLLING DROPLET SIZE

- Volume – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure – Do not exceed the nozzle manufacturer's specified pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles – Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation – Orient nozzles so that the spray is released parallel to the airstream which produces larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

BOOM LENGTH

For some use patterns, reducing the effective boom length to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT

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

SWATH ADJUSTMENT

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

WIND

Drift potential is lowest between wind speeds of 2-10 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 must be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS

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

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).

For Aerial Application in California Only

Aquatic and Other Noncrop Sites:

When applied as directed and under the conditions described in the "Weeds Controlled" section of this label booklet, this product will control or partially control the labeled weeds growing in the following industrial, recreational and public areas or other similar sites.

Aquatic Sites – Including all bodies of fresh and brackish water which may be flowing, nonflowing, or transient. This includes lakes, rivers, streams, ponds, seeps, irrigation and drainage ditches, canals, reservoirs, estuaries, and similar sites.

If aquatic sites are present in the noncrop area and are part of the intended treatment, read and observe the following directions:

There is no restriction on the use of treated water for irrigation, recreation, or domestic purposes. Consult local state fish and game agency and water control authorities before applying this product to public water. Permit may be required to treat such water.

NOTE: Do not apply this product within ½ mile upstream of an active potable water intake in flowing water (i.e., river, stream, etc.) or within ½ mile of an active potable water intake in a standing body of water such as lake, pond, or reservoir. To make aquatic applications around and within ½ mile of active potable water intakes, the water intake must be turned off for a minimum period of 48 hours after the application. The water intake may be turned on prior to 48 hours if the glyphosate level in the intake water is below 0.7 part per million as determined by laboratory analysis. These aquatic applications may be made ONLY in those cases where there are alternative water sources or holding ponds which would permit the turning off of an active potable water intake for a minimum period of 48 hours after the application.

This product does not control plants which are completely submerged or have a majority of their foliage under water.

Aerial Applications:

Aerial applications may be made with helicopters only.

Use the following guidelines when aerial applications are to be made near perennial crops after bud break and before total leaf drop and/or near emerged annual crops.

1. Do not apply within a minimum of 100 feet of all crops.
2. If wind up to 5 miles per hour is blowing toward the crop(s), do not apply within a minimum of 500 feet of the crop(s).
3. Winds blowing from 5 to 10 miles per hour toward the crops(s) may require buffer zones in excess of the 500 feet minimum.
4. Do not apply when winds are in excess of 10 miles per hour or when inversion conditions exist.
   For Aerial Application in Fresno County, California Only From February 15 through March 31 Only

Applicable Area:

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

Use Information:

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

Observe the following directions to minimize off-site movement during aerial application of this product.

Minimization of off-site movement is the responsibility of the grower, Pest Control Advisor and aerial applicator.

Written Recommendations:

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

Aerial Applicator Training and Equipment:

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

Applications at Night:

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

Note: For aerial application from April 1 through February 14, refer to the "For Aerial Application in California Only" section of this label.

Boom Equipment

For control of weed or brush species listed in this section using conventional boom equipment – Use the specified rates of this product and surfactant in 3 to 30 gallons of water per acre as a broadcast spray, unless otherwise specified. See the "Weeds Controlled" section of this label for specific rates. As density of vegetation increases, spray volume should be increased within this range to ensure complete coverage. Carefully select correct nozzle to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

Hand-Held and High-Volume Equipment

Use Coarse Sprays Only

For control of weeds listed in this section using knapsack sprayers or high-volume spraying equipment utilizing handguns or other suitable nozzle arrangements – Prepare a ¾ to 2 percent solution of this product in water, add a nonionic surfactant and apply to foliage of vegetation to be controlled. For specific rates of application and instructions for control of various annual and perennial weeds, see the "Weeds Controlled" section of this label.

Applications should be made on a spray-to-wet basis. Spray coverage should be uniform and complete.

Do not spray to point of runoff.

This product may be used as a 5 to 8 percent solution for low-volume directed sprays for spot treatment of trees and brush. It is most effective in areas where there is a low density of undesirable trees or brush. If a straight stream nozzle is used, start the application at the top of the targeted vegetation and spray from top to bottom in a lateral zigzag motion. Ensure that at least 50 percent of the leaves are contacted by the spray solution. For flat fan and cone nozzles and with hand-directed mist blowers, mist the application over the foliage of the targeted vegetation. Small, open-branched trees need only be treated from one side. If the foliage is thick or there are multiple root sprouts, applications must be made from several sides to ensure adequate spray coverage.

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

Spray Solution

Desired Volume	Amount of Aqua Star™					
	¾%	1%	1 1/4%	1 1/2%	5%	8%
1 Gal	1 oz	1 1/3 oz	1 2/3 oz	2 oz	6 1/2 oz	10 1/4 oz
25 Gal	1 ½ pt	1 qt	1 1/4 qt	1 1/2 qt	5 qt	2 gal
100 Gal	3 qt	1 gal	1 1/4gal	1 1/2 gal	5 gal	8 gal

2 tablespoons = 1 fluid ounce

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

WEEDS CONTROLLED

Annual Weeds

Apply to actively growing annual grasses and broadleaf weeds.

Allow at least 3 days after application before disturbing treated vegetation. After this period the weeds may be mowed, tilled or burned. See "Directions for Use," "Use Information" and "Mixing and Application Instructions" for labeled uses and specific application instructions.

Broadcast Application – Use 1 ½ pints of this product per acre plus 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution if weeds are less than 6 inches tall. If weeds are greater than 6 inches tall, use 2 ½ pints of this product per acre plus 2 or more quarts of an approved nonionic surfactant per 100 gallons of spray solution.

Hand-Held, High-Volume Application – Use a ¾ percent solution of this product in water plus 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution and apply to foliage of vegetation to be controlled.

When applied as directed under the conditions described in this label, this product plus nonionic surfactant WILL CONTROL the following ANNUAL WEEDS:

Balsamapple**
  Momordica charantia
Barley
  Hordeum vulgare
Barnyardgrass
  Echinochloa crus-galli
Bassia, fivehook
  Bassia hyssopifolia
Bluegrass, annual
  Poa annua
Bluegrass, bulbous
  Poa bulbosa
Brome
  Bromus spp.
Buttercup
  Ranunculus spp.
Cheat
  Bromus secalinus
Chickweed, mouseear
  Cerastium vulgatum
Cocklebur
  Xanthium strumarium
Corn, volunteer
  Zea mays
Crabgrass
  Digitaria spp.
Dwarfdandelion
  Krigia cespitosa
Falseflax, smallseed
  Camelina microcarpa
Fiddleneck
  Amsinckia spp.
Flaxleaf fleabane
  Conyza bonariensis
Fleabane
  Erigeron spp.
Foxtail
  Setaria spp.
Foxtail, Carolina
  Alopecurus carolinianus
Groundsel, common
  Senecio vulgaris
Horseweed/Marestail
  Conyza canadensis
Kochia
  Kochia scoparia
Lambsquarters, common
  Chenopodium album
Lettuce, prickly
  Lactuca serriola
Morningglory
  Ipomoea spp.
Mustard, blue
  Chorispora tenella
Mustard, tansy
  Descurainia pinnata
Mustard, tumble
  Sisymbrium altissimum
Mustard, wild
  Sinapis arvensis
Oats, wild
  Avena fatua
Panicum
  Panicum spp.
Pennycress, field
  Thlaspi arvense
Pigweed, redroot
  Amaranthus retroflexus
Pigweed, smooth
  Amaranthus hybridus
Ragweed, common
  Ambrosia artemisiifolia
Ragweed, giant
  Ambrosia trifida
Rocket, London
  Sisymbrium irio
Rye
  Secale cereale
Ryegrass, Italian*
  Lolium multiflorum
Sandbur, field
  Cenchrus spp.
Shattercane
  Sorghum bicolor
Shepherdspurse
  Capsella bursa-pastoris
Signalgrass, broadleaf
  Brachiaria platyphylla
Smartweed, Pennsylvania
  Polygonum pensylvanicum
Sowthistle, annual
  Sonchus oleraceus
Spanishneedles*
  Bidens bipinnata
Stinkgrass
  Eragrostis cilianensis
Sunflower
  Helianthus annuus
Thistle, Russian
  Salsola kali
Spurry, umbrella
  Holosteum umbellatum
Velvetleaf
  Abutilon theophrasti
Wheat
  Triticum aestivum
Witchgrass
  Panicum capillare

*Apply 3 pints of this product per acre.
**Apply with hand-held equipment only.

Annual weeds will generally continue to germinate from seed throughout the growing season. Repeat treatments will be necessary to control later germinating weeds.

Perennial Weeds

Apply this product as follows to control or destroy most vigorously growing perennial weeds. Unless otherwise directed, allow at least 7 days after application before disturbing vegetation.

Add 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution to the rates of this product given in this list. See the “General Information,” “Directions for Use” and “Mixing and Application” sections in this label for specific uses and application instructions.

NOTE: If weeds have been mowed or tilled, do not treat until regrowth has reached the recommended stages. Fall treatments must be applied before a killing frost.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seed. When applied as directed under the conditions described, this product plus surfactant WILL CONTROL the following PERENNIAL WEEDS:

Alfalfa
Medicago sativa
Alligatorweed*
Alternanthera philoxeroides
Anise/Fennel
Foeniculum vulgare
Artichoke, Jerusalem
Helianthus tuberosus
Bahiagrass
Paspalum notatum
Beachgrass, European***
Ammophila arenaria
Bermudagrass
Cynodon dactylon
Bindweed, field
Convolvulus arvensis
Bluegrass, Kentucky
Poa pratensis
Blueweed, Texas
Helianthus ciliaris
Brackenfern
Pteridium spp.
Bromegrass, smooth
Bromus inermis
Canarygrass, reed
Phalaris arundinacea
Cattail
Typha spp.
Clover, red
Trifolium pratense
Clover, white
Trifolium repens
Cogongrass
Imperata clylindrica
Cordgrass
Spartina spp.
Cutgrass, giant*
Zizaniopsis miliacea
Dallisgrass
Paspalum dilatatum
Dandelion
Taraxacum officinale
Dock, curly
Rumex crispus
Dogbane, hemp
Apocynum cannabinum
Fescue
Festuca spp.
Fescue, tall
Festuca arundiracea
Guineagrass
Panicum maximum
Hemlock, poison
Conium maculatum
Horsenettle
Solanum carolinense
Horseradish
Armoracia rusticana
Ice Plant
Mesembryanthemum crystallinum
Johnsongrass
Sorghum halepense
Kikuyugrass
Pennisetum clandestinum
Knapweed
Centaurea repens
Lantana
Lantana camara
Lespedeza: common, serices
Lespedeza striata
Lespedeza cuneata
Loosestrife, purple
Lythrum salicaria
Lotus, American
Nelumbo lutea
Maidencane
Panicum hematomon
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 jubata
Paragrass
Brachiaria mutica
Phragmites**
Phragmites spp.

Quackgrass
  Agropyron repens
Reed, giant
  Arundo donax
Ryegrass, perennial
  Lolium perenne
Smartweed, swamp
  Polygonum coccineum
Spatterdock
  Nuphar luteum
Starthistle, yellow
  Centaurea solstitialis
Sweet potato, wild*
  Ipomoea pandurata
Thistle, artichoke
  Cynara cardunculus
Thistle, Canada
  Cirsium arvense
Timothy
  Phleum pratense
Torpedograss*
  Panicum repens
Tules, common
  Scirpus acutus
Vaseygrass
  Paspalum urvillei
Velvetgrass
  Holcus spp.
Waterhyacinth
  Eichornia crassipes
Waterlettuce
  Pistia stratiotes
Waterprimrose
  Ludwigia spp.
Wheatgrass, western
  Agropyron smithii

*Partial control.
**Partial control in southeastern states. See specific instructions below.
***Washington and Oregon only.

Alligatorweed – Apply 6 pints of this product per acre as a broadcast spray or as a 1¼ percent solution with hand-held equipment to provide partial control of alligatorweed. Apply when most of the target plants are in bloom. Repeat applications will be required to maintain such control.

Beachgrass, European (Washington and Oregon only) – Best results are obtained when applications are made when European beachgrass is actively growing through the boot to the full heading stages of growth. Applications should be made prior to the loss of more than 50% green leaf color in the fall. Applications made during any period of plant (drought) stress, or beyond the recommended active growth period in the fall, will likely result in reduced performance.

Repeat applications of Aqua Star™ may be necessary to treat skips. Monitor treated acres prior to reseeding of desirable vegetation.

Spray-to-Wet Applications:

Apply an 8 percent solution of this product plus 0.5 to 1.5 percent nonionic surfactant on a spray-to-wet basis for control of European beachgrass.

Spray coverage should be uniform and complete but not to the point of runoff.

Wiper Applications:

For selective control of European beachgrass, apply a 33 1/3 percent solution of this product plus 1 to 2.5 percent nonionic surfactant during active growth. Avoid contact of herbicide solution with desirable vegetation. Wiping the plants in opposite directions may improve performance. Maximizing the amount of individual leaf tissue contacted with the wiping equipment will result in optimal performance.

Bermudagrass – Apply 7 ½ pints of this product per acre as a broadcast spray or as a 1½ percent solution with hand-held equipment. Apply when target plants are actively growing and when seed heads appear.

Bindweed, field/Silverleaf Nightshade/Texas Blueweed – Apply 6 to 7 ½ pints of this product per acre as a broadcast spray west of the Mississippi River and 4 ½ to 6 pints of this product per acre east of the Mississippi River. With hand-held equipment, use a 1 ½ percent solution. Apply when target plants are

actively growing and are at or beyond full bloom. For silverleaf nightshade, best results can be obtained when application is made after berries are formed. Do not treat when weeds are under drought stress. New leaf development indicates active growth. For best results apply in late summer or fall.

Brackenfern – Apply 4 ½ to 6 pints of this product per acre as a broadcast spray or as a ¾ to 1 percent solution with hand-held equipment. Apply to fully expanded fronds which are at least 18 inches long. Cattail – Apply 4 ½ to 6 pints of this product per acre as a broadcast spray or as a ¾ percent solution with hand-held equipment. Apply when target plants are actively growing and are at or beyond the early-to-full bloom stage of growth. Best results are achieved when application is made during the summer or fall months.

Cogongrass – Apply 4 ½ to 7 ½ pints of this product per acre as a broadcast spray. Apply when cogongrass is at least 18 inches tall and actively growing in late summer or fall. Allow 7 or more days after application before tillage or mowing. Due to uneven stages of growth and the dense nature of vegetation preventing good spray coverage, repeat treatments may be necessary to maintain control. Cordgrass – Broadcast Applications (Air) – Apply 4 to 7 ½ pints of this product in 5-20 gallons of spray solution per acre. Add 1 to 2 quarts of nonionic surfactant per 100 gallons of spray solution.

Broadcast Applications (Ground) – Apply 4 to 7 ½ pints of this product in 10 to 60 gallons of spray solution per acre. For best results, ensure that complete coverage of cordgrass clumps is achieved. Add 1 to 2 quarts of a nonionic surfactant per 100 gallons of spray solution.

Hand-Held and High Volume Equipment - Apply a 2 to 8 percent solution of this product. Ensure that complete coverage of cordgrass clumps is achieved. Do not spray to the point of run-off. Add 1 to 2 quarts of a nonionic surfactant per 100 gallons of spray solution.

Wiper Applications - For wick or wiper applications, mix 1 gallon of this product with 2 gallons of clean water to make a 33 percent solution. Include a nonionic surfactant at a rate of 10 percent by volume of the total herbicide solution.

In heavy stands, a double application in opposite directions may improve results.

Application Conditions - Schedule applications in order to allow 6 hours before treated plants are covered by tidewater. Rainfall or immersion within 6 hours after application may reduce effectiveness.

The presence of debris and silt on the cordgrass plants will reduce performance of this product. It may be necessary to wash targeted plants prior to application to improve uptake of this product into the plant. Where cordgrass has been cut or mowed prior to application with Aqua Star™, ensure adequate regrowth of cordgrass occurs to allow for interception or absorption of the herbicide solution.

Cutgrass, giant – Apply 6 pints of this product per acre as a broadcast spray or as a 1 percent solution with hand-held equipment to provide partial control of giant cutgrass. Repeat applications will be required to maintain such control, especially where vegetation is partially submerged in water. Allow for substantial regrowth to the 7 to 10-leaf stage prior to retreatment.

Dogbane, hemp/Knapweed/Horseradish – Apply 6 pints of this product per acre as a broadcast spray or as a 1-½ percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the late bud-to-flower stage of growth. For best results, apply in late summer or fall. Fescue, tall – Apply 4 ½ pints of this product per acre as a broadcast spray or as a 1 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the boot-to-head stage of growth. When applied prior to the boot stage, less desirable control may be obtained.

Guineagrass – Apply 4 ½ pints of this product per acre as a broadcast spray or as a ¾ percent solution with hand-held equipment. Apply when target plants are actively growing and when most have reached at least the 7-leaf stage of growth.

Johnsongrass/Bluegrass, Kentucky/Bromegrass, smooth/Canarygrass, reed/Orchardgrass/Ryegrass, perennial/Timothy/Wheatgrass, western – Apply 3 to 4 ½ pints of this product per acre as a broadcast spray or as a ¾ percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the boot-to-head stage of growth. When applied prior to the boot stage, less desirable control may be obtained. In the fall, apply before plants have turned brown.

Lantana – Apply this product as a ¾ to 1 percent solution with hand-held equipment. Apply to actively growing lantana at or beyond the bloom stage of growth. Use the higher application rate for plants that have reached the woody stage of growth.

Loosestrife, purple – Apply 4 pints of this product per acre as a broadcast spray or as a 1 to 1-½ percent solution using hand-held equipment. Treat when plants are actively growing at or beyond the bloom stage of growth. Best results are achieved when application is made during summer or fall months. Fall treatments must be applied before a killing frost.

Lotus, American – Apply 4 pints of this product per acre as a broadcast spray or as a ¾ percent solution with hand-held equipment. Treat when plants are actively growing at or beyond the bloom stage of growth. Best results are achieved when application is made during summer or fall months. Fall treatments must be applied before a killing frost. Repeat treatment may be necessary to control regrowth from underground parts and seeds.

Maidencane/Paragrass – Apply 6 pints of this product per acre as a broadcast spray or as a ¾ percent solution with hand-held equipment. Repeat treatments will be required, especially to vegetation partially submerged in water. Under these conditions, allow for regrowth to the 7 to 10-leaf stage prior to retreatment.

Milkweed, common – Apply 4 ½ pints of this product per acre as a broadcast spray or as a 1-½ percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the late bud-to-flower stage of growth.

Nutsedge: purple, yellow – Apply 4 ½ pints of this product per acre as a broadcast spray, or as a ¾ percent solution with hand-held equipment to control existing nutsedge plants and immature nutlets attached to treated plants. Apply when target plants are in flower or when new nutlets can be found at rhizome tips. Nutlets which have not germinated will not be controlled and may germinate following treatment. Repeat treatments will be required for long-term control.

Pampasgrass – Apply a 1-½ percent solution of this product with hand-held equipment when plants are actively growing.

Phragmites – For partial control of phragmites in Florida and the counties of other states bordering the Gulf of Mexico, apply 7 ½ pints per acre as a broadcast spray or apply a 1-½ percent solution with hand-held equipment. In other areas of the U.S., apply 4 to 6 pints per acre as a broadcast spray or apply a ¾ percent solution with hand-held equipment for partial control. For best results, treat during late summer or fall months when plants are actively growing and in full bloom. Due to the dense nature of the vegetation, which may prevent good spray coverage and uneven stages of growth, repeat treatments may be necessary to maintain control. Visual control symptoms will be slow to develop.

Quackgrass/Kikuyugrass/Muhly, wirestem – Apply 3 to 4 ½ pints of this product per acre as a broadcast spray or as a ¾ percent solution with hand-held equipment when most quackgrass or wirestem muhly is at least 8 inches in height (3 to 4-leaf stage of growth) and actively growing. Allow 3 or more days after application before tillage.

Reed, giant/ice plant – For control of giant reed and ice plant, apply a 1-½ percent solution of this product with hand-held equipment when plants are actively growing. For giant reed, best results are obtained when applications are made in late summer or fall.

Spatterdock – Apply 6 pints of this product per acre as a broadcast spray or as a ¾ percent solution with hand-held equipment. Apply when most plants are in full bloom. For best results, apply during the summer or fall months.

Sweet potato, wild – Apply this product as a 1-½ percent solution using hand-held equipment. Apply to actively growing weeds that are at or beyond the bloom stage of growth. Repeat applications will be required. Allow the plant to reach the recommended stage of growth before retreatment.

Thistle: Canada, artichoke – Apply 3 to 4 ½ pints of this product per acre as a broadcast spray or as a 1 ½ percent solution with hand-held equipment for Canada thistle. To control artichoke thistle, apply a 2 percent solution as a spray-to-wet application. Apply when target plants are actively growing and at or beyond the bud stage of growth.

Torpedograss – Apply 6 to 7 ½ pints of this product per acre as a broadcast spray or as a ¾ to 1 ½ percent solution with hand-held equipment to provide partial control of torpedograss. Use the lower rates under terrestrial conditions, and the higher rates under partially submerged or a floating mat condition. Repeat treatments will be required to maintain such control.

Tules, common – Apply this product as a 1-½ percent solution with hand-held equipment. Apply to actively growing plants at or beyond the seedhead stage of growth. After application, visual symptoms will be slow to appear and may not occur for 3 or more weeks.

Water hyacinth – Apply 5 to 6 pints of this product per acre as a broadcast spray or apply a ¾ to 1 percent solution with hand-held equipment. Apply when target plants are actively growing and at or beyond the early bloom stage of growth. After application, visual symptoms may require 3 or more weeks to appear with complete necrosis and decomposition usually occurring within 60 to 90 days. Use the higher rates when more rapid visual effects are desired.

Waterlettuce – For control, apply a ¾ to 1 percent solution of this product with hand-held equipment to actively growing plants. Use higher rates where infestations are heavy. Best results are obtained from mid-summer through winter applications. Spring applications may require retreatment.

Waterprimrose – Apply this product as a ¾ percent solution using hand-held equipment. Apply to plants that are actively growing at or beyond the bloom stage of growth, but before fall color changes occur. Thorough coverage is necessary for best control.

Other perennials listed on this label – Apply 4 ½ to 7 ½ pints of this product per acre as a broadcast spray or as a ¾ to 1 ½ percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached early head or early bud stage of growth.

WOODY BRUSH AND TREES

When applied as directed under the conditions described, this product plus surfactant CONTROLS or PARTIALLY CONTROLS the following woody brush plants and trees:

Alder
Alnus spp.
Ash*
Fraxinus spp.
Aspen, quaking
Populus tremuloides
Bearclover, Bearmat
Chamaebatia foliolosa
Broom:
Scotch
Cytisus scoparius
Buckwheat, California*
Eriogonum fasciculatum
Cascara*
Rhamnus purshiana
Catsclaw*
Acacia greggi

Birch
  Betula spp.
Blackberry
  Rubus spp.
Broom:
  French
    Cytisus monspessulanus
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, bluegum
  Eucalyptus globules

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
Manzanita
  Arctostaphylos spp.
Sage: black, white
  Salvia spp.
Sagebrush, California
  Artemisia californica
Salmonberry
  Rubus spectabilis
Salt cedar*

Ceanothus
  Ceanothus spp.
Chamise
  Adenostoma fasciculatum

Maple:
  Red**
    Acer rubrum
  Sugar
    Acer saccharum
  Vine*
    Acer circinatum
Monkey Flower*
  Mimulus guttatus
Oak:
  Black*
    Quercus velutina
  Northern pine
    Quercus palustris
  Post
    Quercus stellata
  Red
    Quercus rubra
  Southern red
    Quercus falcata
  White*
    Quercus alba
Persimmon*
  Diospyros spp.

Poison Ivy
  Rhus radicans

Poison Oak
  Rhus toxicodendron
Poplar, yellow*
  Liriodendron tulipifera
Prunus
  Prunus spp.
Raspberry
  Rubus spp.
Redbud, eastern
  Cercis canadensis
Rose, multiflora
  Rosa multiflora
Russian-olive
  Elaeagnus angustifolia
Sweet gum
  Liquidambar styraciflua
Swordfern*
  Polystichum munitum
Tallowtree, Chinese
  Sapium sebiferum
Thimbleberry
  Rubus parviflorus
Tobacco, tree*

Tamarix spp.
Saltbush, Sea myrtle
Baccharis halimifolia
Sassafras
Sassafras aibidum
Sourwood*
Oxydendrum arboreum
Sumac:
Poison*
Rhus vernix
Smooth*
Rhus glabra
Winged*
Rhus copallina
Nicotiana glauca
Trumpetcreeper
Campsis radicans
Waxmyrtle, southern*
Myrica cerifera
Willow
Salix spp.

*Partial Control
**See below for control or partial control instruction.

NOTE: If brush has been mowed or tilled or trees have been cut, do not treat until regrowth has reached the recommended stage of growth.

Apply the directed rate of this product plus 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution when plants are actively growing and, unless otherwise directed, after full-leaf expansion. Use the higher rate for larger plants and/or dense areas of growth. On vines, use the higher rate for plants that have reached the woody stage of growth. Best results are obtained when application is made in late summer or fall after fruit formation.

In arid areas, best results are obtained when application is made in the spring or early summer when brush species are at high moisture content and are flowering. Ensure thorough coverage when using hand-held equipment. Symptoms may not appear prior to frost or senescence with fall treatment.

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

See the “Directions for Use” and “Mixing and Application Instructions” sections in this label for labeled use and specific application instructions.

Applied as a 5 to 8 percent solution as a directed application as described in the “Hand-Held and High-Volume Equipment” section, this product will control or partially control all species listed in this section of this label. Use the higher rate of application for dense stands and larger woody brush and trees.

Apply the product as follows to control or partially control the following woody brush and trees.

Alder/Blackberry/Dewberry/Honeysuckle/Oak, Post/Raspberry – For control, apply 4 ½ to 6 pints per acre as a broadcast spray or as a ¾ to 1 ¼ percent solution with hand-held equipment.

Aspen, Quaking/Hawthorn/Trumpetcreeper – For control, apply 3 to 4 ¼ pints of this product per acre as a broadcast spray or as a ¾ to 1 ¼ percent solution with hand-held equipment.

Birch/Elderberry/Hazel/Salmonberry/Thimbleberry – For control, apply 3 pints per acre of this product as a broadcast spray or as a ¾ percent solution with hand-held equipment.

Broom: French, Scotch – For control, apply a 1 ¼ to 1 ½ percent solution with hand-held equipment.

Buckwheat, California/Hasardia/Monkey Flower/Tobacco, Tree – For partial control of these species, apply a ¾ to 1 ½ percent solution of this product as a foliar spray with hand-held equipment. Thorough coverage of foliage is necessary for best results.

Catsclaw – For partial control, apply a 1 ¼ to 1 ½ percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed.

Cherry: Bitter, Black, Pin/Oak, Southern Red/Sweet Gum/Prunus – For control, apply 3 to 7 ½ pints of this product per acre as a broadcast spray or as a 1 to 1 ½ percent solution with hand-held equipment.

Coyote brush – For control, apply a 1 ¼ to 1 ½ percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed.

Dogwood/Hickory/Salt cedar – For partial control, apply a 1 to 2 percent solution of this product with hand-held equipment or 6 to 7 ½ pints per acre as a broadcast spray.

Eucalyptus, bluegum – For control of eucalyptus resprouts, apply a 1-½ percent solution of this product with hand-held equipment when resprouts are 6 to 12-feet tall. Ensure complete coverage. Apply when plants are actively growing. Avoid application to drought-stressed plants.

Holly, Florida (Brazilian peppertree (Schinus terebinthifolius)) – For partial control, apply this product as a 1-½ percent solution with hand-held equipment.

Alternatively, when applied as directed, this product with QuikSorb™ Penetrant will control or partially control Brazilian peppertree in areas such as dry drainage ditches and canals, wildlife habitat restoration and management areas, roadsides, railroads, fence rows, and similar non-crop areas.

The recommended application technique is directed spot treatment of Brazilian peppertree using hand-held equipment only. Apply this product using backpack, hand-held, handgun or similar equipment. Use flat fan, cone, or similar nozzles that will provide effective spray coverage of target vegetation. Do not apply to Brazilian peppertree growing in water. Do not use aerial, boom-type or other broadcast spray equipment. These applications are more effective on small brush less than 15 feet in height or 3-inch stem diameter.

Basal and Selective Stem Application:

Apply a solution consisting of 25% v/v of this product and 75% v/v of QuikSorb™ penetrant. Completely cover the lower 18-24 inches of the brush stems or trunks. For larger stems over 3 inches in diameter, treat up to 48 inches or higher from the ground level. For better control of large trees, apply spray solution directly to upper foliage of plant canopy. Spray coverage should be uniform, covering at least 40 to 60% of the upper foliage and stems. Application is best when made to young, actively growing stems, branches and foliage. Spray-to-wet but not to the point of run-off.

Read and carefully observe the label claims, cautionary statements, and all information on the labels of all products used in this tank mixture.

Kudzu – For control, apply 6 pints of this product per acre as a broadcast spray or as a 1-½ percent solution with hand-held equipment. Repeat applications will be required to maintain control.

Maple, Red – For control, apply as a ¾ to 1 ¼ percent solution with hand-held equipment when leaves are fully developed. For partial control, apply 2 to 7 ½ pints of this product per acre as a broadcast spray.

Maple, Sugar/Oak: Northern Pin, Red – For control, apply as a ¾ to 1 ¼ percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed.

Poison Ivy/Poison Oak – For control, apply 6 to 7 ½ pints of this product per acre as a broadcast spray or as a 1-½ percent solution with hand-held equipment. Repeat applications may be required to maintain control. Fall treatments must be applied before leaves lose green color.

Rose, multiflora – For control, apply 3 pints of this product per acre as a broadcast spray or as a ¾ percent solution of this product as a foliar spray with hand-held equipment. Thorough coverage of foliage is necessary for best results.

Sage, black/Sagebrush, California/Chamise/Tallowtree, Chinese – For control of these species apply as a ¾ percent solution of this product as a foliar spray with hand-held equipment. Thorough coverage of foliage is necessary for best results.

Saltbush, Sea myrtle – For control, apply this product as a 1 percent solution with hand-held equipment.
Waxmyrtle, southern – For partial control, apply this product as a 1-½ percent solution with hand-held equipment.

Willow – For control, apply 4 ½ pints of this product per acre as a broadcast spray or as a ¾ percent solution with hand-held equipment.

Other woody brush and trees listed in this label – For partial control, apply 3 to 7 ½ pints of this product per acre as a broadcast spray or as a ¾ to 1 ½ percent solution with hand-held equipment.

AQUATIC AND OTHER NONCROP SITES

When applied as directed and under the conditions described in the "Weeds Controlled" section in this label, this product will control or partially control the labeled weeds growing in the following industrial, recreational and public areas or other similar aquatic and terrestrial sites.

NOTE: When applying AquaStar directly to water the use of surfactants must only be used if the surfactant is known to be non-toxic to aquatic species.

Aquatic Sites – This product may be applied to emerged weeds in all bodies of fresh and brackish water which may be flowing, nonflowing or transient. This includes lakes, rivers, streams, ponds, estuaries, rice levees, seeps, irrigation and drainage ditches, canals, reservoirs, wastewater treatment facilities, wildlife habitat restoration and management areas, and similar sites.

If aquatic sites are present in the noncrop area and are part of the intended treatment, read and observe the following directions:

This product does not control plants which are completely submerged or have a majority of their foliage under water.

There is no restriction on the use of treated water for irrigation, recreation or domestic purposes.

Consult local state fish and game agency and water control authorities before applying this product to public water. Permits may be required to treat such water.

NOTE: Do not apply this product directly to water within ½ mile up-stream of an active potable water intake in flowing water (i.e., river stream, etc.) or within ½ mile of an active potable water intake in a standing body of water such as lake, pond or reservoir. To make aquatic applications around and within ½ mile of active potable water intakes, the water intake must be turned off for a minimum period of 48 hours after application. The water intake may be turned on prior to 48 hours if the glyphosate level in the intake water is below 0.7 parts per million as determined by laboratory analysis. These aquatic applications may be made ONLY in those cases where there are alternative water sources or holding ponds which would permit the turning off of an active potable water intake for a minimum period of 48 hours after the applications. This restriction does not apply to intermittent inadvertent overspray of water in terrestrial use sites.

For treatments after drawdown of water or in dry ditches, allow 7 or more days after treatment before reintroduction of water to achieve maximum weed control. Apply this product within 1 day after drawdown to ensure application to actively growing weeds.

Floating mats of vegetation may require retreatment. Avoid wash-off of sprayed foliage by spray boat or recreational boat backwash or by rainfall within 6 hours of application. Do not re-treat within 24 hours following the initial treatment.

Applications made to moving bodies of water must be made while traveling upstream to prevent concentration of this herbicide in water. When making any bankside applications, do not overlap more than 1 foot into open water. Do not spray in bodies of water where weeds do not exist. The maximum application rate of 7 ½ pints per acre must not be exceeded in any single broadcast application that is being made over water.

When emerged infestations require treatment of the total surface area of impounded water, treating the area in strips may avoid oxygen depletion due to decaying vegetation. Oxygen depletion may result in fish kill.

ther Noncrop-Type Sites – This product may be used to control the listed weeds in terrestrial noncrop sites and/or in aquatic sites within these areas.

Airports
Golf Courses
Habitat Restoration & Management Areas
Highways & Roadsides
Industrial Plant Sites
Lumberyards
Parking Areas
Parks
Petroleum Tank Farms
Pipeline, Power, Telephone & Utility Rights-of-Way
Pumping Installations
Railroads
Schools
Storage Areas
Similar Sites

TANK MIXTURES

NOTE: Read and carefully observe the label directions, cautionary statements and all information on the labels of products used in these tank mixtures before proceeding with these recommendations. Additional precautionary statements are made in these labels. Use according to the most restrictive label directions for each product in these mixtures.

When used in combination as directed by Albaugh, the liability of Albaugh, shall in no manner extend to any damage, loss or injury not directly caused by the inclusion of the Albaugh product in such combination use.

AQUA STAR™ plus GARLON® 4

For burndown and partial control or suppression of woody brush and weeds in industrial sites:

When applied as directed for “Noncrop Uses” under the conditions described, this product, and an approved surfactant plus Garlon® 4, provides burndown and partial control or suppression of woody brush and vegetation labeled for this product. This tank mixture is recommended for use on rights-of-way

(utility, railroad, highway, pipeline), fencerows, roadsides, nonirrigation ditchbanks, wasteland and similar noncrop or industrial sites.

Hand-Held and High-Volume Applications:

Use 3 to 6 pints of Aqua Star™ herbicide and 2 or more quarts of an approved surfactant, plus 1 to 2 quarts of Garlon® 4 per 100 gallons of spray solution and apply to foliage of actively growing woody brush and weeds. Applications should be made on a spray to wet basis. Spray coverage should be uniform and complete. Do not spray to point of runoff.

Broadcast Applications with Ground Equipment:

Use 3 to 6 pints of Aqua Star™ plus ½ to 2 quarts of Garlon® 4 in sufficient water and make 20 to 100 gallons of total spray per acre. Use 2 to 4 quarts of an approved surfactant per 100 gallons of spray solution with this product.

Aerial Application (Helicopter Only):

Use 3 to 6 pints of Aqua Star™ plus surfactant plus 1 to 2 quarts of Garlon® 4 and apply in a total spray volume of 10 to 20 gallons per acre. Aerial sprays should be applied using suitable drift control. Use 2 to 4 quarts of an approved surfactant per 100 gallons of spray solution with this product.

Apply when plants are actively growing and after full leaf expansion of woody brush. Use the higher rates of these products where vegetation is heavy or dense, or where hard-to-control brush species are prevalent. Repeat applications may be necessary to maintain control and to suppress areas where canopying of vegetation prevents good spray coverage and penetrations.

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.

AQUA STAR™ plus ARSENAL® 2 WSL

When applied as directed, this tank mixture will control or partially control labeled woody brush, trees and herbaceous weeds in noncrop areas. In addition to the weeds listed on this label, this tank mixture will control arrowweed, salt cedar and yaupon.

Hand-Held and High-Volume Applications:

Use 6 to 12 pints of Aqua Star™ plus ½ to 4 pints Arsenal® 2 WSL per 100 gallons of spray solution. Add 2 to 4 quarts of nonionic surfactant per 100 gallons of spray solution.

Apply to foliage of actively growing vegetation. Applications should be made on a spray-to-wet basis. Spray coverage should be uniform and complete. Do not spray to the point of runoff.

Broadcast Applications with Ground Equipment:

Use 3 to 7 ½ pints of Aqua Star™ plus ½ to 4 pints Arsenal® 2 WSL in sufficient water to apply in a total spray volume of 10 to 20 gallons per acre. Add 2 to 4 quarts of nonionic surfactant per 100 gallons of spray solution. Apply to foliage of actively growing vegetation.

Apply to woody brush and trees after full leaf expansion until initiation of fall color.

Avoid direct applications to any body of water. Do not apply on ditches used to transport irrigation water.

AQUA STAR™ plus 2,4-D AMINE

When applied as a tank mixture, this product will control the annual weeds listed in this label booklet. This tank mixture will control or partially control the listed perennial weeds, woody brush and trees.

Use 1 ½ to 2 ½ pints of this product plus 2 to 4 pints of 2,4-D amine (4 lb ai per gallon, labeled for aquatic sites) for control of annual weeds.
Use 3 to 7 ½ pints of this product plus 2 to 4 quarts of 2,4-D amine (4 lb ai per gallon, labeled for aquatic sites) for control or partial control of perennial weeds, woody brush and trees. The tank mixture may be used on alligatorweed, smartweed, waterprimrose, waxmyrtle and other labeled weeds.

When using this product, mix 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution. Always read and follow the surfactant manufacturer's label directions.

Always predetermine the compatibility of the tank mixtures of this herbicide and 2,4-d amine by mixing small proportional quantities in advance.

Mix in the following sequence: Fill sprayer tank one-half full with water, add Aqua Star™, then 2,4-D amine and finally surfactant. Fill sprayer tank to final volume with water.

NOTE: DO NOT MIX AQUA STAR™ AMINE CONCENTRATES WITHOUT WATER CARRIER. DO NOT MIX AQUA STAR™ AND 2,4-D AMINE IN BYPASS INJECTOR-TYPE SPRAY EQUIPMENT.

WETLAND SITES

This product may be used in and around water (aquatic areas) and wetlands found in forestry and in power, telephone and pipeline rights-of-way sites, including where these sites are adjacent to or surrounding domestic water supply reservoirs, supply streams, lakes and ponds. Read and observe the following before making applications in and around water.

Consult local public water control authorities before applying this product in and around public water.

Permits may be required to treat in such areas.

There is no restriction on the use of treated water for irrigation, recreation or domestic purposes.
Note: Do not apply this product directly to water within ½ mile up-stream of an active potable water intake in flowing water (i.e., river, stream, etc.) or within ½ mile of an active potable water intake in a standing body of water such as lake, pond or reservoir. To make aquatic applications around and within ½ mile of active potable water intakes, the water intake must be turned off for a minimum period of 48 hours after the application. These aquatic applications may be made ONLY in those cases where there are alternative water sources or holding ponds which would permit the turning off of an active potable water intake for a minimum period of 48 hours after the applications. This restriction does not apply to intermittent inadvertent overspray of water in terrestrial use sites.

Do not spray open bodies of water where woody brush, trees and herbaceous weeds do not exist. The maximum application rate of 3.75 quarts per acre must not be exceeded in a single over-water broadcast application except as follows, where any labeled rate may be applied:

- Stream crossings in utility rights-of-way.
- Where applications will result in less than 20 percent of the total water area being treated.

WILDLIFE HABITAT RESTORATION AND MANAGEMENT AREAS

This product can be used for the restoration and/or maintenance of native habitat and in wildlife management areas.

Habitat Restoration and Maintenance – When applied as directed, exotic and other undesirable vegetation may be controlled in habitat management areas. Applications may be made to allow recovery of native plant species, to open up water to attract waterfowl, and for similar broad-spectrum vegetation control requirements in habitat management areas. Spot treatments may be made to selectively remove unwanted plants for habitat enhancement. For spot treatments, care should be exercised to keep spray off of desirable plants.

Wildlife Food Plots – This product may be used as a site preparation treatment prior to planting wildlife food plots. Apply as directed to control vegetation in the plot area. Any wildlife food species may be planted after applying this product, or native species may be allowed to reinfest the area. If tillage is needed to prepare a seedbed, wait 7 days after applying this product before tilling to allow for maximum effectiveness.

WIPER APPLICATIONS

For wick or wiper applications, mix 1 gallon of this product with 2 gallons of clean water to make a 33 percent solution. Include a nonionic surfactant at a rate of 10 percent by volume of total herbicide solution.

Wiper applications can be used to control or suppress annual and perennial weeds listed on this label. In heavy weed stands, a double application in opposite directions may improve results. See the "Weeds Controlled" section in this label for recommended timing, growth stage and other instructions for achieving optimum results.

Bromegrass (smooth), Canarygrass (reed), Dock (curly), Mullein (common), Quackgrass and Canada thistle: This product may be applied through a wiper applicator after dilution with water and thorough mixing to these weeds growing in or along aquatic sites.

Wiper applicators, including wick devices, apply the herbicide solution by rubbing the weed with an absorbent material containing the herbicide solution.

Contact of the herbicide solution with desirable vegetation may result in damage or destruction. Applicators used above desired vegetation should be adjusted so that the lowest wiper contact point is at least two (2) inches above this vegetation. Application made above desirable vegetation should be made when the weeds are a minimum of six (6) inches above this vegetation.

Best results may be attained when more of the weed is exposed to the herbicide solution. Weeds not contacted (wiped) with the herbicide solution will not be affected. This may occur in dense clumps, severe infestations, or when the height of the weed varies so that not all weeds are contacted.

In severe infestations, reduce equipment ground speed to ensure that adequate amounts of this herbicide solution are wiped onto the weeds. When wiping moderate weed infestations an adequate flow rate should be 3 to 4 quarts of herbicide solution per mile of canal (wiping 4 foot band). For best results, do not allow wiper applicator to contact water.

Note:

- Maintain wiper equipment in good operating condition.
- Adjust height of wiper applicator to ensure adequate contact with weeds.
- Keep wiping surfaces clean.

- Keep wiper material at proper degree of saturation with herbicide solution.
- DO NOT use wiper equipment when weeds are wet or under conditions where wave action or other water immersions will wash the solution off the weed.
- DO NOT operate equipment at ground speeds of greater than 5 MPH. As weed density increases, reduce equipment ground speed to ensure good coverage of weeds.
- Be aware that on sloping ground, the herbicide solution may migrate, causing dripping on the lower end and drying on the upper end of the wiper applicator.
- Variation in equipment design may affect weed control. With wiper applicators, the wiping material and its orientation must allow delivery of sufficient quantities of the recommended herbicide solution directly to the weeds.
- Mix only the amount of solution to be used during a one day period as reduced activity may result from use of leftover solutions.

Mixing Instructions:

Mix 2 ½ gallons of Aqua Star™ herbicide with 7 ½ gallons of water to prepare a 25 percent solution. Add 1 quart of an approved surfactant per 10 gallons of herbicide solution (2 ½ percent surfactant by total volume). Apply this solution to weeds listed above.

CUT STUMP APPLICATION

Woody vegetation may be controlled by treating freshly cut stumps of trees and resprouts with this product. Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut vegetation close to the soil surface. Apply a 50 to 100 percent solution of this product to freshly cut surface immediately after cutting. Delay in applying this product may result in reduced performance. For best results, trees should be cut during periods of active growth and full leaf expansion.

When used according to directions for cut stump application, this product will CONTROL, PARTIALLY CONTROL, or SUPPRESS most woody brush and tree species, some of which are listed below:

Alder
Alnus spp.
Coyote brush*
Baccharis consanguinea
Dogwood*
Cornus spp.
Eucalyptus
Eucalyptus spp.
Hickory*
Carya spp.
Madrone
Arbutus menziesii
Maple*
Acer spp.
Oak
Quercus spp.
Poplar*
Populus spp.
Reed, giant
Arundo donax
Salt cedar
Tamarix spp.
Sweet gum*
Liquidambar styraciflua
Sycamore*
Platanus occidentalis
Tan oak
Lithocarpus densiflorus
Willow
Salix spp.

*This product is not approved for this use on these species in the state of California.

INJECTION AND FRILL APPLICATIONS

Woody vegetation may be controlled by injection or frill application of this product. Apply this product using suitable equipment which must penetrate into living tissue. Apply the equivalent of 1 mL of this product per 2 to 3 inches of trunk diameter. This is best achieved by applying 25 to 100 percent concentration of this product either to a continuous frill around the tree or as cuts evenly spaced around the tree below all branches. As tree diameter increases in size, better results are achieved by applying dilute material to a continuous frill or more closely spaced cuttings. Avoid application techniques that allow runoff to occur from frill or cut areas in species that exude sap freely after frills or cutting. In species such as these, make frill or cut at an oblique angle so as to produce a cupping effect and use undiluted material. For best results, applications should be made during periods of active growth and full leaf expansion.

This treatment WILL CONTROL the following woody species:

Oak
  Quercus spp.
Poplar
  Populus spp.
Sweet gum
  Liquidambar styraciflua
Sycamore
  Platanus occidentalis
This treatment WILL SUPPRESS the following woody species:
Black gum*
  Nyssa sylvatica
Dogwood
  Cornus spp.
Hickory
  Carya spp.
Maple, red
  Acer rubrum

*This product is not approved for this use on these species in the state of California.

INDUSTRIAL TURF

Apply 3 to 5 fluid ounces of this product per acre alone or as directed for a tank mixture, at spray volumes of 10 to 40 gallons per acre.

When using this product, mix 2 quarts of a nonionic surfactant per 100 gallons of spray solution.

This product can be used for growth and seedhead suppression of:

Tall Fescue
Smooth Brome

For best results, apply this product in a recommended tank mixture to actively growing turfgrasses after greenup in the spring of the year. For suppression of seedheads, applications must be made before boot-to-seedhead stage of development. Applications made from seedhead emergence until maturity may result in turf discoloration or injury.

After mowing or removal of seedheads, this product in a recommended tank mixture may also be used to suppress the growth of certain turfgrasses. Allow turf to recover from stress caused by heat, drought or

mowing before making applications. Applications made to turf under stress may increase the potential for discoloration or injury.

Annual Grasses

For growth suppression of some annual grasses such as annual ryegrass, wild barley and wild oats, apply 3 to 4 ounces of this product in 10 to 40 gallons of spray solution per acre. Applications should be made when annual grasses are actively growing and before the seedheads are in the boot stage of development. Treatments made after seedhead emergence may cause injury to the desired grasses.

TANK MIXTURES FOR INDUSTRIAL TURFGRASSES

For the following tank mixtures, consult each product label for weeds controlled and the proper stage of application. Do not treat turf under stress.

Tank Mixtures plus 2,4-D Amine

For additional weed control benefits, up to 1 quart per acre of 2,4-D amine may be added to the following tank mixtures.

TALL FESCUE

Aqua Star™ plus Telar®

For suppression of tall fescue growth and seedheads, and control or partial control of some annual weeds, apply this tank mixture after greenup and prior to boot-to-seedhead stage of development. Use up to ½ ounce of Telar® per acre.

This tank mixture can also be applied after mowing or removal of tall fescue seedheads for turf growth suppression and control or partial control of some annual weeds. Make only one of the above applications per growing season.

Aqua Star™ plus Oust®

For suppression of tall fescue growth and seedheads, and control or partial control of some annual weeds, apply this tank mixture after greenup and prior to boot-to-seedhead stage of development. Use up to ¼ ounce of Oust® per acre.

Aqua Star™ plus Escort®

This tank mixture can be applied after mowing or removal of tall fescue seedheads for turf growth suppression and control or partial control of some annual weeds. Use up to 1/3 ounce of Escort® per acre.

SMOOTH BROME

Aqua Star™ plus Oust®

For suppression of smooth brome growth and seedheads and control or partial control of some annual weeds, apply this tank mixture after greenup and prior to boot-to-seedhead stage of development. Use up to ¼ ounce of Oust® per acre.

RELEASE OF BERMUDAGRASS OR BAHIAGRASS ON NONCROP SITES

RELEASE OF DORMANT BERMUDAGRASS AND BAHIAGRASS

When applied as directed, this product will provide control or suppression of many winter annual weeds and tall fescue for effective release of dormant bermudagrass or bahiagrass. Make applications to dormant bermudagrass or bahiagrass.

For best results on winter annuals, treat when weeds are in an early growth stage (below 6 inches in height) after most have germinated. For best results on tall fescue, treat when fescue is in or beyond the 4 to 6-leaf stage.

WEEDS CONTROLLED

Rate specifications for control or suppression of winter annuals and tall fescue are listed below.

Apply the specified rates of this product in 10 to 25 gallons of water per acre plus 2 quarts nonionic surfactant per 100 gallons of total spray volume.

WEEDS CONTROLLED OR SUPPRESSED

NOTE: C = Control
S = Suppression

	Aqua Star™ oz/acre					
WEED SPECIES	6	9	12	18	24	48
Barley, little Hordeum pusillum	S	C	C	C	C	C
Bedstraw, catchweed Galium aparine	S	C	C	C	C	C
Bluegrass, annual Poa annua	S	C	C	C	C	C
Chervil Chaerophyllum tainturieri	S	C	C	C	C	C
Chickweed, common Stellaria media	S	C	C	C	C	C
Clover, crimson Trifolium incarnatum	•	S	S	C	C	C
Clover, large hop Trifolium campestre	•	S	S	C	C	C
Speedwell, corn Veronica arvensis	S	C	C	C	C	C
Fescue, tall Festuca arundinacea	•	•	•	•	S	S
Geranium, Carolina Geranium carolinianum	•	•	S	S	C	C
Henbit Lamium amplexicaule	•	S	C	C	C	C
Ryegrass, Italian Lolium multiflorum	•	•	S	C	C	C
Vetch, common Vicia sativa	•	•	S	C	C	C

*These rates apply only to sites where an established competitive turf is present.

RELEASE OF ACTIVELY GROWING BERMUDAGRASS

NOTE: USE ONLY ON SITES WHERE BAHIAGRASS OR BERMUDAGRASS ARE DESIRED FOR GROUND COVER AND SOME TEMPORARY INJURY OR YELLOWING OF THE GRASSES CAN BE TOLERATED.

When applied as directed, this product will aid in the release of bermudagrass by providing control of annual species listed in the "Weeds Controlled" section in this label, and suppression or partial control of certain perennial weeds.

For control or suppression of those annual species listed in this label, use ¾ to 2 ¼ pints of this product as a broadcast spray in 10 to 25 gallons of spray solution per acre, plus 2 quarts of a nonionic surfactant per 100 gallons of total spray volume. Use the lower rate when treating annual weeds below 6 inches in height (or length of runner in annual vines). Use the higher rate as size of plants increases or as they approach flower or seedhead formation.

Use the higher rate for partial control or longer-term suppression of the following perennial species. Use lower rates for shorter-term suppression of growth.

Bahiagrass
Dallisgrass
Fescue (tall)
Johnsongrass**
Trumpetcreeper*
Vaseygrass

*Suppression at the higher rate only.
**Johnsongrass is controlled at the higher rate.

Use only on well-established bermudagrass. Bermudagrass injury may result from the treatment but regrowth will occur under moist conditions. Do not repeat applications in the same season, since severe injury may result.

BAHIAGRASS SEEDHEAD AND VEGETATIVE SUPPRESSION

When applied as directed in the "Noncrop Sites" section in this label, this product will provide significant inhibition of seedhead emergence and will suppress vegetative growth for a period of approximately 45 days with single applications and approximately 120 days with sequential applications.

Apply this product 1 to 2 weeks after full green-up of bahiagrass or after the bahiagrass has been mowed to a uniform height of 3 to 4 inches. Applications must be made prior to seedhead emergence. Apply 5 fluid ounces per acre of this product, plus 2 quarts of an approved nonionic surfactant per 100 gallons of total spray volume in 10 to 25 gallons of water per acre.

Sequential applications of this product plus nonionic surfactant may be made at approximately 45-day intervals to extend the period of seedhead and vegetative growth suppression. For continued vegetative growth suppression, sequential applications must be made prior to seedhead emergence.

Apply no more than 2 sequential applications per year. As a first sequential application, apply 3 fluid ounces of this product per acre plus nonionic surfactant. A second sequential application of 2 to 3 fluid ounces per acre plus nonionic surfactant may be made approximately 45 days after the last application.

ANNUAL GRASS GROWTH SUPPRESSION

For growth suppression of some annual grasses, such as annual ryegrass, wild barley and wild oats growing in coarse turf on roadsides or other industrial areas, apply 3 to 4 ounces of this product in 10 to 40 gallons of spray solution per acre. Mix 2 quarts of a nonionic surfactant per 100 gallons of spray solution. Applications should be made when annual grasses are actively growing and before the seedheads are in the boot stage of development. Treatments made after seedhead emergence may cause injury to the desired grasses.

CONDITIONS OF SALE AND WARRANTY

The DIRECTIONS FOR USE of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, 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, or the manner of use or application, all of which are beyond the control of ALBAUGH, its Supplemental Distributors, or the Seller. All such risks shall be assumed by the Buyer.

ALBAUGH, its Supplemental Distributors and the Seller warrant that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks referred to above. NEITHER ALBAUGH NOR ITS SUPPLEMENTAL DISTRIBUTORS MAKE ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS.

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