

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

February 12, 2016

Carolyn Miter Registrations Specialist Albaugh LLC P.O. Box 2127 Valdosta, GA 31604

Subject: Label Amendment – Complete revision of <u>all</u> the label rates and directions for use

Product Name: Glyphosate 53.8% EPA Registration Number: 42750-59 Application Date: August 21, 2015

Decision Number: 508552

Dear Ms. Miter:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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

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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Shanta Adeeb by phone at 703-347-0502, or via email at <a href="mailto:adeeb.shanta@epa.gov">adeeb.shanta@epa.gov</a>.

Sincerely,

Reuben Baris, Product Manager 25

Herbicide Branch

Registration Division (7505P)

Office of Pesticide Programs

Enclosure

EDITOR's NOTE: 02/03/16 label re-sbmtl for amendment to match ag uses with 42750-61

# SUB-LABEL A - For non-aquatic terrestrial uses only

# **GLYPHOSATE 53.8%**

(Alternate brand names GLY STAR 5 EXTRA)

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.

# 1.0 Ingredients

Glyphosate*, N-(phosphonomethyl)glycine, in the form of its isopropylamine salt					53.8%
OTHER INGREDIENTS:					46.2%
				TOTAL	100.0%
	Group	9	Herbicide		

<sup>\*</sup>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.

# 2.0 Emergency Phone Numbers

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

# KEEP OUT OF REACH OF CHILDREN

# CAUTION

# 3.0 PRECAUTIONARY STATEMENTS

## 3.1 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.

# 3.1.1 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.

EPA Reg. No. 42750-59 Manufactured by:

Albaugh, LLC, 1525 NE 36th Street, Ankeny, IA 50021

02/12/2016

ACCEPTED

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 100000 EPA

42750-59

EPA Est. No. NET CONTENTS GALS.

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# 3.2 PERSONAL PROTECTIVE EQUIPMENT: (PPE)

Applicators and other handlers must wear:

- 1. long-sleeved shirt and long pants,
- 2. 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.

# 3.3 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.

#### 3.4 ENVIRONMENTAL HAZARDS

FOR TERRESTRIAL USE ONLY: 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.

# 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.

# 3.5 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:

- 1. coveralls,
- 2. waterproof gloves,

## 3. shoes plus socks.

#### 3.6 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.

#### 3.7 Seed Potato Precautions

Potatoes grown for seed are very sensitive to glyphosate at extremely low concentrations. Exposure of the seed potato crop can case germination failure or deformities. Daughter tuber damage may occur at levels where mother crop symptoms are not viable. Multiple sprouting from eyes, weak and distorted stems, "little potato syndrome", cauliflower sprouts, root distortions, excessive root growth, suppressed tuber initiation and bulking failure or delay in opening of eyes and rotting of tubers in the field or store can result. Subsequent plantings of seed pieces from the exposed mother crop can result in delayed a no emergence or produce lower than normal yields.

Glyphosate can contaminate seed potato crops through carryover residue in application equipment or drift from applying glyphosate to nearby crops.

Always follow good wash-out procedures using detergents or other suitable cleaning agents to remove all residual traces of glyphosate from application equipment that may be used to apply other products to seed potato crops.

To avoid contamination from spray drift follow the precautions in the "Spray Drift Management" section of the label.

#### 4.0 STORAGE AND DISPOSAL

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

STORAGE: STORE ABOVE 10° F (-12° C) TO KEEP FROM CRYSTALIZING. Crystals will settle to the bottom. If crystals form, allow product to warm above 50° F (10° 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.

<u>Refillable containers:</u> 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.

#### 5.0 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 rates of 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.

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.

To the extent consistent with applicable law, buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are not expressly 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 4.5 quarts of this product per acre per year.

For noncrop uses, the combined total of all treatments must not exceed 6.0 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.

Refer to the Spray Drift Management guidance in Section 8.0

NOTE: Keep container closed to prevent spills and contamination.

## 6.0 - WEED RESISTANCE MANAGEMENT

Glyphosate, the active ingredient in this product, is a Group 9 herbicide. Target site resistance to Group 9 herbicides is rare. Any weed population may contain plants naturally resistant to Group 9 herbicides. Weed species resistant to Group 9 herbicides may be effectively managed utilizing another herbicide from a different Group or using other cultural practices or mechanical practices.

# 6.1 - WEED MANAGEMENT DIRECTIONS

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

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

# 6.2 - MANAGEMENT DIRECTIONS FOR GLYPHOSATE RESISTANCE BIOTYPES

Note: Appropriate testing is critical in order to determine if a weed is resistant to glyphosate. Contact your Albaugh, LLC representative to determine if resistance has been confirmed to any particular weed biotype in your area, or visit on the internet www.weedresistancemangement.com or www.weedscience.org. For more information see the "ANNUAL WEEDS RATE SECTION" and "PERENNIAL WEEDS RATE SECTION" of this label.

Control directions for biotypes confirmed as resistant to glyphosate are made available on separately published supplemental labeling or fact sheets for this product and can be obtained from your local retailer or Albaugh, LLC representative.

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

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

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

# 7.0 MIXING

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

Precaution: 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.

## 7.1 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.

#### 7.2 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.

# 7.3 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.

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

# 7.4 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		F	Amount of Gly	phosate 53.8%	)	
Volume	3/4%	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.

# 7.5 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.

# 7.6 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.

## 7.7 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.

## 8.0 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.

#### 8.1 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. Dicamba tank mixtures may not be applied by air in California.

Avoid direct application to any body of water.

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

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

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.

#### 8.2 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 <u>Aerial Drift Reduction Advisory</u>.

# 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).

## 8.3 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.

# 8.4 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.

## 8.5 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 applications can be made up to the maximum number of applications for that use site.

#### 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 **Smutarass** Dogfennel Sunflower Guineagrass Thistle, Canada Johnsongrass Thistle, musk Milkweed Vaseygrass Velvetleaf Nightshade, silverleaf

Pigweed, redroot

# 8.6 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.

#### **RESTRICTION:**

• Do not mix this product with the concentrate of other products when using injection systems.

## 8.7 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)

# 9.0 - ANNUAL & PERRENNIAL CROPS (Alphabetical)

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

See the individual crop categories for specific instructions, preharvest intervals, and additional precautions and restrictions.

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

#### TYPES OF APPLICATIONS

Chemical fallow, Pre-plant fallow beds, Pre-plant, Pre-emergence, At Planting, Hooded Sprayers in Row-Middles, Shielded Sprayers in Row-Middles, Wiper Applications in Row-Middles, and Post-Harvest Treatments.

Additional application types may be specified or allowed in individual Crop Categories.

#### **USE DIRECTIONS**

Apply this product during fallow intervals preceding planting, prior to planting or transplanting, at planting, or preemergent to annual and perennial crops listed in this label, except where specifically limited. For any crop NOT listed in this label, applications must be made at least 30 days prior to planting.

Unless otherwise specified weed control applications must be made according to the rates listed in the "Annual Weeds", Perennial Weeds", and "Woody Brush & Trees" rate tables in this label.

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

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

## **PRECAUTIONS**

- Avoid contact of herbicide with foliage, green shoots or stems, bark, exposed roots (including those emerging from plastic mulch), or fruit of crops because severe injury or destruction may result.
- · Apply before seed germination in coarse sandy soils to further minimize the risk of injury.

#### RESTRICTIONS

- Unless otherwise specified in this product's labeling, treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest.
- In crops where spot treatments are allowed, do not treat more than 10 percent of the total field to be harvested. The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside the target area for the same reason.
- When making pre-emergence and at planting applications, applications must be made before crop emergence to avoid severe crop injury. Broadcast applications made at emergence will result in injury or death to emerged seedlings.
- Post-harvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop.
- For broadcast post-emergent treatments, do not harvest or feed treated vegetation for 8 weeks following application, unless otherwise specified.

	9.1 - CEREAL CROPS				
LABELED CROPS: (All), Wild rice.	LABELED CROPS: Barley, Buckwheat, Millet (Pearl & Proso), Oats, Rice, Rye, Quinoa, Teff, Teosinte, Triticale, Wheat (All), Wild rice.				
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS			
See Section 9.0	See Use Directions in Section 9.0	See Section 9.0			
Pre-Plant, Pre-Emergence, At-Planting	This product may be applied before, during or after planting of cereal crops. Applications must be made prior to emergence of the crop.	Do not treat rice fields or levees when the field contains floodwater.			
Red Rice Control (prior to planting rice)	Apply 2.25 pints (36 fl. oz.) 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 only be partially controlled.  Avoid spraying during low humidity conditions, as reduced control may result.	Do not treat rice field or levees when the fields contain flood water.  Do not re-flood treated fields for 8 days following application.			
Spot treatment (except rice)	This product may be applied as a spot treatment in cereal crops. Apply this product before heading in small grains.	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 spray or allow drift outside target area for the same reason.			
Over the Top Wiper applications (Feed barley & wheat only)	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.	Allow at least 35 days between application and harvest.  Do not use roller applicators.			
Pre-harvest (Feed barley & wheat only)	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.	Do not apply more than 1.5 pints of this product per acre.  Do not apply to wheat or barley grown for seed.  Allow 7 days between application and harvest or grazing.			
Post-harvest	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. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.	For any crop not listed on this label, applications must be made at least 30 days prior to planting the next crop.  Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.			

		9.2 – CORN (N	Non-Roundup Ready)	
LABELLED CROP	PS: Field corn, Seed	weet corn and Popcorn		
TYPES OF APPLICATIONS		USE DIRECTIO	NS	RESTRICTIONS
See Section 9.0	See Use Direction	s in Section 9.0		See Section 9.0
Pre-plant, Pre-emergence, At planting	Applications must be TANK MIXTURES: A or 10 to 60 gallons or responsibility to ensu use. Read and follow directions for use on must follow the most statements of each p  2,4-D Aim Atrazine Axiom Balance Bicep Magnum Bicep II Magnum Bullet Degree Degree Xtra  For difficult to control crabgrass, shatterca Pennsylvania smartv pints (24 fl. oz). per a apply 1- 1.5 pints (16 are less than 6 inche are over 6 inches tall	f nitrogen solution per acure that all products are the applicable restriction all product labels involves restrictive directions for product in the tank mixture.  Distinct Dual Magnum Dual II Magnum Epic Frontier/Outlook Fultime Guardsman/Leadoff Harness Harness Xtra Harness Xtra Harness Xtra 5.6L  I annual weeds such as ne and broadleaf signal weed up to 6 inches tall, acre in these tank mixtures tall, 1.5 – 2.25 pints (2).  When using nitrogen increased to the 2.25 pi	s in 10 to 20 gallons of water cre. It is the pesticide user's registered for the intended ons and limitations and ed in tank mixing. Users use and precautionary re.  Lariat Intro Linex/Lorox Marksman Micro-Tech Prowl Python simazine Topnotch  fall panicum, barnyardgrass, grass up to 2 inches tall and apply this product at 1.5 res. For other labeled weeds, duct per acre when weeds solutions as the carrier, use	Do not apply in nitrogen solutions to tough-to-control grasses such as barnyardgrass, fall panicum, broadleaf signalgrass, annual ryegrass and any perennial weeds in the following area:  From Route 50 South in Illinois and Indiana and the following states: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, New Jersey, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.

	9.2 – CORN (Non-Roundup Ready)				
LABELLED CROF	LABELLED CROPS: Field corn, Seed corn, Silage corn, Sweet corn and Popcorn				
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS			
Spot treatment	For spot treatments, apply this product prior to silking of corn.	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 spray or allow drift outside target area for the same reason.			
Hooded sprayers	This product may be used through hooded sprayers for weed control between the rows of corn.  Only hooded sprayers that completely enclose the spray pattern may be used.  See additional instructions for the use of hooded sprayers in the "Application Equipment and Techniques" section of this label.  Precaution: Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage. To the extent consistent with applicable law, such damage shall be the sole responsibility of the applicator.	Corn must be at least 12 inches tall, measured without extending leaves.  Do not apply more than 1.5 pints (24 fl. oz.) of this product per acre for each application and no more than 2.25 quarts (72 fl. oz.). per acre per year for hooded sprayer applications.			
Pre-harvest	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 2.25 quarts (72 fl. oz.) of this product per acre.  For aerial applications, apply up to 3 pints (48 fl. oz.) of this product per acre.	Allow a minimum of 7 days between application and harvest.  Do not make applications to corn grown for seed.			
Post-harvest	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.	Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.			

	9.3 – COTTON				
LABELLED CROPS	LABELLED CROPS: Cotton (non-Roundup Ready)				
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS			
See Section 9.0	See Use Directions in Section 9.0	See Section 9.0			
Pre-plant, Pre-emergence, At-planting	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	This product may be applied through hooded sprayers, shielded applicators or wiper applicators in cotton.	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.  Allow at least 7 days between application and harvest.			
Spot treatment	For spot treatments, apply this product prior to boll opening of cotton.	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 spray or allow drift outside target area for the same reason.			
Pre-harvest	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 – 48 fl. oz. of this product per acre for cotton regrowth inhibition.  Apply up to 3 pints (48 fl. oz.) of this product using either aerial or ground spray equipment. Apply after sufficient bolls have developed to produce the desired yield of cotton. Applications made prior to this time could affect maximum yield potential.  TANK MIXTURES: This product may be tank mixed with DEF® 6, Folex®, Ginstar or Prep™ to provide additional enhancement of cotton leaf drop. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.	Allow at least 7 days between application and harvest.  Do not apply to cotton grown for seed, as a reduction in germination or vigor may occur.  The use of additives other than those listed on this label, for preharvest application to cotton is prohibited.			

# 9.4 - FALLOW SYSTEMS

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

this label.		·
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS
Chemical Fallow	See Use Directions in Section 9.0	See Section 9.0
	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. It is the pesticide	Do not apply dicamba tank mixtures by air in California.
	user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.	Refer to the specific product labels for crop rotation restrictions and cautionary statements of all products used in tank mixtures.
	Applications up to 3 pints (48 fl. oz). per acre may be made by aerial application in fallow sites where there is sufficient buffer to prevent injury due to drift onto adjacent crops.	
Pre-plant Fallow Beds	This product may be applied to fallow beds prior to planting or emergence of any crop listed on this label. This product will control weeds listed in the annual, perennial and woody brush tables.	
	TANK MIXTURES:	
	It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.	
	In addition, 9 fl. oz. of this product plus the labeled rate of Goal® 2XL (or generic equivalent) per acre will control the following weeds with the maximum height or length indicated: 3" – common cheeseweed, chickweed, groundsel; 6" – London rocket, shepherdspurse.	
	12 fl. oz. of this product plus the labeled rate of Goal® 2XL (or generic equivalent) per acre will control the following weeds with the maximum height or length indicated: 6" – common cheeseweed, groundsel, marestail (Conyza canadensis), 12" – chickweed, London rocket, shepherdspurse.	
	PRECAUTION: Some crop injury may occur if dicamba is applied within 45 days of planting.	
Aid-to-Tillage	This product may be used in conjunction with tillage practices in fallow systems or pre-plant to labeled crops to control downy brome, cheat, volunteer wheat, tansy mustard and foxtail. Apply 9 fl. oz. 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. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.	

9.5 - GRAIN SORGHM (Milo)					
LABELLED CROPS:	LABELLED CROPS: Grain Sorghum (Milo)				
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS			
See Section 9.0 Pre-Plant, Pre-Emergence, At-Planting	See Use Directions in Section 9.0 This product may be applied alone or in tank mixture before, during or after planting grain sorghum. Applications must be made prior to emergence of the crop. TANK MIXTURES: Apply these tank mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.  atrazine  Lariat Bicep II Magnum  Lasso Bullet  Micro-Tech Dual II Magnum  Milo-Pro  For difficult-to-control annual weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 1.5 pints (24 fl. oz.) per acre in these tank mixtures. For other labeled annual weeds, apply 18 - 24 fl. oz. of this product per acre when weeds are less than 6 inches tall, and 1.5 – 2.25 pints (24 - 36 fl. oz.) when weeds are over 6 inches tall. When using nitrogen solutions as the carrier, the 2.25 pints (36 fl. oz.) use rate may need to be increased for acceptable weed control.	See Section 9.0  For spot treatment, 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 spray or allow drift 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.			
Spot Treatment, Over-the-Top Wiper Applications	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.				
Hooded Sprayers	This product may be used through hooded sprayers for weed control between the rows of milo. Only hooded sprayers that completely enclose the spray pattern may be used. See additional instruction for the use of hooded sprayers in the "APPLICATIONS EQUIPMENT AND TECHNIQUES" section of this label.  Treat before milo sends tillers between the drill rows. If such tillers are contacted with the spray solution, the main plant may be killed. Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage. To the extent consistent with applicable law, such damage is the responsibility of the applicator.  Crop injury may occur when the foliage of treated weeds comes into direct contact with leaves of the crop. Droplets, mist, foam or splatter of the herbicide solution may contact the crop and cause discoloration, stunting or destruction.	Milo must be at least 12 inches tall, measured without extending leaves.  Do not graze or feed milo forage or fodder following applications of this product through hooded sprayers.  Do not apply more than 1.5 pints (24 fl. oz.) of this product per acre per application and no more than 2.25 quarts (72 fl. oz.) per acre for hooded sprayer applications.  Do not apply this product when the leaves of the crop are growing in direct contact with weeds to be treated.			
Pre-harvest	Make applications at 30% grain moisture or less.  As with other herbicides that cause sudden plant death, avoid pre-harvest applications of this product to milo infected with charcoal rot as lodging can occur.	Do not apply more than 3 pints (48 fl. oz.) of this product per acre.  Allow a minimum of 7 days between application and harvest of sorghum.  The use of this product for pre-harvest grain sorghum (milo) is not registered in California.  Do not make applications to sorghum grown for seed.			

	9.5 - GRAIN SORGHM (Milo)				
LABELLED CROPS:	ABELLED CROPS: Grain Sorghum (Milo)				
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS			
Post-harvest	This product may be applied after harvest of grain sorghum. A 2.25 pints (36 fl. oz.) rate 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 (24 fl. oz.) of this product per acre for control, or 18 fl. oz. of this product per acre for suppression.	Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.			

#### 9.6 - HERBS AND SPICES

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

Wintergreen, Woodruff, Wormwood.				
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS		
See Section 9.0	PRECAUTION: This product could cause crop injury. When applying this product prior to transplanting or direct-seeding crops into plastic mulch, care must be taken to remove product residues from the plastic prior to planting. Residual product can be removed by a single 0.5-inch application of water, either by natural rainfall or via a sprinkler system. Care must be taken to ensure that the washwater flushes off the plastic mulch and does not enter transplant holes. Applications made at emergence will result in injury or death to emerged seedlings. For some crops below, applications must be made 3 days before transplanting or planting.	See Section 9.0		
Over-the-Top Wiper Application, Spot Treatment (Peppermint and Spearmint only)	This product may be applied as a spot treatment or over the top of peppermint or spearmint with wiper applications in spearmint and peppermint. Apply spot treatments on a spray-to-wet basis with hand-held equipment, such as backpack sprayers, pump-up pressure sprayers, handguns, hand-wands or any other hand-held or motorized spray equipment used to direct the spray solution to a limited area.  In wiper applications, the applicator must be adjusted so that the wiper contact point is at least 2 inches above the crop. Weeds should be a minimum of 6 inches taller than the crop.  PRECAUTION: Contact of the herbicide solution with the crop may result in discoloration, stunting, or destruction.  Further applications may be made in the same area at 30-day intervals.	Allow at least 7 days between application and harvest.  In spot treatment applications, no more than 10 percent of the total field area to be harvested can be treated at one time.  The crop receiving spray in the treated area will be killed. Do not spray or allow drift outside target area for the same reason.		

# 9.7 OIL SEED CROPS

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

Meadowfoam, Mustard (seed), Rape, Safflower, Sesame, Sunflower.				
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS		
See Section 9.0	See Use Directions in Section 9.0	See Section 9.0		
	This product may be applied before, during or after planting oil seed crops listed in this section. Broadcast applications must be made prior to crop emergence. Wiper applications or hooded sprayers may be used between the rows once the crop is established.  TANK MIXTURES: For sunflowers, a tank mixture with Prowl may be applied according to the labeled directions for that product.	For use with canola, do not apply more than 1.5 quarts (48 fl. oz.) of this product per acre.  For use with sunflowers, do not apply more than 0.75 quart (24 fl. oz) of this product per acre as a single pre-plant or pre-emergence application per year.  Do not feed or graze sunflower forage		
		following application of this product.		
Pre-Harvest	This product provides weed control when applied as a harvest aid to a physiologically mature crop prior to harvest of sunflower or	Allow a minimum of 7 days between treatment and harvest or livestock feeding.		
(Sunflower & safflower)	safflower.  For safflower, apply when seed has lost its opaque character, approximately 20 to 30 days after the end of flowering of the secondary branches.	Apply no more than 72 fl. oz. (2.25 quarts) of this product at a pre-harvest timing to safflower.		
	For sunflower, apply when the backsides of sunflower heads are yellow and bracts are turning brown and seed moisture content is less than 35%.	Apply no more than 1.5 pints (24 fl. oz.) of this product at a pre-harvest timing to sunflower.		
Post-Harvest (Sunflower & safflower)	This product may be applied after harvest of safflower or sunflower. A 2.25 pints (36 fl. oz.) per acre rate may be required for control of large weeds, which are growing in the crops at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable	Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.  Applications must be made at least 30 days prior to planting any crop not listed on the		
	restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.	Glyphosate 53.8% label booklet.		

		9.8 - SO	YBEANS	
LABELLED CROPS	S: Soybeans (non-Roundu	p Ready)		
TYPES OF APPLICATIONS	l	JSE DIRECTIONS		RESTRICTIONS
See Section 9.0	See Use Directions in This product may be app soybeans. Applications r	lied before, during or afte		See Section 9.0  The tank mix directions in this section are not
Pre-Plant, Pre-Emergence, At-Planting	crop. Products that can be tant table below. It is the pest products are registered for applicable restrictions an product labels involved in restrictive directions for uproduct in the tank mixture.  This product may be tank 2,4-D label for intervals be the crabgrass, shattercane at tall, and Pennsylvania so product at 1.5 pints (24 flother labeled annual wear acre when weeds are less (2010).	icide user's responsibility or the intended use. Read Ilmitations and direction tank mixing. Users musice and precautionary stare.  Armixed with 2,4-D or 2,4 between application and precaution and precaution and precaution and precaution and precaution and precaution and proadleaf signalgrass nartweed up to 6 inches to co.) per acre in these tands, apply 18 -24 fl. oz. of is than 6 inches tall, and	to ensure that all d and follow the ns for use on all t follow the most tements of each  -DB. See the blanting.  , barnyardgrass, up to 2 inches all, apply this ank mixtures. For f this product per 1.5 – 2.25 pints	registered in California.
	(24 – 36 fl. oz.) when wer TANK MIXES: Aim Assure II Authority Boundry Canopy Canopy XL Command Domain Dual Dual II Magnum	Firstrate Flexstar Frontline/Outlook Fusion Gauntlet Intrro Linex Lorox/Linuron Lorox Plus Magnum	Micro Tech Prowl Pursuit Pursuit Plus Reflex Scepter Sencor/Lexone Squadron Steel Valor	
Spot treatment	For spot treatments, app soybeans.  The crop receiving spray			Do not treat more than 10 percent of the total field area to be harvested.  Do not spray or allow drift outside target area for
	The crop receiving spray	in the treated area will be	e Killed.	the same reason.
Pre-harvest	This product provides weed control when applied prior to harvest of soybeans.  Apply at rates given in the annual, perennial and woody brush		Do not apply more than 3.75 quarts (120 fl. oz.) per acre of this product for pre-harvest applications.  Do not apply more than 3 pints (48 fl. oz.) per	
	tables.  This product may be applied using either aerial or ground spray equipment.  Apply after pods have set and lost all green color. Care should be taken to avoid excessive seed shatter loss due to ground application equipment.		Allow a minimum of 7 days between application and harvest of soybeans.  Do not graze or harvest treated hay or fodder for livestock feed within 25 days of last pre-harvest application. (If the application rate is 1.5 pints (24 fl. oz.) per acre or lower, the grazing restriction is reduced to 14 days after the last pre-harvest application.)  Do not apply to soybeans grown for seed.	
Selective equipment	This product may be app sprayers, wiper applicato	rs or sponge bars in soyl	peans.	Allow at least 7 days between application and harvest.
	See the "Selective Equip Equipment Techniques" : proper use and calibratio	section of this label for in		

9.9 – SUGARCANE				
LABELLED CROPS	S: Sugarcane			
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS		
See Section 9.0	See Use Directions in Section 9.0	See Section 9.0		
Pre-plant, Pre-emergence, At-planting	This product may be applied in or around sugarcane fields or in fields prior to the emergence of plant cane.	Do not apply to vegetation in or around ditches, canals or ponds containing water to be used for irrigation.		
Spot Treatment	This product may be applied as a spot treatment in sugarcane. For control of volunteer or diseased sugarcane, make a 1 percent solution of this product in water and spray to wet the foliage of vegetation to be controlled. Volunteer or diseased sugarcane should have at least 7 new leaves.	Do not feed or graze treated sugarcane foliage following application.		
	Avoid spray contact with healthy cane plants since severe damage or destruction may result.			
Fallow treatments	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 3.75 quarts (96-120 fl. oz.) of this product in 10 to 40 gallons of water per acre to new growth having at least 7 new leaves.	Allow 7 or more days after application before tillage.		
	Ground or aerial application equipment may be used. Applications up to 4.5 pints (72 fl. oz.) per acre may be made by aerial application in fallow sites where there is sufficient buffer to prevent injury due to drift onto adjacent crops. Tank mixtures with 2,4-D and dicamba may be used. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.			
Hooded sprayers	This product may be used through hooded sprayers for weed control between the rows of sugarcane. See Section 8.0 for "Application Equipment and Techniques" for additional USE DIRECTIONS.	Do not allow treated weeds to come into contact with the crop.		
	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.			
	PRECAUTION: Droplets, mist, foam or splatter of the herbicide solution settling on the crop may result in discoloration, stunting or destruction.			
	To the extent consistent with applicable law, such damage shall be the sole responsibility of the applicator.			
FOR AID IN SUGARCANE RIPENING	This product is a foliar-applied plant growth regulator to hasten ripening and increase the level of sucrose in sugarcane. It is effective in both low and high-tonnage sugarcane.	Do not make application to sugarcane grown for seed.		
(FLORIDA, HAWAII,	When applied as directed under the conditions described, this product will hasten ripening and extend the period of high sucrose level in sugarcane.	Do not feed or graze treated sugarcane forage following application.		
LOUISIANA, PUERTO RICO AND TEXAS)	As a result of leaf desiccation, improved trash burn can be expected.  Most of the sucrose increase is concentrated in the top nodes of the treated cane stalk. In order to recover the maximum sugar where topping is practiced	Do not apply for enhanced ripening to any crops other than sugarcane.		
	during harvest, top at the base of the fourth leaf.  Prior to application, consult your state sugarcane authority or local Albaugh, LLC representative regarding the degree of sucrose response anticipated from the variety of sugarcane to be treated.	Do not plant subsequent crops in treated fields other than the following for 30 days after application: alfalfa or other forage legumes, beans (all types), corn		

9.9 – SUGARCANE				
LABELLED CROPS: Sugarcane				
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS		
	APPLICATION RATES: Use the following application rates and timing instructions according to the State in which the sugarcane is grown.  PRECAUTION: Application of this product may initiate development of shooting eyes. This product may not increase the sucrose content of sugarcane under conditions of good nature ripening. Within 2 to 3 weeks after application, this product may product a slight yellowing to pronounced browning and drying of leaves, and a shortening of upper internodes. Spindle death may occur.  Rainfall within 6 hours after application may reduce effectiveness.  NOTE: Use the higher rate within the labeled range when treating sugarcane under adverse ripening conditions or when less responsive varieties are to be treated.  FLORIDA - Apply 3.75 – 9 fl. oz. of this product per acre 3 to 6 weeks before harvest of LAST RATTON CANE ONLY.  HAWAII – Apply 6.75 – 15.75 fl. oz. of this product per acre 4 to 10 weeks before harvest.  LOUISIANA - Apply 2.6 - 9 fl. oz. of this product per acre 3 to 7 weeks before harvest of RATOON CANE ONLY.  PUERTO RICO – Apply 3.75 fl. oz. of this product per acre 3 to 5 weeks before harvest of RATOON CANE ONLY.  TEXAS – Apply 3.75 – 9 fl. oz of this product per acre 3 to 5 weeks before harvest of RATOON CANE ONLY.	(all types), cotton, melons (all types), pasture grasses, peanuts, potatoes (Irish or sweet), sorghum (milo), soybeans, squash (all types) or wheat.		

#### 9.10 - VEGETABLE CROPS

This "VEGETABLE CROPS" section gives directions that apply to all listed vegetable crops within section 9.10 grouped alphabetically below. See the individual crop categories for specific instructions, preharvest intervals, precautions and restrictions.

TYPES OF APPLICATIONS: Chemical Fallow, Preplant Fallow Beds, Preplant, Preemergence, Prior to Transplanting Vegetables, At-Planting, Hooded Sprayers in Row Middles, Shielded Sprayers in Row Middles, Wiper Applications in Row Middles, and Post Harvest, Directed Applications (Non-Bearing Ginseng), Over-the-top Wiper Applications (Rutabagas Only).

#### PRECAUTIONS:

- When applying this product prior to transplanting or direct-seeding crops into plastic mulch, care must be taken to remove residues of this product, which could cause crop injury, from the plastic prior to planting.
- Residues can be removed by single 0.5-inch application of water, either by natural rainfall or via a sprinkler system. Care must be taken to insure that the wash water flushed off the plastic mulch and does not enter transplant holes.
- Applications made at emergence will result in injury or death to emerged seedlings.
- Apply before seed germination in coarse sandy soils to further minimize the risk of injury.
- Avoid contact of herbicide with foliage, green shoots or stems, bark, exposed roots (including those
  emerging from plastic mulch), or fruit of crops because severe injury or destruction may result.

## **RESTRICTIONS:**

- When making pre-emergence and at planting applications, applications must be made before crop emergence to avoid severe crop injury.
- In crops with vines, hooded sprayer, shielded sprayer and wiper applications to row middles must be made prior to vine development to prevent severe injury or destruction.
- Unless otherwise specified in this product's labeling, treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest.
- Post-harvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop.

See "Application Equipment and Techniques" section of this label for additional information.

9.10.1 – BRASSICA VEGETABLES			
LABELLED CROPS: Broccoli, Broccoli (raab), Brussels sprouts, Cabbage, Cabbage (Chinese), Cabbage (Chinese mustard), Cauliflower, Cavalo broccolo, Chinese broccoli (gai lon), Chinese cabbage (bok choy & napa), Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens			
TYPES OF APPLICATIONS			
See Section 9.10	See Use Directions under Section 9.0	See Section 9.10	

9.10.2 – BULB VEGETABLES		
LABELLED CROPS: Garlic, Great-headed garlic, Leek, Onion (dry bulb & green), Shallot, Welsh onion, Shallot		
TYPES OF USE DIRECTIONS RESTRICTIONS APPLICATIONS		
See Section 9.10  See Use Directions under See Section 9.10  Section 9.0		

# 9.10.3 - CUCURBIT VEGETABLES & FRUITS

LABELLED CROPS: Chayote (fruit), Chinese waxgourd, Citron melon, Cucumber, Gherkin, Gourds, Gourds (edible including hyotan, cucuzza, hechima, Chinese okra), Melons (All), Momordica spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber), Muskmelon (cantaloupe, casaba, crenshaw, golden pershaw, honeydew, honey ball, mango melon & Persion, pineapple, Santa Claus, snake), Pumpkin, Summer Squash (including crookneck, scallop, straightneck, vegetable marrow, zucchini) Winter squash (including butternut, calabaza, hubbard, acorn, spaghetti), Watermelon

T)/DE0.0E	LIGE DIDECTIONS	DESTRICTIONS
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS
	See Use Directions under Section 9.0	For Cantaloupe, Casaba melon, Crenshaw melon, Cucumber, Gherkin, Gourds, Honeydew melon, Honey ball melon, Mango melon, Melons (all) Muskmelon, Persian melon, Pumpkin, Squash (summer & winter), AND Watermelon, allow at least 3 days between application and planting.

# 9.10.4 - LEAFY VEGETABLES

LABELED CROPS: Amaranth (Chinese spinach), Arrugula (roquette), Beet greens, Cardoon, Celery, Celery (Chinese), Celtuce, Chaya, Chervil, Chrysanthemum (edible leaved), Chrysanthemum (Garland), Corn salad, Cress (garden & upland), Dandelion, Dock (sorrel), Dokudami, Endive (escarole), Fennel (Florence), Gow kee, Lettuce (head & leaf), Orach, Parsley, Purslane (garden & winter), Radicchio (red chicory), Rhubarb, Spinach (All), Swiss Chard, Watercress (upland), Water Spinach

TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS
See Section 9.10	See Use Directions under Section 9.0  For Watercress, avoid application within 3 days prior to seeding and during the period between seeding and emergence to minimize the risk of injury.	See Section 9.10

	9.10.5 - FRUITING VEGETABLES			
LABELLED CROPS: Eggplant, Ground cherry (Physalis spp.), Pepino, Pepper (includes bell, chili, cooking, pimento, sweet), Tomatillo, Tomato				
TYPES OF USE DIRECTIONS RESTRICTIONS APPLICATIONS				
See Section 9.10	See Use Directions under Section 9.0	See Section 9.10  For Eggplant, Ground cherry, Pepino, Pepper (all), Tomatillo and Tomato, allow at least 3 days between application and planting.  Do not use hooded or shielded sprayer applications in row middles of tomatoes.		

0.40.0				
	9.10.6 – LEGUME VEGETABLES (succulent or dried)			
	: Bean (Lupinus: includes grain lupin, sweet lu			
(Phaseolus: include	es field bean, kidney bean, lima bean, navy bea	n, pinto bean, runner bean, snap bean, tepary bean,		
wax bean), Bean (\	Vigna: includes adzuki bean, asparagus bean, b	plackeyed pea, catjang, Chinese longbean, cowpea,		
crowder pea, moth	bean, mung bean, rice bean, southern pea, urd	l bean, yardlong bean), Broad bean (fava), Chickpea		
		udes dwarf pea, edible podded pea, English pea, field		
	reen pea, snowpea, sugar snap pea), Pigeon p			
TYPES OF	USE DIRECTIONS	RESTRICTIONS		
APPLICATIONS	COL BINLEGIIONO	NEOTHIO HONG		
711 LIO/THONG				
See Section 9.10	See Use Directions under Section 9.0	See Section 9.10		
Pre-harvest	This product may be applied as an over the top			
broadcast spray	broadcast spray to control labeled weeds prior to	Apply at least 7 days before harvest for Dry Beans, Dry		
(Dry beans)	the harvest of dry beans. Apply up to 1.5 pints	Peas, Lentils & Chickpeas.		
(Diy bound)	(24 fl. oz.) stage of the legume seed (30 percent			
	grain moisture or less). Either ground broadcast	Only make one application per year.		
	or aerial applications may be made.			
Pre-harvest	This product may be applied as an over the top	Do not combine a pre-harvest spray with a spot treatment on		
broadcast spray	broadcast spray to control labeled weeds prior to	the same crop area.		
(Dry Peas,	the harvest of dry peas, lentils, and chickpeas.	Do not food twented visco and have from those groups to		
Lentils &	Apply up to 3 pints (48 fl. oz.) in 3 to 20 gallons of	Do not feed treated vines and hay from these crops to		
Chickpeas)	water per acre at the hard dough stage of the	livestock. Do not apply this product through any type of		
	legume seed (30 percent grain moisture or less).	irrigation system.		
	Either ground broadcast or aerial applications	Do not treat field (feed) peas, since these are considered to		
	may be made.	be grown as livestock feed.		
	grown do mootook rood.			
		Do not make pre-harvest applications to Dry Beans, Dry		
		Peas, Lentils & Chickpeas grown for seed.		

9.10.6 – LEGUME VEGETABLES (succulent or dried)				
LABELED CROPS	LABELED CROPS: Bean (Lupinus: includes grain lupin, sweet lupin, white lupin, and white sweet lupin), Bean			
(Phaseolus: include	es field bean, kidney bean, lima bean, navy bea	n, pinto bean, runner bean, snap bean, tepary bean,		
wax bean), Bean (\	/igna: includes adzuki bean, asparagus bean, b	plackeyed pea, catjang, Chinese longbean, cowpea,		
crowder pea, moth	crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean), Broad bean (fava), Chickpea			
(garbanzo), Guar, Jackbean, Lablab bean, Lentil, Pea (Pisum: includes dwarf pea, edible podded pea, English pea, field				
pea, garden pea, green pea, snowpea, sugar snap pea), Pigeon pea, Soybean (immature seed), Sword bean				
TYPES OF	USE DIRECTIONS	RESTRICTIONS		
APPLICATIONS				
Spot treatment	This product may be applied as spot treatment to	Apply at least 14 days before harvest		

TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS
Spot treatment (Dry beans, Dry Peas, Lentils, Chickpeas)	This product may be applied as spot treatment to control troublesome weeds such as Canada thistle, quackgrass, mayweed (dog fennel), and milkweed in dry beans. Apply up to 19.5 fl. oz. in 10 to 20 gallons of water through ground spray equipment or use a 2 percent solution in a handheld sprayer. For best results, applications should be made at or beyond the bud stage of growth. The crop receiving spray in treated areas will be killed.	Apply at least 14 days before harvest  Only one application per year may be made.  Do not combine a pre-harvest spray with a spot treatment on the same crop area.  Do not feed treated vines and hay from these crops to livestock. Do not apply this product through any type of irrigation system.  Do not treat field cowpeas, since these are considered to be grown as livestock feed.

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9.10.7 – ROOT & TUBER VEGETABLES				
LABELLED CROPS: Arracacha, Arrowroot, Artichoke (Chinese & Jerusalem), Beet (garden), Burdock, Canna, Carrot, Cassava (bitter & sweet), Celeriac, Chayote (root), Chervil, Chicory, Chufa, Dasheen, Galangal, Ginger, Ginseng, Horseradish, Leren, Kava, Parsley, Parsnips, Potato (Irish), Radish, Radish (Oriental), Rutabaga, Salsify, Salsify (Black & Spanish), Skirret, Sweet potato, Tanier, Tumeric, Turnip, Wasabi, Yacon, Yams, Yam bean, Yam (True)				
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS		
See Section 9.10	See Use Directions under Section 9.0	See Section 9.10		
Direct Application (Non-bearing Ginseng)	This product may be used for weed control in established non-bearing ginseng. Applications may be made with boom equipment, CDA, shielded sprayers, hand-held and high volume wands, lances, and orchard guns or with wiper application equipment.  PRECAUTION: Extreme care must be exercised to avoid contact of herbicide solution, spray, drift or mist with foliage or green bark of trunk, branches, suckers, fruit or other parts of desirable plants. Contact of this product with other than matured brown bark can result in serious crop damage.	Applications must be made at least one year prior to harvest.		

rutabagas.

Wiper applicators may be used over-the-top of rutabagas.

Over-the-Top Wiper Application (Rutabaga Only)

Allow at least 14 days between application and harvest of

# 9.11 – MISCELLANEOUS CROPS

LABELED CROPS: Aloe vera, Asparagus, Bamboo shoots, Globe artichoke, Okra, Peanut (ground nut), Pineapple, Strawberry, Sugar Beet (non-Roundup Ready)

	eet (non-Roundup Ready)	2221221212
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS
See Section 9.10	See Use Directions under Section 9.0	See Section 9.10
	Avoid contact of herbicide with foliage, green shoots or stems. Bark, exposed roots (including those emerging from plastic mulch), or fruit of crops because severe injury or destruction may result.	When making pre-emergence and at planting applications, applications must be made before crop emergence to avoid serious crop injury. Apply before seed germination in coarse sandy soils to further minimize the risk of injury. In crops with vines, hooded sprayer, shielded sprayer and wiper applications to row middles must be made prior to vine development.
		Treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest.
		Post harvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop.
Weed control, Site preparation	This product may be applied for weed control or for site preparation prior to planting or transplanting crops listed in	Do not apply within a week before the first asparagus spears emerge.
	this section.	Do not feed or graze treated pineapple forage following application.
	When applying this product prior to transplanting or direct seeding crops into plastic mulch, care must be taken to remove residues of this product from the plastic prior to transplanting. Residues can be removed by 0.5 inch natural rainfall or by applying water via a sprinkler system. Care must be taken to insure that the wash water flushes off the plastic mulch and does not enter transplant holes. Injury made at emergence will result in injury or death to emerged seedlings.	
Spot treatment (Asparagus)	This product may be applied immediately after cutting, but prior to the emergence of new spears.	Do not treat more than 10 percent of the total field area to be harvested.  Do not harvest within 5 days of treatment.
Post-harvest (Asparagus)	This product may be applied after the last harvest and all spears have been removed. If spears are allowed to regrow, delay application until ferns have developed. Delayed treatments should be applied as a directed or shielded spray in order to avoid contact of the spray with ferns, stems or spears.  Select and use recommended types of spray equipment for post-emergence 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.	Do not allow direct contact of the spray with the asparagus which will result in serious crop injury.

#### 10.0 - TREE, VINE, & SHRUB CROPS (Alphabetical)

This section gives directions that apply to all listed tree, vine & shrub crops within section 10 crop groups. Individual crops may have more specific instructions, pre-harvest intervals, precautions and restrictions.

TYPES OF APPLICATIONS: Pre-plant (Site Preparation) Broadcast Sprays, Weed control, Middles (between rows of trees, vines or shrubs), Strips (within rows of trees, vines or shrubs), Selective Equipment (shielded sprayers, wiper treatments), Directed Sprays, Spot Treatments, Perennial Grass Suppression, Cut Stump.

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.

#### **USE DIRECTIONS:**

This product may be applied in middles (between rows of trees or vines), strips (within rows of trees or vines), and for weed control or perennial grass suppression in established tree fruit and tree nut groves, orchards, berries and vineyards. This product may also be used for site preparation prior to planting or transplanting these crops. Apply at 12 – 120 fl. oz. per acre according to the "Annual Weeds" and "Perennial Weeds" rate tables sections of this label. Utilize 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. Repeat applications may be made up to a maximum of 7.8 quarts (250 fl. oz.) per acre per year.

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

## PRECAUTIONS:

- Extreme care must be exercised to avoid contact of herbicide solution, spray, drift or mist with foliage or green bark of trunk, branches, suckers, fruit or other part of the trees, canes and vines.
- · Avoid applications when recent pruning wounds or other mechanical injury has occurred.
- Contact of this product other than matures brown bark can result in serious crop damage or destruction.
- For applications in strips (within rows of trees), only selective equipment (directed sprays, hooded sprayers, shielded applicators, or wipers) must be used to minimize the potential for leakage or drift of herbicide sprays onto crop.

See "APPLICATION EQUPMENT AND TECHNIQUES" section of this label for additional directions and precautions.

#### **RESTRICTIONS:**

- Only wipers or shielded applicators capable of preventing all contact with crop may be used.
- Only shielded or directed sprayers may be used in crops with potential for crop contact, and then only where there is sufficient clearance.
- For berry crops, hooded or shielded sprayers must be fully enclosed including top, sides, front and back.
- Allow a minimum of 3 days between applications and transplanting.

Middles (between rows of trees, vines or bushes)

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

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

A tank mixture of this product plus Goal® 2XL (or generic equivalent) 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 - 24 fl. oz./A of this product plus the labeled rate of Goal® 2XL will control annual weeds with a maximum height or diameter of 6 inches, including crabgrass, common groundsel, junglerice, common lambsquarters, redroot pigweed, London rocket, common ryegrass, shepherdspurse, annual sowthistle, common

cheeseweed (malva), filaree (suppression), horseweed/marestail (Conyza canadensis), stinging nettle and common purslane (suppression). 12 - 24 fl. oz./A of this product plus labeled rate of Goal<sup>®</sup> 2XL will control common cheeseweed (malva) or hairy fleabane (Conyza bonariensis), with a maximum height or diameter of 3 inches.

Strips (in rows of trees, vines or bushes)

TANK MIXTURES: This product may be applied in rows of tree or vine crops and may also be tank mixed with the following products (or generic equivalent). It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

DEVRINOL® 50 DF

DIREX® 4L

GOAL® 2XL

KARMEX® DF

KROVAR® I

KROVAR® II

PRINCEP® CALIBER 90

SIMAZINE 4L

SIMAZINE 80W

SIM-TROL™ 4L

SOLICAM® DF

SULFLAN® AS

PROWL®

SURFLAN® 75W

Restriction: Do not apply these tank mixtures in Puerto Rico.

#### 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 fl. oz. 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 fl. oz. 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 fl. oz. of this product per acre, followed by an application of 1.5 - 3 fl. oz.per acre about 45 days later. Make no more than 2 applications per year.

For burndown of bermudagrass, apply 1.5 – 3 pints (24 – 48 fl. oz.) 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 - 12 fl. oz. of this product per acre east of the Rocky Mountains and 12 fl. oz. 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 up to the maximum labeled rate may be made when regrowth occurs and bermudagrass injury and stand reduction can be tolerated. East of the Rocky Mountains, rates of 4.5 - 7.5 fl. oz. per acre should be used in shaded conditions or where a lesser degree of suppression is desired.

### CUT STUMPS (Tree crops)

### LABELED CROPS:

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

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

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

T) (DEC 05	LIGE DIDECTIONS	DECEDICATIONS
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS
Suitable Hand-held Equipment	Cut stump applications of this product may be made during site preparation or site renovation, prior to transplanting tree crops. This product will control regrowth of cut stumps and resprouts of many types of tree species, some of which are listed below.	,
	Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut trees or resprouts close to the soil surface. Apply a 50 to 100 percent solution of this product to the freshly cut surface immediately after cutting. Delays in application may result in reduced performance. For best results, applications should be made during periods of active growth and full leaf expansion.	
	PRECAUTION: Some sprouts, stems, or trees may share the same root system. Adjacent trees having a similar age, height and spacing may signal shared roots. Whether grafted or shared, injury is likely to occur to non-treated stems/trees when one or more trees sharing common roots are treated.	

### 10.1 - BERRY CROPS

LABELED CROPS: Blackberry (including bingleberry, black satin berry, boysenberry, Cherokee blackberry, chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thronless berry, Himalayaberry, hullberry, juneberry, lavacaberry, lowberry, lucretiaberry, marionberry, nectarberry, olallie berry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, and youngberry), Blueberry, Cranberry, Currant, Elderberry, Gooseberry, Huckleberry, Loganberry, Raspberry (Black, Red), Salai

TYPES OF	USE DIRECTIONS	RESTRICTIONS
APPLICATIONS See Section 10.0	See Use Directions under Section 10.0	See Section 10.0
See Section 10.0	See Use Directions under Section 10.0	Do not permit herbicide solution to contact desirable vegetation, including green shoots, canes or foliage.
		Allow a minimum of 14 days between last application and harvest of labeled berry crops.
		Allow a minimum of 30 days between last application and harvest of cranberries.
		Do not make directed sprays within the cranberry bush areas prior to berry harvest.
Spot Treatment (Cranberry production)	May be used to control weeds growing in dry ditches (interior and perimeter) of cranberry production areas.	Allow a minimum of 30 days between last application and harvest of cranberries.
production)	Handheld sprayers or other appropriate application equipment listed under "Application Equipment and Techniques" in this label may be used. Drop water level to	Do not apply this material through irrigation system.
		Do not make applications by air.
	product. Spray to wet vegetation, not to run-off.	Do not apply directly to water.
	For treatments after draw down of water in dry ditches, allow 2 or more days after treatment before reintroduction of water to achieve maximum weed control.	
	Apply this product within 1 day after draw down to ensure application to actively growing weeds.	
	Use nozzles that emit medium- to large-sized droplets to minimize drift in order to avoid crop injury.	
Post-harvest (Cranberry Production)	Best results will be obtained if applications are made to vines that appear dormant (after they have turned red). Hand-held sprayers, wipers or other appropriate application agricultural listed under "Application Equipment and	Do not treat more than 10 percent of the total bog.  Allow a minimum of 6 months after the last application and next harvest of cranberries.
	equipment listed under "Application Equipment and Techniques" in this label may be used. If using hand-held	
	sprayers, use a 0.5 to 1 percent solution of this product. Spray to wet vegetation, not to run off. If using hand-held boom sprayers, apply 1.5 - 3 quarts (48 - 96 fl. oz.) of this product per acre.	Do not apply this product through the irrigation system.  Do not make applications by air.
		Do not apply directly to water.
	PRECAUTION: Even though vines appear dormant, contact of the herbicide solution with desirable vegetation may result in damage or severe plant injury. Cranberry plants that are directly sprayed may be killed.	Make applications only after cranberries have been harvested to control weeds growing within the field.

		10.2 - CITRUS			
	Calamondin, Chironja, Citron All), Pummelo, Satsuma Ma			Lemon, Lime, Mar	ndarin
TYPES OF APPLICATIONS	USI	DIRECTIONS		RESTRIC	CTIONS
See Section 10.0	See Use Directions under	Section 10.0		See Section 10.0	
	Florida and Texas only: For below, apply the labeled rates per acre. Where weed foliage per acre.  For goatweed, apply 1.5 - 2.2 acre. Apply in 20 to 30 gallon actively growing. Use 3 pints than 8 inches tall and 2.25 pir greater than 8 inches tall. If gaddition of Krovar® II or Karmelt is the pesticide user's response to the intended us restrictions and limitations and involved in tank mixing. Users for use and precautionary statimixture.	of this product in 3 to 4 is dense, use 10 to 30 is dense, use 10 to 30 is dense, use 10 to 30 is of water per acre whe (48 fl. oz.) per acre who atweed is greater than ex® may improve controllity to ensure that a e. Read and follow the addirections for use on a simust follow the most re-	O gallons of water gallons of water gallons of water of this product per n plants are en plants are less then plants are 8 inches tall, the l.  Ill products are applicable ll product labels estrictive directions	Allow a minimum of application and harve For citron groves appropriate sprays only.	est.
Perennial w	eeds: S=Suppression	B=Burndown	PC=Partial Co	ntrol C=	-Control
W	eed Species	1.5 pints (24 fl. oz).	Glyphosate 53. 1.5 quarts (48 fl. oz.)	8% Rate Per Acre 2.25 quarts (72 fl. oz.)	3.75 quarts (120 fl. oz.)
Bermudagrass Guineagrass		B	-	PC	C (120 II. 02.)
Texas and Florida F	Ridge	В	С	С	С
Florida Flatwoods		-	В	С	С
			С	C	C
Paragrass Torpedograss		B S	C -	C C PC	C C C

10.3 – MISCELLANEOUS TREE FOOD CROPS			
LABELED CROPS: Cactus (fruits & pads), Palm (heart, leaves), Palm (oil)			
TYPES OF USE DIRECTIONS RESTRICTIONS APPLICATIONS			
See Section 10.0 See Use Directions under Section 10.0 See Section 10.0			

10.4 – NON-FOOD TREE CROPS			
LABELED CROPS: Pine, Poplar, Eucalyptus, Christmas Trees, Other Non-food Tree Crops.			
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS	
See Section 10.0	See Use Directions under Section 10.0	See Section 10.0	
Directed sprays, Spot treatments, Wiper applications	This product may be used as a post-directed spray and spot treatment around established poplar, eucalyptus, Christmas Trees and other non-food tree crops.  PRECAUTION: Care must be exercised to avoid contact of spray drift or mist with foliage or green bark of established Christmas trees and other pine trees. Desirable plants may be protected from the spray solution by using shields or coverings made of cardboard or other impermeable material.	Do not use this product as an over-the- top broadcast spray in Christmas trees and other pine tree.	
Site Preparation	This product may be used prior to planting non-food tree crops.  Precautions must be taken to protect non-target plants during site preparations applications.		
Directed Spray (Eucalyptus and Poplar Production)	This product can be used around established eucalyptus and poplar trees to control undesirable vegetation.  Use a 1 to 2 percent spray solution to control herbaceous weeds in eucalyptus farms. Use a 2 percent spray solution for control of undesirable woody brush and trees. For "hard-to-control" weeds, use a 5 to 10 percent spray solution. Avoid contact of spray, drift, or mist with foliage, green bark or non-woody surface roots of plants.		
Wiper Application (Eucalyptus and Poplar Production)	This product may be used through wick or other suitable wiper applicators for control or partial control of grass and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label. For wick applicators, mix 3 quarts (96 fl. ozs) of this product with 2 gallons water to make a 33% solution. For wiper systems that can handle thicker solutions, such as force-fed systems, a 33 to 100% solution may be used. For best results, ensure that the herbicide solution is allowed to contact the maximum amount of leaf surface. As weed densities increase, decrease equipment speed to allow sufficient herbicide flow to wet all weed surfaces contacted. Weeds not contacted will be unaffected.		

10.5 – POME FRUIT			
LABELED CROPS: Apple, Crabapple, Loquat, Mayhaw, Pear (including oriental pear), Quince			
TYPES OF USE DIRECTIONS RESTRICTIONS APPLICATIONS			
See Section 10.0	See Use Directions under Section 10.0	See Section 10.0  Allow a minimum of 1 day between last application and harvest in pome fruits.	

10.6 – STONE FRUIT				
LABELED CROPS: Apricot, Cherry (Sweet, Tart), Nectarine, Olive, Peach, Pear, Plum/Prune (All types), Plumcot.				
TYPES OF USE DIRECTIONS RESTRICTIONS APPLICATIONS				
See Section 10.0  See Use Directions under Section 10.0  Avoid application near trees with recent pruning wounds or other mechanical injury.  See Section 10.0  Allow a minimum of 17 days betwee application and harvest in stone from the content of		See Section 10.0  Allow a minimum of 17 days between last application and harvest in stone fruit crops.  For olive groves, apply as directed sprays only.		

#### RESTRICTIONS ON APPLICATION EQUIPMENT:

For cherries, any application equipment listed in Section 10.0 may be used in all states.

Any application equipment listed in Section 10.0 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 AK, AL, AR, CT, DE, FL, GA, HI, IA, IL, IN, LA, MA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, NY, OH, PA, RI, SC, SD, TN, VA, VT, and WI, 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 spray 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. Apply only near trees that have been planted in the orchard for 2 or more years.

EXTREME CARE MUST BE TAKEN TO ENSURE NO PART OF THE PEACH TREE IS CONTACTED.

10.7 - TREE NUTS			
LABELED CROPS: Almond, Beechnut, Betelnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Coconut, Filbert (Hazelnut), Hickory nut, Macadamia, Pecan, Pine nut, Pistachio, Walnut (Black, English)			
TYPES OF USE DIRECTIONS RESTRICTIONS APPLICATIONS			
See Section 10.0			

### 10.8 - TROPICAL CROPS & SUBTROPICAL TREES & FRUITS

LABELED CROPS: Ambarella, Atemoya, Avocado, Banana, Barbados Cherry (acerola), Biriba, Blimbe, Breadfruit, Cacao (cocoa) bean, Canistel, Carambola (starfruit), Cherimoya, Coffee, Custard apple, Dates, Durian, Feijoa, Figs, Governor's plum, Guava, Ilama, Imbe, Imbu, Jaboticaba, Jackfruit, Longan, Lychee, Mamey apple, Mango, Mangosteen, Marmaladebox (genip), Mountain papaya, Papaya, Pawpaw, Plantain, Persimmon, Pomegranate, Pulasan, Rambutan, Rose apple, Sapodilla, Sapote (black, mamey, white), Spanish lime, Soursop, Star apple, Sugar apple, Surinam cherry, Tamarind, Tea, Ti (roots & leaves), Wax jambu.

Tamarind, Tea, TI (roots & leaves), vvax jambu.				
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS		
See Section 10.0	See Use Directions under Section 10.0  This product may be applied for weed control or for site preparation prior to transplanting crops listed in this section.	See Section 10.0  Allow a minimum of 1 day between last application and harvest of banana, guava, papaya and plantain crops.  Allow a minimum of 14 days between last application and harvest of any other tropical or subtropical tree fruit.  Allow a minimum of 28 days between last application and harvest in coffee crops.  In coffee and banana, delay applications 3 months after transplanting to allow the new coffee or banana plant to become established.		
Bananacide (Banana only)	See Use Directions under Section 10.0  This product may be used to destroy banana plants infected with the Banana Bunchy Top Virus as well as non-infected banana plants to establish a disease free buffers around plantations. Remove all fruit from the plants within the treatment area prior to treatment. Inject 1 mL of this product's concentrate per 2 to 3 inches of pseudostem diameter. Make the injection at least one foot above ground, except for very small plants, which should be injected vertically into the top. Any subsequent regrowth must also be destroyed. All plants and mats (or units) adjacent (within a 4-foot radius) to a treated mat shall be mechanically destroyed.  For control of the Banana Bunchy Top Virus, it is critical that the grower follow a strict control program involving monitoring for diseased plants, spraying to control the aphid vector, and destruction of all infected mats (or units). An infected plant may not show symptoms of the disease for up to 125 days, therefore it is critical that the entire mat (or unit) containing the diseased plant be destroyed immediately.	See Section 10.0  Do not apply more than 11.25 mL of this product's concentrate per mat (or units). Remove all fruit from plants and mats (or units) prior to treatment.  Do not harvest any fruit or plant materials from treated mats (or units) following injection. Do not allow livestock to consume treated materials.  Following transplant of new banana plants into treated areas, allow plants to become established for 3 months before applying this product for weed control.		

10.9 - VINE CROPS				
LABELED CROPS	LABELED CROPS: Grapes (raisin, table, wine), Hops, Kiwi, Passion fruit			
TYPES OF APPLICATIONS USE DIRECTIONS RESTRICTIONS				
See Section 10.0	See Use Directions under Section 10.0  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.	See Section 10.0  Allow a minimum of 14 days between last application and harvest.  Do not use selective equipment in kiwi Applications must not be made when green shoots, canes or foliage are in the spray zone.		

## 11.0 - PASTURE GRASSES, FORAGE LEGUMES & RANGELANDS

11.1 – ALFALFA, CLOVER, & OTHER FORAGE LEGUMES				
LABELED CROPS: Alfalfa, Clover, Kenaf, Kudzu, Lespedeza, Leucaena, Lupin, Sainfoin, Trefoil, Velvet bean, Vetch (all types)				
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS		
Pre-plant, Pre-emergence, At-Planting	This product may be applied before, during or after planting crops listed.  Make applications according to the rates listed in Annual Weeds, Perennial Weeds, and Woody Brush & Trees rate tables in this label.	If a single application is made at rates of 1.5 quarts (48 fl. oz.) per acre or less, no waiting period between treatment and feeding or grazing is required.  If application rates greater than 1.5 quarts (48 fl. oz.) per acre are made, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.		
Spot treatment, Over-the-Top Wiper applications (Alfalfa and Clover only)	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.	For spot treatment and wiper applications, apply in areas where the movement of domestic livestock can be controlled.  No more than one-tenth of any acre can be treated at one time.  Remove domestic livestock before application and wait 14 days after application before grazing livestock or harvesting.		
Dormant (Alfalfa Only)	This product will control or suppress many weeds including quackgrass, downy brome and cheatgrass in dormant alfalfa. Apply 6 - 9 fl. oz. per acre of this product. Apply in the spring to alfalfa that is dormant. Applications should be made after spring temperatures have warmed enough to encourage resumption of weed growth, but prior to initiation of trifoliate leaf expansion of the alfalfa. Applications made after expansion of the first trifoliate leaf of the alfalfa will cause growth reduction and reduced crop yield.  Slight discoloration of the alfalfa may occur, but the alfalfa will regreen and regrow under moist soil conditions as effects of this product wear off.  PRECAUTION: Application of this product can cause crop injury.	Do not use ammonium sulfate when spraying dormant alfalfa with Glyphosate 53.8%.  Do not use this product where a slight yield reduction in the first cutting of alfalfa cannot be tolerated.  Do not make more than one application per year.  Allow 36 hours after application before grazing livestock or harvesting.		
Pre-harvest (Alfalfa Only)	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.  Use up to 1.5 pints (24 fl. oz.) of this product per acre. Applications may be made at any time of the year. For control of quackgrass, apply in the spring, late summer or fall when quackgrass is actively growing. Treatments for quackgrass must be followed by deep tillage for complete control.	Make only one application to an existing stand of alfalfa per year.  Do not apply more than 1.5 quarts (48 fl. oz.) of this product per acre as a pre-harvest treatment.  Do not use for alfalfa grown for seed.  Wait 36 hours before treated crop and weeds can be harvested and fed to livestock.		
Renovation	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.  Make applications according to the rates listed in Annual Weeds, Perennial Weeds and Wood Brush & Trees Rate Tables in this label.	Remove domestic livestock before application.  If application rates of 1.5 quarts (48 fl. oz.) per acre or less are used wait 36 hours after application before grazing or harvesting.  If application rates greater than 1.5 quarts (48 fl. oz.) per acre are used, wait 8 weeks after application before grazing or harvesting.		

11.2 - CONSERVATION RESERVE PROGRAM (CRP)				
LABELLED CROPS	S: Conservation Reserve Program (CRP) Acres			
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS		
Renovation (rotating out of CRP), Site preparation	This product may be used to prepare CRP land for crop production. Refer to Federal, state or local use guides for CRP renovation recommendations.  Make applications according to the rates listed in Annual Weeds, Perennial Weeds and Wood Brush & Trees Rate Tables in this label.  PRECAUTION: Some stunting of CRP perennial grasses will occur if broadcast applications are made when plants are not dormant.	Do not apply more than 2.25 quarts (72 fl. oz.) per acre per year onto CRP grasses.  For any crop not listed in the "CROPS" sections of this label applications must be made at least 30 days prior to planting.		
Post-emergence Weed control in Dormant Acres, Over-the-Top Wiper Application	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 – 12 fl. oz. 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.			

11.3 - GRASS or TURFGRASS SEED PRODUCTION				
LABELLED CROPS:	LABELLED CROPS: Any grass (Gramineae family) except corn, sorghum, sugarcane and those listed under "CEREAL CROPS"			
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS		
Pre-plant, Pre-emergence, Renovation, Site preparation	This product may be applied before, during, or after planting or for renovation of turf or forage grass areas grown for seed production.  Make applications according to the rates listed in Annual Weeds, Perennial Weeds and Wood Brush & Trees Rate Tables in this label.  Applications must be made prior to the emergence of the crop to avoid 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.	Do not disturb soil or underground plant parts before treatment. Tillage or renovation techniques such as vertical mowing, coring or slicing must be delayed for 7 days after application to allow proper translocation into underground plant parts.  If application rates total 2.25 quarts (72 fl. oz.) per acre or less, no waiting period between treatment and feeding or livestock grazing is required.  If the rate is greater 2.25 quarts (72 fl. oz.) per acre, remove domestic livestock and wait 8 weeks following application before grazing or harvesting.		
Shielded Sprayer  Over-the-Top	Apply 24 - 72 fl. oz.of this product as a broadcast spray in 10 to 20 gallons of total spray volume per acre. Uniform planting in straight rows aid in shielded sprayer applications. Best results are obtained when the grass seed crop is small enough to easily pass by or through the protective shields.  PRECAUTION: Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage.  To the extent consistent with applicable law, grower assumes all responsibility for crop losses from misapplication.  This product may be applied with wiper applicators to control or suppress the weeds listed under "WIPER"			
Wiper Applications	APPLICATORS" in the "SELECTIVE EQUIPMENT" section of this label.			

11.3 - GRASS or TURFGRASS SEED PRODUCTION			
LABELLED CROPS:	LABELLED CROPS: Any grass (Gramineae family) except corn, sorghum, sugarcane and those listed under "CEREAL CROPS"		
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS	
	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 2 inches above the desirable vegetation.		
	Weeds should be a minimum of 6 inches above the desirable vegetation. Better results may be obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. This may occur in dense clumps, severe infestations, or when weed height varies so that not all weeds are contacted. In these instances, repeat treatments up to the maximum application rate may be necessary. Better results may be obtained if 2 applications are made in opposite directions.		
Spot treatments	Use a 1- to 1.5 percent solution  Apply this product prior to heading of grasses.	The crop receiving the spray in the treated area will be killed. Do not allow drift or spray outside of the target area for the same reason.	
Creating Rows in Annual Ryegrass	Use 12 - 24 fl. oz. of this product per acre. Use the higher rate when the ryegrass is greater than 6 inches tall. Best results are obtained when applications are made before the ryegrass reaches 6 inches in height.  PRECAUTION: Set nozzle height 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.  To the extent consistent with applicable law, grower assumes all responsibility for crop losses from		
	assumes all responsibility for crop losses from misapplication.		

	11.4 - PASTURES			
LABELLED CROPS: Any grass (Gramineae family) except corn, sorghum, sugarcane and those listed under "CEREAL CROPS". Including Bahiagrass, Bermudagrass, Bluegrass, Brome, Fescue, Guineagrass, Kikuygrass, Orchardgrass, Pangola grass, Ryegrass, Timothy, Wheatgrass.				
TYPES OF APPLICATIONS	USE DIRECTIONS RESTRICTIONS			
Spot treatment, Over-the Top Wiper Applications	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.	When spot treatment or wiper applications are made using rates above 2.25 quarts (72 fl. oz.). per acre, no more the 10 percent of the total pasture may be treated at any one time.		
	For spot treatments or wiper application methods using rates of 2.25 quarts (72 fl. oz.). per acre or less, the entire field or any portion of it may be treated.	Remove domestic livestock before application and wait 7 days after application before grazing livestock or harvesting.		

#### 11.4 - PASTURES

LABELLED CROPS: Any grass (Gramineae family) except corn, sorghum, sugarcane and those listed under "CEREAL CROPS". Including Bahiagrass, Bermudagrass, Bluegrass, Brome, Fescue, Guineagrass, Kikuygrass, Orchardgrass, Pangola grass, Ryegrass, Timothy, Wheatgrass.

. 3 3 , ,	rangola grado, ryogrado, rimolay, rribalgrado.			
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS		
Pre-plant, Pre-emergence, Pasture renovation, Stand Removal	This product may be applied prior to planting or emergence of forage grasses. In addition, this product may be used to control perennial pasture species listed on this label prior to re-planting.  Make applications according to the rates listed in Annual Weeds, Perennial Weeds and Wood Brush & Trees Rate Tables in this label.	If application rates total 2.25 quarts (72 fl. oz.) per acre or less, no waiting period between treatment and feeding or livestock grazing is required.  If the rate is greater 2.25 quarts (72 fl. oz.) per acre, remove domestic livestock and wait 8 weeks following application before grazing or harvesting.		
Chemical Mowing (Bermudagrass Pastures Prior To Spring Growth Or Immediately After First Cutting)	This product may be applied at 12 fl. oz. per acre to control the weeds listed below and most other winter annual grass and broadleaf weeds in established coastal bermudagrass pastures.  Annual bluegrass, Cheat, Crabgrass, Henbit, Johnsongrass seedling, Little barley, Oats, Ryegrass, Sandbur field, Wheat, Wild mustard  Applications prior to spring growth: Apply this product in the late winter or early spring but before new coastal bermudagrass growth begins in the spring. Applications to new growth can damage the bermudagrass.  Applications following the first cutting: Apply this product after the first bermudagrass cutting when the bermudagrass has not yet begun to regrow. Applications made after regrowth has begun can damage the bermudagrass.	Labeled application rates totaling 2.25 quarts (72 fl. oz.) per acre or less do not require a waiting period between treatment and feeding or livestock grazing.  If the rate is greater than 2.25 quarts (72 fl. oz.) per acre, remove domestic livestock and wait 8 weeks following application before grazing or harvesting.  Only make one application per year to treated fields.  Do not make a spring application prior to growth and an application following the first cutting on the field during the same year.		

#### STATE SPECIFIC DIRECTIONS FOR PASTURES

Colorado, Idaho, Iowa, Kansas, Montana, Nebraska, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming Only

Bromus Species: This product may be used to treat downy brome (Bromus tectorum), Japanese brome (Bromus japonicus), soft chess (Bromus mollis) and cheatgrass (Bromus secalinus) found in industrial, rangeland and pasture sites. Apply 6 to 12 fluid ounces of product per acre on a broadcast basis. For best results, treatment should coincide with early seedhead emergence of the most mature plants. Delaying the application until this growth stage will maximize the emergence of other weedy grass flushes. Applications should be made to the same site each year until seed banks are depleted and the desirable perennial grasses are able to become reestablished on the site.

Medusahead: To treat medusahead, apply 12 fl. oz. of this product per acre as soon as plants are actively growing, and prior to the 4 leaf stage. Applications may be made in the fall or spring.

Application Equipment and Techniques: Applications may be made using ground or aerial equipment. Aerial applications for these uses may be made using fixed wing or helicopter equipment. For aerial applications, apply in 2 to 10 gallons of water per acre. For applications using ground equipment, apply in 10 to 20 gallons of water per acre.

When applied as directed there are no grazing restrictions.

11.5 - RANGELANDS				
LABELLED CROPS:	LABELLED CROPS: Rangeland (Perennial cool and warm season grass rangelands)			
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS		
Post-emergence	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.  Apply 9 – 12 fl. oz. per acre to control or suppress many annual weeds growing in perennial cool and warm-season grass rangelands including downy brome, cheat grass, cereal rye and jointed goatgrass. 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 encourage 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.  For medusahead, apply 12 fl. oz. per acre at 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.  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.	Do not use ammonium sulfate when spraying rangeland grasses with this product.  Do not apply more than 2.25 quarts (72 fl. oz.) per acre per year.		

11.6 – TURF GRASS SOD PRODUCTION				
LABELLED CROPS:	LABELLED CROPS: Turfgrass for Sod			
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS		
Pre-plant, Pre-emergence, Renovation, Site Preparation	This product controls most existing vegetation prior to renovating turf grass areas or establishing turf grass grown for sod. Broadcast of hand-held equipment may be used to control sod remnants or other unwanted vegetation after sod is harvested. For maximum control of existing vegetation, delay planting or sodding 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 the best control. Where existing vegetation is growing under mowed turfgrass management, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the spray.  Make applications according to the rates listed in Annual Weeds, Perennial Weeds and Wood Brush & Trees Rate Tables in this label.  Desirable turfgrasses may be planted following the above	If application rates total 2.25 quarts (72 fl. oz.) per acre or less, no waiting period between treatment and feeding or livestock grazing is required. If the rate is greater than 2.25 quarts (72 fl. oz.) per acre, remove domestic livestock and wait 8 weeks following application before grazing or harvesting.  Do not disturb soil or underground plant before treatment. Tillage or renovation techniques such as vertical mowing, coring, or slicing must be delayed for 7 days after application to allow translocation into underground plant parts.		
Spot treatment	Procedures.  Hand-held equipment may be used for spot treatment of unwanted vegetation growing in existing turf grass			
Turfgrass Renovation for sod production	This product controls most existing vegetation prior to renovating turfgrass areas or establishing turfgrass grown for seed or sod. For maximum control of existing vegetation, delay planting or sodding 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 the best control. Where existing vegetation is growing under mowed turfgrass management, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the spray.  Tillage or renovation techniques such as vertical mowing, coring	sod production for 8 weeks following application.  Do not disturb soil or underground plant parts before treatment.		
	or slicing should be delayed for 7 days after application to allow translocation into underground plant parts.  Desirable turfgrass may be planted following the above			
	procedures.  Hand-held equipment may be used for spot treatment of unwanted vegetation growing in existing turfgrass. Broadcast or hand-held equipment may be used to control sod remnants or other unwanted vegetation after sod is harvested.			

#### 11.7 - RELEASE OF BERMUDAGRASS OR BAHIAGRASS

#### **Dormant applications**

This product may be used to control or partially control many winter annual weeds and tall fescue for effective release of dormant bermudagrass or bahiagrass. Treat only when turf is dormant and prior to spring greenup. This product may also be tank-mixed with Oust® for residual control. Tank mixtures of this product with Oust® may delay greenup. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

For best results on winter annuals, treat when plants 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 at or beyond the 4 to 6-leaf stage.

Apply 6 – 48 fl. oz. of this product per acre alone or in a tank mixture with the labeled rate of Oust<sup>®</sup>. Apply the labeled rates in 10 to 40 gallons of water per acre. Use only in areas where bermudagrass or bahiagrass are desirable ground covers and where some temporary injury or discoloration can be tolerated.

#### Actively growing bermudagrass:

This product may be used to control or partially control many annual and perennial weeds for effective release of actively growing bermudagrass. Apply 12 – 36 fl. oz. of this product in 10 to 40 gallons of spray solution per acre. Use the lower rate when treating annual weeds below 6 inches in height (or runner length). Use the higher rate as weeds increase in size or as they approach flower or seedhead formation. These rates will also provide partial control of the following perennial species:

Bahiagrass Johnsongrass
Bluestem, silver Trumpetcreeper
Fescue, tall Vaseygrass

This product may be tank-mixed with Oust<sup>®</sup>. If tank-mixed, use no more than 12 – 24 fl. oz. of this product with the labeled rate of Oust<sup>®</sup> per acre. These rates will also provide partial control of the following perennial weeds:

Bahiagrass Johnsongrass
Bluestem, silver
Broomsedge Trumpetcreeper
Dallisgrass Vaseygrass
Dock, curly Vervain, blue
Dogfennel
Fescue, tall

#### RESTRICTIONS

- Use only on well-established bermudagrass.
- Bermudagrass injury may result from the treatment, but regrowth will occur under moist conditions.
- Do not repeat applications of the tank mix in the same season since severe injury may occur.

#### Actively growing bahiagrass

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 40 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 - 3 fl. oz. per acre about 45 days later. Make no more than 2 applications per year.

A tank mixture of this product plus Oust® may be used. Apply 4.5 fl. oz. of this product plus the labeled rate of Oust® per acre 1 to 2 weeks following an initial spring mowing. Make only one application per year.

#### 12.0 - ROUNDUP READY® CROPS

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

THIS PRODUCT IS TO BE USED FOR POSTEMERGENCE APPLICATION ONLY ON CROP VARIETIES DESIGNEATED AS CONTAINING A ROUNDUP READY GENE OR GLYPHOSATE TOLERANT GENE.

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

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

NOTE: Roundup Ready seed, and the method of selectivity controlling weeds using glyphosate on a Roundup Ready crop, are protected under several U.S. Patents. A license to use Roundup Ready seed must be obtained prior to use.

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

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

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

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

To prevent crop injury, tank mixtures with other herbicides, insecticides, fungicides, micronutrients or fertilizers may result in reduced weed control or crop injury and are not recommended for over-the-top applications of this product unless otherwise specified in this product label, or supplemental labeling published separately by Albaugh.

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

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

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

### 12.1 - ROUNDUP READY CANOLA (Spring Varieties)

LABELLED CROPS: Roundup Ready spring canola is defined as those Roundup Ready canola varieties that are seeded in the spring and harvested in the fall and do not enter a winter dormancy period.

Do not use this product on spring canola with a Roundup Ready gene planted in the following states: Alabama, Delaware Florida, Georgia, Kentucky, Maryland, New Jersey, North Carolina, South Carolina, Tennessee, Virginia and West Virginia, except for uses in wildlife food plots that will not be for human or livestock food.

TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS		
Pre-plant, At-Planting, Pre-emergence	This product may be applied before, during or after planting Roundup Ready spring canola.	Maximum quantity of this product that may be applied for all pre-plant, at-planting and pre-emergence applications combined is 3 pints (48 fl. oz.) per season.		
Post-emergence (In-crop)	This product may be applied post-emergence to Roundup Ready spring canola from emergence through the 6-leaf stage of development. Applications made during bolting or flowering may result in crop injury and yield loss. To maximize yield potential, make applications early to eliminate competing weeds.  Single Application – 8.25 – 12 fl. oz. of this product per acre no later than the 6-leaf stage for the control of annual weeds. Avoid overlapping applications as this may result in temporary yellowing, delayed flowering, and or growth reduction. Similar crop injury may result when applications of more than 8.25 fl. oz. per acre are applied after the 4-leaf stage.  Sequential Application – Apply 8.25 fl. oz. of this product per acre to 1- to 3-leaf canola followed by a sequential application at a minimum interval of 10 days, but no later than the 6-leaf stage. Sequential applications can be made for early emerged annual weeds and perennial weeds such as Canada thistle and quackgrass, or when multiple applications are needed for adequate weed control.	No more than two in-crop (over-the-top) broadcast applications may be made from crop emergence through the 6-leaf stage of development and the total of all in-crop applications must not exceed 16.5 fl. oz. of this product per acre.  Allow a minimum of 60 days between last application and canola harvest.		
	MAXIMUM ALLOWABLE APPLICATION RATES			
Total of all Pre-plant, At Planting, Pre-emergence applications		3 pints (48 fl. oz.) per acre		
Total of all In-crop ar	oplications from emergence to 6-leaf stage	1.5 pints (24 fl. oz.) per acre		

## 12.2 - ROUNDUP READY CANOLA (Fall & Winter Varieties)

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

in the winter.			
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS	
Pre-plant, At-Planting, Pre-emergence	This product may be applied before, during or after planting Roundup Ready winter canola.	Maximum quantity of this product that may be applied for all pre-plant, at-planting and pre-emergence applications combines is 3 pints (48 fl. oz.) per acre per season.	
Post-emergence (In-crop)	This product may be applied to Roundup Ready winter canola varieties from emergence to canopy closure in the fall and prior to bolting in the spring. Applications made during or after bolting may result in crop injury and yield loss. To maximize yield potential, make applications early to eliminate competing weeds.  Some weeds with multiple germination times, or suppressed (stunted) weeds, or weeds that have overwintered may require sequential applications of this product for control. The second application should be made after some re-growth has occurred and at least 60 days after a previous application of this product.  Single Application – Apply 16.5 - 24 fl. oz. of this product per acre in the fall. Applications in the fall should be made when weeds are small and actively growing. Use the higher rate in the labeled range when weed densities are high, when weeds have overwintered or when weeds become large and well established. Applications of greater than 12 fl. oz. per acre prior to the 6-leaf stage may result in reduced crop growth in the fall. Avoid overlaps. Spray overlaps may result in temporary yellowing and/or growth reduction.  Sequential Applications Apply 12 – 24 fl. oz. of this product per acre to 2-leaf or larger canola in the fall, followed by a sequential application at the same rate and at a minimum interval of 60 days, but before bolting in the spring. Sequential applications can be made for early emerging annual weeds and winter emerging weeds such as downy brome, jointed goatgrass and ryegrass, and for weeds that have overwintered. This product will control or suppress most of perennial weeds. For some perennial weeds, sequential applications may be required to reduce competition with the crop.	No more than two over-the-top broadcast applications may be made from crop emergence up to the onset of bolting, and the total in-crop application must not exceed 3 pints (48 fl. oz.) of this product per acre.  Allow a minimum of 60 days between last application and harvest of canola grain.  No waiting period is required between application and open grazing of livestock.	
MAXIMUM ALLOWABLE APPLICATION RATES			
Total of all Pre-plant, At Planting, Pre-emergence applications		3 pints (48 fl. oz.) per acre	
Total of all In-crop applications from emergence to canopy closure or prior to bolting in the spring		3 pints (48 fl. oz.) per acre	

12.3 - ROUNDUP READY CORN			
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS	
Pre-plant, Pre-emergence,	This product may be applied alone or in a tank-mixture before, during or after planting corn.	Do not apply this product to crop varieties that are not designated as glyphosate tolerant.	
At-Planting	TANK MIXTURES: This product may be tank mixed with Bullet, Degree, Degree Xtra, Harness, Harness Xtra, Harness Xtra 5.6L, Lariat, Lasso or Micro-Tech at 50 to 100 percent of labeled rate. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.	Do not allow contact with foliage, green stems, or fruit of crops, or any desirable plants that do not contain a Roundup Ready or glyphosate tolerant gene, since severe injury or destruction will result.  Avoid drift. Extreme care must be used when applying this product to prevent injury to desirable plants and crops which do not contain a glyphosate tolerant gene.  See the "Mixing and Application Equipment and	
	If less than the maximum rates of the above listed residual products was used in pre-plant and pre-emergence treatment then a post-emergence (in-crop) application of this product should be applied for maximum weed control.	Techniques" sections of this label for additional directions and restrictions on the application of this product.	
	Avoid drift. Extreme care must be used when applying this product to prevent injury to desirable plants and crops which do not contain glyphosate tolerant gene.		
	Make applications according to the rates listed in Annual Weeds, Perennial Weeds, and Woody Brush & Trees rate tables in this label.		
Post-emergence (in-crop)	When applied as directed, this product controls labeled annual grass and broadleaf weeds in Roundup Ready corn. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more application of this product. The post-emergent application of 18 – 36 fl. oz. per acre-of this product should be made before the weeds reach a height and/or density that the weeds become competitive with the crop, generally 4 inch tall weeds or less.	Single in-crop applications of this product are not to exceed 2.25 pints (36 fl. oz.) per acre.  The maximum combined total of multiple in-crop applications from emergence through the 48-inch stage is 4.5 pints (72 fl. oz.) per acre  Allow a minimum of 10 days between in-crop applications of this product.	
	This product may be applied over-the-top to Roundup Ready corn from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 48 inches, whichever comes first,.	Allow a minimum of 50 days between application of this product and harvest of corn forage.	
	Use drop nozzles when corn height is 24 to 30 inches (free standing), for optimum spray coverage and weed control.		
	For corn heights 30 to 48 inches (free standing), apply this product ONLY using ground application equipment with drop nozzles adjusted to avoid spraying into the whorls of the corn plants.		
	If product is applied to whorls of corn, plant injury and yield reduction can occur.		
	Maximum single in-crop application rate of this product up to 48-inch corn is 2.25 pints (36 fl. oz.) per acre.		
	See the "ROUNDUP READY CROPS" section of this label for precautionary instructions for use in Roundup Ready crops.		
	TANK MIXTURES: This product may be applied in tank mixture with Bullet, Degree, Degree Xtra, Harness, Harness Xtra, Harness Xtra 5.6L, and Micro-Tech at 50 to 100 percent of labeled rate. This product may be applied in tank mixture with Permit and Atrazine at labeled rates. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use		

12.3 - ROUNDUP READY (			RN
TYPES OF APPLICATIONS	USE DIRECTIONS		RESTRICTIONS
	on all product labels involved in tank mixing. follow the most restrictive directions for use a precautionary statements of each product in mixture.  Tank-mix Partner  Degree Degree Xtra Harness Harness Xtra Harness Xtra Harness Xtra Harness Tra	and the tank	
Pre-Harvest	post-emergence application in Texas.  In Roundup Ready corn, up to 1.5 pints (24 of this product one has poplied are horizont.)		Allow a minimum of 7 days between application and
	of this product can be applied pre-harvest. A applications at 35 percent grain moisture or that maximum kernel fill is complete and the physiologically mature (black layer formed).	less. Ensure	harvest.
Post-Harvest	This product may be applied after harvest of pints (36 fl. oz.) per acre rate may be require large weeds that were growing in the crop at harvest. Tank mixtures with 2,4-D or dicamb	ed for control of the time of	Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.
	MAXIMUM ALLOWABLE	APPLICATION	RATES
Combined total per year for all applications			6 quarts (192 fl. oz) per acre
Total of all Pre-plant, Pre-emergence, At-Planting applications			3.75 quarts (120 fl. oz) per acre
Total in-crop applications from emergence through 48-inch corn			4.5 pints (72 fl. oz.) per acre
Maximum single in-crop application rate up to 48-inch corn			2.25 pints (36 fl. oz.) per acre
Maximum pre-harvest application rate after maximum kernel fill is complete and the crop is physiologically mature (black layer formation) until 7 days before harvest			1.5 pints (24 fl. oz.) per acre

### 12.4 - ROUNDUP READY COTTON

Use of this product in accordance with label directions is expected to result in normal growth of Roundup Ready cotton. However, various environmental conditions, agronomic practices and other factors make it impossible to eliminate all risks associated with this product, even when application are made in conformance with the label specifications. In some cases, these factors can result in boll loss, delayed maturity and/or yield loss.

	maturity and/or yield loss.			
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS		
Pre-plant, Pre-emergence, At-planting	This product may be applied before, during or after planting cotton.  Make applications according to the rates listed in Annual Weeds, Perennial Weeds, and Woody Brush & Trees rate tables in this label.  See the "ROUNDUP READY CROPS" section of this label for precautionary instructions for use in Roundup Ready crops.			
Post-emergence (Over-the-Top)	This product may be applied by aerial or ground application equipment at rates up 1.5 pints (24 fl. oz.) per acre per application post-emergence to Roundup Ready cotton from the ground cracking stage until the 4-leaf (node) stage of development (until the fifth true leaf reaches the size of a quarter). Over-the-top applications made after the 4-leaf (node) stage of development may result in boll loss, delayed maturity and/or yield loss.  Salvage Treatment. This treatment may be used after the 4-leaf stage of development and must only be used where weeds threaten to cause the loss of the crop. 1.5 pints (24 fl. oz.) per acre may be applied either as an over-the-top applications or as a post-directed treatments sprayed higher on the cotton plants and over the weeds.  Salvage treatments will result in significant boll loss, delayed maturity and/or yield loss.  See the "ROUNDUP READY CROPS" section of this label for precautionary instructions for use in Roundup Ready crops.	The combined total application of this product from cotton emergence until harvest must not exceed 4.5 quarts (144 fl. oz) per acre.  No more than two over-the-top broadcast applications may be made from crop emergence through the 4-leaf (node) stage of development.  No more than two applications may be made from the 5-leaf stage through layby sequential in-crop over-the-top or post-directed applications of this product must be at least 10 days apart and cotton must have at least two nodes of incremental growth between applications. Allow a minimum of 7 days between application and harvest.  Do not apply more than one salvage treatment per growing season.		
Selective Equipment	This product may be applied using precision post-directed or hooded sprayers at rates up to 1.5 pints (24 fl. oz.) per acre per application to Roundup Ready cotton through layby. At this stage, post-directed equipment must be used which directs the spray to the base of the cotton plants. Contact of the spray with cotton leaves should be avoided to the maximum extent possible. To minimize spray onto the leaves of the cotton plants, place nozzles in a low position directing a horizontal spray pattern under the cotton leaves to contact weeds in the row, and maintain low spray pressure (less than 30 psi). For best results, make applications while weeds are small (less than 3 inches).	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.		
Pre-harvest	This product may be applied for pre-harvest annual and perennial weed control as a broadcast treatment to Roundup Ready cotton after 20 percent boil crack. Up to 3 pints (48 fl. oz.) of this product may be applied using either aerial or ground spray equipment.  Do not apply this product to cotton grown for seed, as a reduction in germination or vigor may occur.  TANK MIXTURES: This product may be tank mixed with DEF™ 6, Folex™, Ginstar, or Prep™ (or generic equivalents). It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for	Allow a minimum of 7 days between application and harvest of cotton.		

## 12.4 - ROUNDUP READY COTTON

Use of this product in accordance with label directions is expected to result in normal growth of Roundup Ready cotton. However, various environmental conditions, agronomic practices and other factors make it impossible to eliminate all risks associated with this product, even when application are made in conformance with the label specifications. In some cases, these factors can result in boll loss, delayed maturity and/or yield loss.

maturity and/or yield loss.			
TYPES OF APPLICATIONS	USE DIRECTIONS		RESTRICTIONS
	use and precautionary statements of each product in the tank mixture.		
	Refer to manufacturers labels for use of additives (such as surfactants, stickers and spreaders) for preharvest application to cotton.		
	This product will not enhance the performance of these harvest aids when applied to Roundup Ready cotton.		
MAXIMUM ALLOWABLE A		APPLICATION	IRATES
Combined total per year for all applications			6 quarts (192 fl. oz) per acre
Total of all Pre-plant, Pre-emergence, At-Planting applications			3.75 quarts (120 fl. oz) per acre
Total in-crop applications from ground cracking to layby			3 quarts (96 fl. oz.) per acre
Maximum pre-harvest application rate			1.5 quarts (48 fl. oz.) per acre

### 12.5 - ROUNDUP READY® FLEX COTTON

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

RESULT IN BOLL LOSS, DELA	AYED MATURITY AND/OR YIELD LOSS.	
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS
Pre-plant, Pre-emergence, At-planting	This product may be applied before, during or after planting Roundup Ready Flex cotton. Always plant into a weed free seedbed. In no-till and stale seedbed systems, always burn down existing weeds before cotton emerges.	
	Make applications according to the rates listed in Annual Weeds, Perennial Weeds, and Woody Brush & Trees rate tables in this label.	
	See the "ROUNDUP READY CROPS" section of this label for precautionary instructions for use in Roundup Ready crops.	
Post-emergence (Over-the- Top)	When applied in accordance with this label, GLY STAR PLUS herbicide will control labeled annual grasses and broadleaf weeds in Roundup Ready Flex cotton. To maximize yield potential spray cotton early to eliminate competing weeds. Many perennial weeds will be controlled or suppressed with one or more applications of this product.	The maximum rate for any single in-crop application of this product is 2.25 pints (36 fl. oz.) per acre made using ground application equipment.  Except for pre-harvest use, do not exceed a maximum rate of 1.5 pints (24 fl. oz.) per acre of
	In-crop application rates above 1.5 pints (24 fl. oz.).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.	this product when making applications by air.  Between layby and 60 percent open bolls, the maximum combined total rate of this product that may be applied is 3 pints (48 fl. oz.) per acre.
	Make an initial application of 1.5 pints (24 fl. oz.) per acre on 1 to 3 inch tall annual grass and broadleaf weeds. This product may be applied by ground application equipment at rates up to 2.25 pints (36 fl. oz.) per acre per application postemergence to Roundup Ready Flex cotton. In addition to broadcast applications, post-directed equipment may be used to achieve weed coverage.	The maximum combined total of all applications made from crop emergence through 60 percent open bolls must not exceed 144 oz (4.5 quarts) per acre.
	Application after 10 <sup>th</sup> leaf or 10 <sup>th</sup> node may result in plant injury and yield loss.	
	NOTE: For specific rates of application and instructions, refer to the "ANNUAL WEEDS" and "PERENNIAL WEEDS RATE SECTION" in the label booklet for GLY STAR PLUS herbicide.	
Pre-harvest	This product may be applied for pre-harvest annual and perennial weed control as a broadcast treatment to Roundup Ready Flex cotton after 60 percent boll crack. Up to 3 pints (48 fl. oz.) of this product may be applied using either aerial or ground spray equipment.	Allow a minimum of 7 days between application and harvest of cotton.  Do not apply this product to cotton grown for seed, as a reduction in germination or vigor may occur.
	NOTE: This product will not enhance the performance of harvest aids when applied to Roundup Ready Flex cotton.	The use of additives, other than those listed on this label, for preharvest application to cotton is prohibited.
	MAXIMUM ALLOWABLE APPLICATION	N RATES
Combined total per year for used for all pre-plant, in-crop ar	r all applications (Calculate the combined rate to be and pre-harvest applications)	6 quarts (192 fl. oz) per acre
	nting, Pre-emergence applications	3.75 quarts (120 fl. oz) per acre
Total in-crop applications fro	om ground cracking to 60 percent open bolls	4.5 quarts (144 fl. oz.) per acre
Maximum allowed from 60 p	percent bolls open to 7 days prior to harvest	1.5 quarts (48 fl. oz.) per acre

	12.6 - ROUNDUP READY SOYBI	EANS
	ct for in-crop applications over Roundup Ready Soybeans may rion a California approved supplemental label specifying the acce	
Ore-plant, Pre-emergence, At-planting	This product may be applied before, during or after planting soybeans. Make applications according to the rates listed in Annual Weeds, Perennial Weeds, and Woody Brush & Trees rate tables in this label.	
	See the "ROUNDUP READY CROPS" section of this label for precautionary instructions for use in Roundup Ready crops.	
Post-emergence (In-Crop)	When applied as directed, this product will control labeled annual grasses and broadleaf weeds in Roundup Ready soybeans. Applications of this product can be made in Roundup Ready soybeans from emergence (cracking) throughout flowering. Refer to the "ANNUAL WEEDS RATE TABLE" in this label for specific rates on various annual weeds.  Make an initial application of 1.5 pints (24 fl. oz.) per acre on 2- to 8-inch tall weeds for best results. Weeds will generally be 2 to 8 inches tall, 2 to 5 weeks after planting. If the initial application is delayed and weeds are larger, apply a higher rate of this product. This product may be used up to 3 pints (48 fl. oz.) per acre in any single in-crop application for control of annual weeds and where heavy weed densities exist.  A 1.5 - 3 pints (24 - 48 fl. oz.) per acre per acre rate (single or multiple applications) of this product will control or suppress perennial weeds such as: bermudagrass, Canada thistle, common milkweed, field bindweed, hemp dogbane, horsenettle, marestail (horseweed), nutsedge, quackgrass, rhizome johnsongrass, redvine, trumpetcreeper, swamp smartweed and wirestem muhly. For best results, allow perennial weed species to achieve at least 6 inches of growth before spraying with this product.	The maximum combined total of this product that can be applied during flowering is 3 pints (48 fl. oz.) 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 may be necessary to control late flushes of weeds. In the Southern States, a sequential application of this product will be required to control new flushes of weeds in the Roundup Ready Soybean crop. To control giant ragweed, apply up to 1.5 pints (24 fl. oz.) per acre of this product when the weed is 8 to 12 inches tall to increase control and possibly avoid the need for a sequential application.	

12 7 - ROUNDUP READY® SI	IGAR REFTS
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The Roundup Ready designation indicates that the sugar beet contains a patented gene, which provides tolerance to this product. Information on Roundup Ready sugarbeet may be obtained from your seed supplier or Albaugh representative. Roundup Ready crop varieties must be purchased from an authorized licensed seed supplier.

Do NOT combine these instructions with those listed for crop varieties that do not contain a Roundup Ready gene listed in the "ANNUAL AND PERENNIAL CROPS (Alphabetical)" sections of the Glyphosate 53.8% herbicide label booklet.

AND PERENNIAL CROPS (Alphabetical)" sections of the Glyphosate 53.8% herbicide label booklet.				
Pre-plant, At-Planting, Pre-emergence	This product may be applied before, during or after planting of Roundup Ready sugar beets.  Make applications according to the rates listed in Annu Weeds, Perennial Weeds, and Woody Brush & Trees rate tables in this label.	Maximum quantity of this product that may be applied for all pre-plant, at-planting and pre-emergence applications combined is 3.75 quarts (120 fl. oz.) per acre per season.		
Post-emergence (In-crop)	This product may be applied over the top of Roundup Ready sugar beets for control of annual grasses and broadleaf weeds from emergence to 30 days prior to harvest. To maximize yield potential, spray sugar beets early to eliminate competing weeds. Up to 4 sequential applications of this product may be made with at least days between applications. This product will control or suppress most perennial weeds. For some perennial weeds, repeat applications may be required to eliminat crop competition throughout the growing season.	The maximum rate for any single application between emergence to the 8 leaf stage is 2.25 pints (36 fl. oz.) per acre.		
	MAXIMUM ALLOWABLE APPL	ICATION RATES		
Combined total per year for all application		6 quarts (192 fl. oz) per acre		
Total of all Pre-plant, Pre-emergence applications		7.5 pints (120 fl. oz) per acre		
Emergence to 8 leaf stage		3.75 pints (60 fl. oz.) per acre		
Between 8 leaf stage and canopy closure		3 pints (48 fl. oz.) per acre		

### 12.8 - ROUNDUP READY ALFALFA

### FOR POSTEMERGENCE APPLICATION ONLY ON ALFALFA VARIETIES DESIGNATED AS CONTAINING A ROUNDUP RADY GENE.

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

must be purchased	d from an authorized licensed seed supplier.		
TYPES OF APPLICATIONS	USE DIRECTION	IS	RESTRICTIONS
Pre-plant, At-planting, Pre-emergence	This product will control many troublesome emerged in Roundup Ready alfalfa.	Do not exceed 3 pints (48 fl. oz.) of this product per acre when making	
and Post-emergence	For ground applications with broadcast equipment, apspray solution per acre. Carefully select proper nozzle spraying a fine mist. For best results with ground appl nozzles. Check for even distribution of spray droplets.	applications by air.  Any single over-the-top application of this product	
	For aerial application: Use the labeled rates of this p solution per acre.	roduct in 3 to 15 gallons of spray	must not exceed 3 pints (48 fl. oz.) per acre. Sequential applications of this production must be at
	New Stand Establishment (seeding year) Prior to First Cutting During New Stand Establis	hmont:	least 7 days apart.
	From emergence up to 4 trifoliate leaves	3 pints (48 fl. oz.) per acre	The combined total per year for all in-crop
	From 5 trifoliate leaves up to 5 days before first cutting	3 pints (48 fl. oz.) per acre	applications in newly established and
	After First Cutting in Newly Established Stands: In-crop application, per cutting, up to 5 days before cutting	3 pints (48 fl. oz.) per acre	established stands must not exceed 4.5 quarts (144 fl. oz.) per acre.
	Established Stands (non-seeding year)		Remove domestic
	In-Crop applications, per cutting, up to 5 days before cutting	3 pints (48 fl. oz.) per acre	livestock before application and wait a minimum of 5 days after last application
	During stand establishment, due to the biology and breeding constraints of alfalfa, up to 10% of the seedlings may not contain the Roundup Ready gene and will not survive after the first application of this product. To eliminate the undesirable effects of stand gaps created by the loss of plants not containing a Roundup Ready gene, a single application of at least 1.5 pints (24 fl. oz.) per acre of this product should be applied at or before the 3 to 4 trifoliate growth stage.		
	In both newly seeded and established stands, in orde potential of forage and hay, applications of this producemerged but before alfalfa growth or re-growth interfeof the target weeds.		
	In addition to those weeds listed in the GLYPHOSATE product will suppress or control the parasitic weed, Do Ready alfalfa. Repeat applications may be necessary	odder (Cuscuta spp.) in Roundup	
Over-the-top applications	This product may be applied post-emergence to Rour until 5 days prior to cutting. Any single over-the-top agexceed 3 pints (48 fl. oz.) per acre.		Sequential applications of this production must be at least 7 days apart.
	ATTENTION: Where Roundup Ready alfalfa is grow is over seeded with a second species, over-the-top are eliminate the non-Roundup Ready species.		Tank mixtures with other herbicides, insecticides, or fungicides may result in crop injury or reduced weed control and must not be used for over-the-top applications of this product.
	MAXIMUM ALLOWABLE AI	PPLICATION RATES	•
Combined total pe	r year for all applications, including pre-plant during year		5.8 quarts (186 fl. oz.) per acre
Combined total pe	r year for in-crop applications for newly established and	d established stands	4.5 quarts (144 fl. oz.) per acre
Pre-plant, At-plant	3 pints (48 fl. oz.) per acre		

#### 13.0 - NON-CROP USES AROUND THE FARMSTEAD

#### 13.1 - WEED CONTROL & TRIM-AND-EDGE LABELED SITES: Non-crop Areas 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. TYPES OF **USE DIRECTIONS RESTRICTIONS APPLICATIONS** This product may be used to control annual weeds, perennials weeds and woody Do not apply this product with Any suitable application brush which are found in any part of the farmstead. dicamba tank mixtures by air in California. equipment Make applications according to the rates listed in Annual Weeds, Perennial described in Weeds, and Woody Brush & Trees rate tables in this label. Section 8.0 of this label TANK MIXTURES: This product may be tank mixed with the following products (or generic equivalents). Refer to these product labels for approved farmstead sites and application rates. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. For annual weeds, use 1.5 pints (24 fl. oz.) per acre of this product when weeds are less than 6 inches tall and 2.25 pints (36 fl. oz.) per acre when weeds are greater than 6 inches tall. For perennial weeds, apply 1.5 - 3.75 quarts (48 -120 fl. oz.) 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 allowable application rates. Arsenal Oust Sahara Barricade 65WG Pendulum 3.3 EC Simazine Pendulum WDG Surflan Diuron Endurance Plateau Elar Vanquish Princep DF **Escort** Karmex DF Princep Liquid 2.4-D Ronstar 50 WP Krovar DF For control or partial control of the following perennial weeds, apply 1.5 - 3 pints (24) - 48 fl. oz.) of this product plus the labeled rate of Oust® per acre. Bahiagrass Fescue, tall Bermudagrass Johnsongrass Broomsedge Poorioe Dallisgrass Quackgrass Dock, curly Vaseygrass

13.2 - GREENHOUSE/SHADEHOUSE						
LABELLED USES:						
TYPES OF APPLICATIONS						
Spot Spray, Directed Spray	This product may be used to control weeds in and around greenhouses and shadehouses.	Air circulation fans must be turned off during application.				
	Make applications according to the rates listed in Annual Weeds, Perennial Weeds, and Woody Brush & Trees rate tables in this label.	Desirable vegetation must not be present during application.				

Vervain, blue

Dogfennel

13.3 – CHEMICAL MOWING				
LABELLED USES:	LABELLED USES: Farm Ditches and Other Parts of Farmsteads			
TYPES OF APPLICATIONS USE DIRECTIONS RESTRICTIONS				
Any suitable application equipment described in Section 8.0 of this label t	This product will suppress perennial grasses listed in this section to serve as a substitute for mowing. Use 6 fl. oz. of this product per acre when treating tall fescue, fine fescue, orchardgrass or quackgrass covers. Use 4.5 fl. oz. of this product per acre when treating Kentucky bluegrass. Use 12 fl. oz. of this product when treating bermudagrass. Use 3 pints (48 fl. oz.) of this product when treating torpedograss or paragrass. Apply treatments in 10 to 20 gallons of spray solution per acre.			

13.4 - CUT STUMPS				
LABELLED USES:	: Cut Stumps (on any	non-crop site listed on th	is label)	
TYPES OF APPLICATIONS		USE DIRECTIONS		RESTRICTIONS
Suitable Hand- Held Equipment	woody brush and tree s product using suitable of Cut trees or resprouts of solution of this product Delays in application m applications should be expansion.  Some sprouts, stems, of having a similar age, he	I regrowth of cut stumps and species, some of which are liequipment to ensure coveragelose to the soil surface. App to the freshly-cut surface im ay result in reduced perform made during periods of activor trees may share the same eight and spacing may signay is likely to occur to non-treemon roots are treated.		
	Alder Eucalyptus Madrone Oak			

	13.5 – HABITAT MANAGEMENT				
LABELLED USE	S: Habitat Restoration & Maintenance, Wildlife Food Plots				
TYPES OF APPLICATIONS					
Any suitable application equipment described in Section 8.0 of this label	This product may be used to control exotic and other undesirable vegetation in habitat management and natural areas including rangeland and wildlife refuges. Applications can be made to allow recovery of native plant species, prior to planting desirable native species, and for similar broad spectrum vegetation control requirements in habitat management areas.  Make applications according to the rates listed in Annual Weeds, Perennial Weeds, and Woody Brush & Trees rate tables in this label.  Spot treatments can be made to selectively remove unwanted plants for habitat maintenance and enhancement.  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 to allow translocation into underground plant parts.			

# 14.0 – FORESTRY, INDUSTRIAL, TURF & ORNAMENTAL

14.1 – FORESTRY SITE PREPARATION			
TYPES OF APPLICATIONS	USE	RESTRICTIONS	
Boom Sprayers, Shielded Boom Sprayers, High- Volume Off- Center Nozzles, Hand-Held Equipment, And Similar Equipment.	herbaceous weeds in forestry, as well a openings with these sites and maintaini Make applications according to the rate Woody Brush & Trees rate tables in this This product can be used in site prepara Christmas trees, eucalyptus, hybrid tree Use higher rates of this product within the woody brush, trees and hard-to-control apply to actively growing woody brush a color and leaf drop. Increase rates with herbaceous weeds any time after emergappear.  Use the lower rates of this product within herbaceous weeds and actively growing flowers or berries appear. Apply to the five weeds any time after emergence.  TANK MIXTURES: Tank mixtures of this of vegetation controlled. It is the pesticic products are registered for the intended and limitations and directions for use or must follow the most restrictive direction product in the tank mixture.  Any labeled rate of this product may be (or generic equivalents) for forestry site Arsenal Applicators Concentrate Chopper Escort or Escort XP Garlon 3A  For control of herbaceous weeds, use the state of the control of herbaceous weeds, use the product of the control of herbaceous weeds, use the product of the control of herbaceous weeds, use the product of the control of herbaceous weeds, use the product of the control of herbaceous weeds, use the product of the control of herbaceous weeds, use the product of the control of herbaceous weeds, use the product of the control of herbaceous weeds, use the product of the control of herbaceous weeds, use the product of the control of	s listed in Annual Weeds, Perennial Weeds, and label.  ation prior to planting any tree species, including cultivars and silvicultural nursery sites.  The labeled range for control or partial control of perennial herbaceous weeds. For best results, and trees after full leaf expansion and before fall in the labeled range for control of perennial gence and before seedheads, flowers or berries in the labeled range for control of annual gence and before seedheads, flowers or berries in the labeled range for control of annual generanial herbaceous weeds after seedheads, oliage of actively growing annual herbaceous  s product may be used to increase the spectrum de user's responsibility to ensure that all use. Read and follow the applicable restrictions and product labels involved in tank mixing. Users are for use and precautionary statements of each used in a tank mix with the following products	Do not apply this product as an over-the-top broadcast spray for forestry conifer or hardwood release.

### 14.2 - NONCROP AREAS & INDUSTRIAL SITES

LABELLED USES: Non-crop areas including airports, apartment complexes, Christmas tree farms, commercial sites, Conservation Reserve Program (CRP) areas, ditch banks, dry ditches, dry canals, fencerows, gold courses, greenhouses, industrial sites, landscape areas, lumber yards, manufacturing sites, municipal sites, natural areas, office complexes, ornamentals, parks, parking areas, pastures, petroleum tank farms and pumping installations, plant nurseries, public areas, railroads, rangeland, recreational areas, residential areas, rights-of-way, roadsides, schools, sod or turf seed farms, sports complexes, storage areas, substations, turfgrass areas, utility sites, warehouse areas, and wildlife management areas.

APPLICATIONS		OSE DIRECTIONS	USE DIRECTIONS		
This product may be applied with any suitable application equipment described in Section 8.0 of this label.	treatment of unwanted vegetation and to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. This product may be used prior to		Do not apply this product with dicamba tank mixtures by air in California.		
	emerged annual weeds an woody brush and trees.  For control or partial control	Outrider pendimethalin Plateau™ Crossbow L Landmark II MP Landmark II Ronstar™ 50 WP  simazine Surflan™ AS Surflan WDG Telar™ DF Transline Velpar DF Velpar L 2,4-D Poast  xture for bare ground, this production of partial control of each of the following perennial was the labeled rate of Oust or  Dock, curly Dogfennel Fescue, tall	emerged perennial weeds, eeds, apply 1.5 – 3 pints (24 –		

14.3 - INJECTION & FRILL (Woody Brush & Trees)				
LABELED SITES:	Woody brush & Trees in non-cro	p areas		
TYPES OF APPLICATIONS	USE	RESTRICTIONS		
Injection or Frill Applications	tissue. Apply the equivalent of 0.75 trunk diameter at breast height (DB 100 percent concentration of this pror as cuts evenly spaced around the increases in size, better results are continuous frill or more closely space.	uipment which must penetrate into the living 5 mL of this product per each 2 to 3 inches of H). This is best achieved by applying a 50 to oduct either to a continuous frill around the tree e tree below all branches. As tree diameter achieved by applying diluted material to a sed cuttings.  be made during periods of active growth and ct will control many species, some of which are    Partial Control   Black gum   Dogwood   Hickory   Maple, red	Do not use application techniques that allow runoff to occur from frilled or cut areas in species that exude sap freely.  In species such as this, make the frill or cuts at an oblique angle to produce a cupping effect and use a 100 percent concentration of this product.	

14.4 – HOLLOW STEM INJECTION				
LABELLED SITES: Hollow-stem plants growing in any non-crop site specified on this label.				
TYPES OF	USE DIRECTIONS	RESTRICTIONS		
APPLICATIONS				
Hand-Held	For control of the following hollow-stem plants, use the application rates below:	The combined total for all		
Injection	Jananasa Kastusasi Daluganum suanidatum	treatments must not exceed		
Devices That	Japanese Knotweed, Polygonum cuspidatum Inject 3.75 mL per stem of this product between second and third internode.	5.25 quarts (168 fl. oz.) of this product per acre.		
Deliver Labeled	Inject 3.73 mc per stem of this product between second and third internode.	product per acre.		
Amounts Of	Bohemian Knotweed, Polygonum bohemicum	At 3.75 mLper stem, 5.25		
This Product	Inject 3.75 mL per stem of this product between the second and third internode.	quarts (168 fl. oz.) should		
		treat approximately 1300		
	Giant Hogweed, Hercleum mantegazzianum Inject one leaf cane per plant 12 inches above the root brown with 3.75 mL of a	stems per acre.		
	5% v/v solution of this product.			
	Poison Hemlock, Conium maculatum			
	Inject one leaf cane per plant 10 to 12 inches above the root crown with 3.75 mL a 5% v/v solution of this product.			
	Field horsetail, Equisetum arvense			
	Inject one segment above the root crown with 3.75 mL per stem of this product.  Use a small syringe that calibrates to this rate.			
	, ,			
	Canada Thistle, Circisum arvense			
	Cut 8 to 9 of the tallest plants at bud stage in a clump with clippers. Use a cavity			
	needle that is pushed into the stem center and then slowed removed as 3.75 mL per stem of this product is injected into the stem.			

14.5 – ORNAMENTALS, PLANT NURSERIES & CHRISTMAS TREES			
LABELED SITES: Plant Nurseries, Christmas Tree farms & other non-food tree production sites			
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS	
Post-Directed, Trim-and-Edge	This product may be used as a post-directed spray around established woody ornamental species (including arborvitae, azalea, boxwood, crabapple, eucalyptus, euonymus, fir, Douglas fir, jojoba, hollies, lilac, magnolia, maple, oak, poplar, privet, pine, spruce and yew, growing in plant nurseries, on Christmas tree farms, or on other non-food tree production sites), or to trim and edge around trees, buildings, sidewalks, roads, potted plants and other objects in a production setting.  Apply at a concentration labeled by Section 15.0 or Section 16.0 or Section 16.1 or Section 17.0 appropriate to the species of weed to be controlled.  Avoid contact of spray, drift or mist with foliage or green bark of desirable ornamental species. Desirable plants may be protected from the spray solution by using shields or coverings made of cardboard or other impermeable material.	This product is not allowed for use as an over-the-top broadcast spray in ornamentals and Christmas trees.	
Site Preparation	This product may be used prior to planting any tree, shrub or vine, including Christmas tree species, in a nursery or production setting.		
Wiper Application	This product may be used through wick or other suitable wiper applicators to control or partially control undesirable vegetation around established trees, shrubs or vines. See the "SELECTIVE EQUIPMENT" section of this label for further information about the proper use of wiper applicators.		

	14.6 - PARKS, RECREATIONAL & RESIDENTIAL AREAS				
LABELLED SITES: Around Trees, Fences, Paths, Driveways, Around Buildings, Patios, Sidewalks, Flower Beds, Around Shrubs and					
other Ornamental Plants					
TYPES OF	USE DIRECTIONS	RESTRICTIONS			
APPLICATIONS					
Trim-and-Edge, Spot Treatment	This product may be used to eliminate unwanted weeds growing in areas listed above.  Use suitable hand held equipment for directed spraying according to instructions	Do not allow spray, drift or mist to contact foliage or green bark of desirable			
	in Section 7.3 "MIXING FOR HAND-HELD SPRAYERS".	ornamental species.			
	If necessary, use cardboard or plastic to shield desirable plants.	Do not use for spot weed control in lawns since desirable lawn grass will also			
Site Preparation, Lawn Renovation	This product may be used prior to planting an area to ornamentals, flowers, turfgrass (sod or seed), lawn renovation or prior to laying asphalt or beginning construction projects.	be killed.			
	Make applications according to the rates listed in Annual Weeds, Perennial Weeds, and Woody Brush & Trees rate tables in this label.				
	Apply using suitable broadcast or directed spray equipment.				
	For lawn renovation, thorough coverage is necessary to kill all weeds and old lawn.				
	For best results, apply when daytime temperatures are at least 60 F. Do not mow for 7 days before or after treatment.				
	7 days after application, soil may be tilled, fertilized and seeded.				

	14	.7 – RAILROADS			
LABELLED SITES: Railroad Rights-of-Way, Railroad Ballast areas					
TYPES OF APPLICATIONS	USE [	DIRECTIONS	RESTRICTIONS		
Boom Sprayers, Shielded Boom	Observe application precautions in Se	otion 8.0.			
Sprayers, High- Volume Off-	All of the instructions in the "NONCRO apply to railroads.	P AREAS AND INDUSTRIAL SITES" section			
Center Nozzles, Hand-Held Equipment	Make applications according to the rat and Woody Brush & Trees rate tables				
	This product may be used to maintain shoulders. Repeat applications of this maintain bare ground. This product m improve line-of-sight at railroad crossir rights-of-way. For crossing application may be used.				
	Avoid application to non-target plants	due to drift, overspray or runoff.			
	TANK MIXTURES: This product may be generic equivalent) for ballast, should provided that the specific product is repesticide user's responsibility to ensurintended use. Read and follow the approximation of the control of the contro				
	ARSENAL® Dicamba DIURON ESCORT® GARLON® 3 GARLON® 4 HYVAR® X				
	Brush control				
	This product may be used to control w way. Apply 3 - 7.5 quarts (96 - 240 fl. spray, using boom-type or boomless n acre may be used. Apply a ¾ to 2 per volume spray-to-wet applications. Apply when using low volume directed spray mixed with the following products (or gwoody brush and trees:				
	ARSENAL® ESCORT® GARLON® :	TELAR DF TORDON® K BA TORDON 22K			
	GARLON 4	TRANSLINE			
	KERNITE	VANQUISH			
		VELPAR			

	14.8 – ROADSIDES			
LABELLED SITES: Roadside Rights of Way areas (including Shoulders, Guardrails and Signposts)				
TYPES OF APPLICATIONS	USE DIRECTIONS	RESTRICTIONS		
Boom Sprayers, Shielded Boom Sprayers, High- Volume Off- Center Nozzles, Hand-Held Equipment, And Similar Equipment.	Observe application precautions in Section 8.0.  All the instructions in the "NONCROP AREAS AND INDUSTRIAL SITES" section apply to roadsides.  Make applications according to the rates listed in Annual Weeds, Perennial Weeds, and Woody Brush & Trees rate tables in this label.  This product may be used on road shoulders, under guardrails and around signposts and other objects along roadsides that may be obstacles to mowing.  Avoid application to non-target plants due to drift, overspray or runoff.  TANK MIXTURES: This product may be tank-mixed with the following products (or generic equivalent) for shoulder, guardrail, spot and bare ground treatments:  BANVEL® PRINCEP® LIQUID DIURON RONSTAR® 50 WP SAHARA® ESCORT® SIMAZINE KROVAR® I DF SURFLAN® TELAR® PENDULUM® 3.3 EC VANQUISH® PENDULUM® 3.3 EC VANQUISH® PENDULUM® WDG 2,4-D PRINCEP® DF  It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.  See the "NONCROP AREAS AND INDUSTRIAL SITES" section of this label for instructions for tank mixing.			
Spot treatment	This product may be used as a spot treatment to control unwanted vegetation growing along roadsides.			

LABELLED SITES: Electrical Power, Pipeline And Telephone Rights-Of-Way, And In Other Rights-Of-Way, Including Substations, Roadsides, Railroads Or Similar Rights-Of-Way That Utilities.  TYPES OF APPLICATIONS  Boom Sprayers, Shielded Boom Sprayers, High-Volume Off-Center Nozzles, Hand-Held Equipment, And Similar Equipment.  Make application to non-target plants due to drift, overspray or runoff.	Run In Conjunction With  RESTRICTIONS
Rights-Of-Way, Including Substations, Roadsides, Railroads Or Similar Rights-Of-Way That Utilities.  TYPES OF APPLICATIONS  Boom Sprayers, Shielded Boom Sprayers, High-Volume Off-Center Nozzles, Hand-Held Equipment, And Similar Equipment.  Rights-Of-Way, Including Substations, Roadsides, Railroads Or Similar Rights-Of-Way That USE DIRECTIONS  USE DIRECTIONS  Observe application precautions in Section 8.0.  This product may be used in utility sites and substations to control unwanted vegetation and to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. This product may be used prior to planting a utility site to ornamentals, flowers, turfgrass (sod or seed), or beginning construction projects.  Make applications according to the rates listed in Annual Weeds, Perennial Weeds and Woody Brush & Trees rate tables in this label.	Run In Conjunction With  RESTRICTIONS
APPLICATIONS  Boom Sprayers, Shielded Boom Sprayers, High- Volume Off- Center Nozzles, Hand-Held Equipment, And Similar Equipment.  Observe application precautions in Section 8.0.  This product may be used in utility sites and substations to control unwanted vegetation and to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. This product may be used prior to planting a utility site to ornamentals, flowers, turfgrass (sod or seed), or beginning construction projects.  Make applications according to the rates listed in Annual Weeds, Perennial Weeds and Woody Brush & Trees rate tables in this label.	
Boom Sprayers, Shielded Boom Sprayers, High- Volume Off- Center Nozzles, Hand-Held Equipment, And Similar Equipment.  Observe application precautions in Section 8.0.  This product may be used in utility sites and substations to control unwanted vegetation and to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. This product may be used prior to planting a utility site to ornamentals, flowers, turfgrass (sod or seed), or beginning construction projects.  Make application precautions in Section 8.0.  This product may be used in utility sites and substations to control unwanted vegetation and to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. This product may be used prior to planting a utility site to ornamentals, flowers, turfgrass (sod or seed), or beginning construction projects.  Make applications according to the rates listed in Annual Weeds, Perennial Weeds and Woody Brush & Trees rate tables in this label.	,
A follow up application of this product may be used, up to the maximum labeled ra as weeds emerge, to maintain bare ground.  This product can also be used when preparing or establishing wildlife openings we these sites, maintaining access roads and for side trimming along utility rights-of-to-control of herbaceous weeds, use the lower labeled tank mixture rates. For condition of dense stands of tough-to-control woody brush and trees, use the higher labeled rates.  TANK MIXTURES: Tank mixtures of this product may be used to increase the spectrum of control for herbaceous weeds, woody brush and trees. This product robe tank mixed with the following products or generic equivalent). Refer to these products' labels for approved non-crop sites and application rates. It is the pesticiuser's responsibility to ensure that all products are registered for the intended use Read and follow the applicable restrictions and limitations and directions for use confound to the product labels involved in tank mixing. Users must follow the most restrictive direction use and precautionary statements of each product in the tank mixture.  Arsenal Krenite simazine  Arsenal Krenite simazine  Arsenal Krenite simazine  Arsenal Krovar 1 DF Surflan AS  Barricade 65WG Oust Surflan WDG  dicamba Oust XP Telar DF  diuron Outrider Transline  Endurance pendimethalin Vanquish  Patenal Velpar DF  Escort XP Princep Velpar L  Garlon 3A Ronstar 50WP 2,4-D	ay all

### 15. 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.

This product may be used up to 2.25 pints (36 fluid ounces) per acre where heavy weed densities exist.

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

### **RESTRICTIONS:**

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

West Region	Alaska, Arizona, California, Colorado, Idaho, Kansas (west of Highway 83), Montana, Nebraska (west of Highway 83), Nevada, New Mexico, North Dakota (west of Highway 83), Oregon, South Dakota (west of Highway 83), Texas, Utah, Washington, Wyoming
North Region	Connecticut, Indiana (north of I-70), Iowa, Kansas (east of Highway 83 & north of I-35), Maine, Massachusetts, Minnesota, Missouri (north of I-44), Nebraska (east of Highway 83), New Hampshire, New Jersey, New York, North Dakota (east of Highway 83), Ohio, Pennsylvania, Rhode Island, South Dakota (east of Highway 83), Vermont, Wisconsin
South Region	Alabama, Arkansas, Delaware, Florida, Georgia, Hawaii, Illinois(south of I-70), Indiana (south of I-70), Kansas (east of Highway 83 & south of I-35), Kentucky, Louisiana, Maryland, Mississippi, Missouri (south of I-44), North Carolina, Oklahoma (east of I-35), South Carolina, Tennessee, Texas (east of I-35), Virginia, Washington DC, West Virginia

### 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"	-	-	-

				RATE			
WEED			FLUID O		PER AC	RE)	
SPECIES	REGION	9	12	18	24	30	36
	1			IUM HEI			
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		_	6"	-	-	-	-
(Conyza bonariensis)							
Fleabane, rough		-	3"	6"	12"	-	-
Florida pusley		-	-	-	4"	4"	6"
Foxtail	South	-	8"	12"	20"	-	-
	North	18"	18"+	-	-	-	-
Goatgrass, jointed		-	6"	-	-	-	-
Goosegrass		-	3"	5"	8"	-	18"
Grain sorghum (milo)		-	6"	12"	20"	-	-
Groundsel, common		-	6"	-	-	-	-
Hemp sesbania		-	-	2"	4"	6"	8"
Henbit		-	-	-	6"	-	20"
Horseweed/Marestail	South	-	-	12"	30"	-	-
(Conyza canadensis)	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 <sup>1</sup>		-	3 to 6"	12"	-	-	-
Lambsquarters		-	6"	8"	12"	-	20"
Little barley		-	20"	-	-	-	-
London rocket		-	6"	-	-	-	-
Mayweed		-	-	2"	6"	12"	18"
Morningglory		-	-	2"	4"	-	6"

				RATE			
WEED		(	FLUID O	UNCES	PER AC	RE)	
SPECIES	REGION	9	12	18	24	30	36
			MAXIN	/IUM HEI	GHT/LE	NGTH	1
(Ipomoea spp.)							
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	1.0	_	-	4"	6"	_	11"
Red rice		_	_	-	4"	_	-
Russian thistle		_	_	_	6"	_	_
Rye	South	_	6"	20"	60"	_	_
T T T T T T T T T T T T T T T T T T T	North	_	18"	18"+	-	_	_
Ryegrass	North	_	-	-	6"	_	7"+
Sandbur, field		12"		_	-	_	-
Shattercane		-	12"	18"	_	_	_
Sheperd's purse		_	6"	12"	_	_	_
Sicklepod		_	-	2"	4"	_	8"
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"
voivelleal	North	-	3"	6"	12"	-	-
Virginia pepperweed	INOILII	-	18"	-	-	-	-
		-	-	6"	12"	-	
Waterhemp Wheat	South		6"	30"			-
vviiedl		-			-	-	-
	North	-	18"	18"+	-	-	-

		RATE						
WEED			(FLUID OUNCES PER ACRE)					
SPECIES	REGION		9	12	18	24	30	36
		MAXIMUM HEIGHT/LENGTH						
Wheat (overwintered)			-	6"	18"	-	-	-
Wild oats			-	12"	-	-	-	-
Wild Proso Millet			-	-	6"	12"	12"	18"
Witchgrass			-	12"	-	-	-	-
Woolly cupgrass			-	6"	12"	-	-	-
Yellow rocket			-	-	12"	20"	-	-

<sup>&</sup>lt;sup>1</sup>Do not treat kochia in the button stage.

# ANNUAL WEEDS RATE TABLE, WEST REGION

	RATE								
WEED	(FLUID OUNCES PER ACRE)								
SPECIES	9	12	18	24	36				
	MAXIMUM HEIGHT/LENGTH								
Barley	12"	-	_	_	_				
Barnyardgrass	6"	_	-	-	-				
Bluegrass, annual	6"	_	_	_	_				
Bluegrass, bulbous	-	6"	_	_	_				
Brome, downy <sup>1</sup>	6"	-	_	_	_				
Buttercup	-	12"	_	_	_				
Cheat	-	6"	_	_	_				
Chickweed	_	6"	_	_	_				
Cocklebur	_	12"	_	_	_				
Corn	-	6"	_	_	_				
Crabgrass	-	12"	_	_	_				
Dwarfdandelion	_	12"	_	_	_				
Fall panicum	-	12"	_	_	_				
Falseflax, smallseed	-	12"	_	_	_				
Field pennycress	_	6"	_	_	_				
Filaree	_	_	_	_	12"				
Fleabane, hairy	_	6"	_	_	-				
(Conyza									
bonariensis)									
Florida pusley	-	-	-	12"	-				
Foxtail		6 fl. o	z. for up to	 12"	ı				
Goatgrass, jointed	-	6"	-	-	-				
Groundsel, common	-	6"	-	-	-				
Henbit	-	6"	-	-	-				
Horseweed/Marestail	-	6"	-	-	-				
(Conyza									
canadensis)									
Johnsongrass,	-	12"	-	-	-				
seedling									
Lambsquarters	-	6"	-	-	-				
London rocket	-	6"	-	-	-				
Morningglory	-	2"	-	-	-				
(Ipomoea spp.)									
Mustard, blue	6"	-	-	-	-				

	RATE						
WEED	(FLUID OUNCES PER ACRE)						
SPECIES	9	12	18	24	36		
		MAXIMUN	HEIGHT	LENGTH			
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"	-	-	-		

<sup>&</sup>lt;sup>1</sup>For control of Downy brome in no-till systems, use 12 fluid ounces per acre.

#### 15.1 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.

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

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

12 fluid ounces of this product plus the labeled rate 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 the labeled rate of Banvel® or the labeled rate of 2,4-D per acre will control foxtail.

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

#### RESTRICTION:

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

#### 16.0 PERRENIAL WEEDS RATE TABLE ALPHABETICALLY BY SPECIES

Apply to actively growing perennial weeds.

A second treatment may be necessary to control weeds regenerating from underground parts or seed.

The second treatment must be made prior to crop emergence.

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

# RESTRICTION:

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

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

Weed Species	Rate	Water	Hand-Held	Directions
Alfalfa	(PT/A) 1.5-3	Volume 3-10	% Solution 1.5%	Make applications after the last hay cutting in the fall.
Allalla	1.5-5	3-10	1.570	
				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 when bermudagrass is actively growing and seedheads are present.
				A second treatment 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

Weed Species	Rate	Water	Hand-Held	Directions
	(PT/A)	Volume	% Solution	
				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.
				RESTRICTION: This product is not registered in California for use on water bermudagrass.

Weed Species	Rate	Water	Hand-Held	Directions
Bindweed, field	(PT/A) .75-7.5	Volume 3-20	% Solution 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 the labeled rate 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 the specified label rate of a 2,4-D product in 10 to 20 gallons of water per acre with ground equipment only.
				It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
				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 the specified label rate of a 2,4-D product 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 bootto-early seedhead stage of development.

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Directions
				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 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.
Decil of the	4.5.0	0.40	75.4.50/	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 bootto-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 the labeled rate of Banvel® per acre. For partial control, apply 1.5 pints of this product plus the labeled rate 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 the specified label rate of a 2,4-D product in 3 to 10 gallons of water per acre.
				It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Directions
	(1774)	Volume	76 Solution	mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
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 the specified label rate of a 2,4-D product 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 the labeled rate 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.
				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.

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Directions
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 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.

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Directions
Nutsedge; purple, yellow	.75-4.5	3-40	.75-1.5%	Fall treatments must be applied before a killing frost.  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 bootto-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.

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Directions
				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.
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.

Weed Species	Rate	Water	Hand-Held	Directions
	(PT/A)	Volume	% Solution	
				Also for control, apply 12 fluid ounces of this product plus the specified label rate of a 2,4-D product in 3 to 10 gallons of water per acre in the late summer or fall.
				It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
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 the specified label rate of a 2,4-D product 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 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.

Weed Species	Rate	Water	Hand-Held	Directions
·	(PT/A)	Volume	% Solution	
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 the specified label rate of a 2,4-D product in 3 to 10 gallons of water per acre in the late summer or fall after harvest, mowing or tillage. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
				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. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
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.

# 17.0 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. A second treatment 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	Water	Hand-Held	Directions
	(PT/A)	Volume	% Solution	
Alder	4.5-6	3-40	.75-1.5%	For control
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.

Weed Species	Rate (PT/A)	Water Volume	Hand-Held % Solution	Directions	
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,	3-7.5	3-40	.75-1.5%	Partial control	
American					
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	
Madrone	-	-	1.5%	Partial control. Apply to resprouts that are 3 to 6 feet	
resprouts				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	

Weed Species	Rate	Water	Hand-Held	Directions
	(PT/A)	Volume	% Solution	
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,	3-7.5	3-40	.75-1.5%	Partial control
southern				
Willow	4.5	3-40	.75%	For control

#### 18.0 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, LLC, its Supplemental Distributors, or the Seller. All such risks shall be assumed by the Buyer.

ALBAUGH, LLC, 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, LLC 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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Sim-Trol™ is a trademark of Oxon Italia Company.

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Devrinol® is a registered trademark of United Phosphorous, Inc.

# **SUB-LABEL B - For aquatic uses only**

# 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 isopropylamir	ne salt	53.8%
OTHER INGREDIENTS:		46.2%
	TOTAL	100.0%

<sup>\*</sup>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.

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

EPA Reg. No. 42750-59

EPA Est. No.

Manufactured by: Albaugh, LLC. Ankeny, IA 50021 NET CONTENTS GALS.

# 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.

#### **ENVIRONMENTAL HAZARDS**

FOR AQUATIC USES ONLY: 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 10° F (-12° C) TO KEEP FROM CRYSTALIZING. Crystals will settle to the bottom. If crystals form, allow product to warm above 50° F (10° 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.

To the extent consistent with applicable law, the 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.

#### **USE RESTRICTIONS:**

- For noncrop uses, the combined total of all treatments must not exceed 6.0 quarts of this product per acre per year.
- The maximum use rates stated throughout this product's labeling apply to this product combined with the use of all other herbicides containing glyphosate or sulfosate as the active ingredient, whether applied as mixtures or separately. Calculate application rates and ensure that the total use of this and other glyphosate or sulfosate containing products does not exceed stated maximum use rate.

#### **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.

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

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.

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 3/4 the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
- 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 <u>Aerial Drift</u> 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.

#### RESTRICTIONS:

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:

Only make aerial applications with helicopters.

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, restrictions 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	Amount of Aqua Star™						
Volume	3/4%	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 labeled 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  $\frac{1}{2}$  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  $\frac{1}{2}$  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.

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.

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

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.

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 Sisvmbrium irio 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

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.

RESTRICTION: Fall treatments must be applied before a killing frost.

A second application 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:

<sup>\*</sup>Apply 3 pints of this product per acre.

<sup>\*\*</sup>Apply with hand-held equipment only.

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

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

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

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.

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.

Alligatorweed – Apply 6 pints of this product per acre as a broadcast spray or as a 1½ 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.

A second application 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  $\frac{1}{2}$  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  $\frac{1}{2}$  pints of this product per acre as a broadcast spray or as a 1- $\frac{1}{2}$  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 handheld 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  $\frac{1}{2}$  pints of this product per acre as a broadcast spray or as a 1  $\frac{1}{2}$  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:

Broom:

Alder Scotch

Alnus spp. Cytisus scoparius
Ash\* Buckwheat, California\*
Fraxinus spp. Eriogonum fasciculatum

Aspen, quaking Cascara\*

Populus tremuloides Rhamnus purshiana

Bearclover, Bearmat Catsclaw\*
Chamaebatia foliolosa Acacia greggi
Birch Ceanothus
Betula spp. Ceanothus spp.

Blackberry Chamise

Rubus spp. Adenostoma fasciculatum

French Maple:
Cytisus monspessulanus Red\*\*

Broom:

Cherry: Acer rubrum
Bitter Sugar

Prunus emarginata Acer saccharum

Black Vine\*

Prunus serotina Acer circinatum
Pin Monkey Flower\*

Prunus pensylvanica Mimulus guttatus

Coyote brush Oak:
Baccharis consanguinea Black\*

Creeper, Virginia\*

Quercus velutina

Parthenocissus quinquefolia

Northern pine

Parthenocissus quinquefolia Northern pine
Dewberry Quercus palustris
Rubus trivialis Post

Dogwood Quercus stellata

Cornus spp. Red

Elderberry Quercus rubra
Sambucus spp. Southern red
Elm\* Quercus falcata

Ulmus spp. White\*

Eucalyptus, bluegum Quercus alba

Eucalyptus globules

Persimmon\* Diospyros spp.

Hasardia\*

Haplopappus squamosus Hawthorn

Rhus radicans

Crataegus spp.

Hazel

Corylus spp.

Hickory Carva 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\* Tamarix spp.

Saltbush, Sea myrtle Baccharis halimifolia

Sassafras

Sassafras aibidum

Sourwood\* Oxydendrum arboreum

Sumac:

Poison\* Rhus vernix

Smooth\* Rhus glabra Winaed\*

Rhus copallina

Poison Oak

Poison Ivv

Rhus toxicodendron

Poplar, vellow\*

Liriodendron tulipifera

Prunus Prunus spp. Raspberry Rubus spp. Redbud, eastern Cercis canadensis Rose, multiflora

Rosa multiflora

Elaeagnus angustifolia

Sweet aum

Russian-olive

Liquidambar styraciflua

Swordfern\*

Polystichum munitum Tallowtree, Chinese Sapium sebiferum

Thimbleberry

Rubus parviflorus Tobacco, tree\* Nicotiana glauca Trumpetcreeper Campsis radicans Waxmvrtle, 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 <sup>3</sup>/<sub>4</sub> percent solution with hand-held equipment.

Broom: French, Scotch - For control, apply a 1 1/4 to 1 1/2 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 ½ 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  $\frac{1}{2}$  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 handheld 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  $\frac{3}{4}$  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  $\frac{1}{2}$  pints of this product per acre as a broadcast spray or as a  $\frac{3}{4}$  to 1  $\frac{1}{2}$  percent solution with hand-held equipment.

### **AQUATIC 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.

RESTRICTION: 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.

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  $7 \frac{1}{2}$  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.

# **RESTRICTIONS:**

- 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.

### OTHER 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 directions.

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

When used in combination as directed by Albaugh, to the extent consistent with applicable law, 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. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

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 the labeled rate 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 the labeled rate 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 the labeled rate 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. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Hand-Held and High-Volume Applications:

Use 6 to 12 pints of Aqua Star<sup>™</sup> plus the labeled rate of Arsenal<sup>®</sup> 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 the labeled rate of 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.

### **RESTRICTION:**

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

Use 1 ½ to 2 ½ pints of this product plus the labeled rate of 2,4-D amine (labeled for aquatic sites) for control of annual weeds.

Use 3 to 7 ½ pints of this product plus the labeled rate of 2,4-D amine (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.

# RESTRICTIONS:

- 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.

# **RESTRICTIONS:**

- 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 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 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 Poplar\*

Alnus spp.
Coyote brush\*
Baccharis consanguinea
Dogwood\*
Cornus spp.
Eucalyptus

Populus spp.
Reed, giant
Arundo donax
Salt cedar
Tamarix spp.
Sweet gum\*

Eucalyptus spp. Liquidambar styraciflua

Hickory\* Sycamore\*

Carya spp. Platanus occidentalis

Madrone Tan oak

Arbutus menziesii Lithocarpus densiflorus

Maple\* Willow Acer spp. Salix spp.

Oak

Quercus spp.

### 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

# 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.

<sup>\*</sup>This product is not approved for this use on these species in the state of California.

<sup>\*</sup>This product is not approved for this use on these species in the state of California.

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 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 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. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

# Tank Mixtures plus 2,4-D Amine

For additional weed control benefits, the labeled rate 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 the labeled rate of Oust®.

# 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 the labeled rate of Escort®.

# 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 the labeled rate of Oust®.

### 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	S	С	С	С	С	С		
Hordeum pusillum								
Bedstraw, catchweed	S	С	С	С	С	С		
Galium aparine								
Bluegrass, annual	S	С	С	С	С	С		
Poa annua								
Chervil	S	С	С	С	С	С		
Chaerophyllum tainturieri		_	_	_	_	_		
Chickweed, common	S	С	С	С	С	С		
Stellaria media								
Clover, crimson	•	S	S	С	С	С		
Trifolium incarnatum		_	_	_	_	_		
Clover, large hop	•	S	S	С	С	С		
Trifolium campestre	_	_	_	_	_	_		
Speedwell, corn	S	С	С	С	С	С		
_ Veronica arvensis						_		
Fescue, tall	•	•	•	•	S	S		
Festuca arundinacea								

		<u>Aqua Star™ oz/acre</u>								
WEED SPECIES	6	9	12	18	24	48				
Geranium, Carolina	•	•	S	S	С	С				
Geranium carolinianum										
Henbit	•	S	С	С	С	С				
Lamium amplexicaule										
Ryegrass, Italian	•	•	S	С	С	С				
Lolium multiflorum										
Vetch, common	•	•	S	С	С	С				
Vicia sativa										

<sup>\*</sup>These rates apply only to sites where an established competitive turf is present.

### RELEASE OF ACTIVELY GROWING BERMUDAGRASS

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

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.

<sup>\*</sup>Suppression at the higher rate only.

<sup>\*\*</sup>Johnsongrass is controlled at the higher rate.

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.

### 18.0 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, LLC, its Supplemental Distributors, or the Seller. All such risks shall be assumed by the Buyer.

ALBAUGH, LLC, 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, LLC 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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