

## ATTENTION:

This specimen label is provided for general information only.

- This pesticide product may not yet be available or approved for sale or use in your area.
- It is your responsibility to follow all federal, state and local laws and regulations regarding the use of pesticides.
- Before using any pesticide, be sure the intended use is approved in your state or locality.
- Your state or locality may require additional precautions and instructions for use of this product that are not included here.
- Monsanto does not guarantee the completeness or accuracy of this specimen label. The information found in this label may differ from the information found on the product label. You must have the EPA approved labeling with you at the time of use and must read and follow all label directions.
- You should not base any use of a similar product on the precautions, instructions for use or other information you find here.
- Always follow the precautions and instructions for use on the label of the pesticide you are using.

21195F3-25



### Complete Directions for Use in Aquatic and Other Non-Crop Sites.

EPA Reg. No. 524-343

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.

2006-1

Read the entire label before using this product.

Use only according to label instructions.

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

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

THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION OR REPACKAGING. SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.

## 1.0 INGREDIENTS

ACTIVE INGREDIENT:

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

\*Contains 648 grams per liter 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 liter or 4.0 pounds per U.S. gallon of the acid, glyphosate.

No license granted under any non-U.S. patent(s).

## 2.0 IMPORTANT PHONE NUMBERS

1. FOR **PRODUCT INFORMATION** OR ASSISTANCE IN USING THIS PRODUCT, CALL TOLL-FREE, **1-800-332-3111**.
2. IN CASE OF AN **EMERGENCY INVOLVING THIS PRODUCT**, OR FOR **MEDICAL ASSISTANCE**, CALL COLLECT, DAY OR NIGHT, **(314)-694-4000**.

## 3.0 PRECAUTIONARY STATEMENTS

### 3.1 Hazards to Humans and Domestic Animals

Keep out of reach of children.

## CAUTION!

Remove contaminated clothing and wash clothing before reuse. Wash thoroughly with soap and water after handling.

### 3.2 Environmental Hazards

Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Treatment of aquatic weeds can result in oxygen depletion or loss due to decomposition of dead plants. This oxygen loss can cause fish suffocation.

In case of: SPILL or LEAK, soak up and remove to a landfill.

### 3.3 Physical or Chemical Hazards

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

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

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This product can only be used in accordance with the Directions for Use on this label or in separately published Monsanto Supplemental Labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

## 4.0 STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Keep container closed to prevent spills and contamination.

**PESTICIDE STORAGE:** STORE ABOVE 5°F (-15°C) TO KEEP PRODUCT FROM CRYSTALLIZING. Crystals will settle to the bottom. If allowed to crystallize, place in a warm area 68°F (20°C) for several days to redissolve and roll or shake container or recirculate in mini-bulk containers to mix well before using.

**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.

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

**FOR PLASTIC ONE-WAY CONTAINERS & BOTTLES:** Do not reuse container. Triple rinse container, then puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**FOR ONE-WAY DRUMS:** Do not reuse container. Return container per the Monsanto container return program. If not returned, triple rinse container,

then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**FOR REFILLABLE PORTABLE (MINI-BULK) CONTAINERS:** This container must only be refilled with pesticide product. **Do not reuse this container for any other purpose.**

Final disposal must be in compliance with state and local regulations. If not refilled, returned, or recycled, triple rinse or pressure rinse, 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.

Do not transport this container if it is damaged or leaking. If the container is damaged, leaking or obsolete, or to obtain information about recycling portable refillable containers, contact Monsanto Company at 800-768-6387.

**Users:** When the 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, triple rinse or pressure rinse the empty container and offer it for recycling if available.

**Refillers:** Do not reuse this mini-bulk container except for refill in accordance with a valid Monsanto Repackaging or Toll Repackaging Agreement. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting.

**FOR REFILLABLE STATIONARY BULK CONTAINERS:** This container must only be refilled with pesticide product. **Do not reuse this container for any other purpose.**

Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices.

Final disposal must be in compliance with state and local regulations. If not refilled, triple rinse or pressure rinse container and offer for recycling or reconditioning if possible. If burned, stay out of smoke.

## 5.0 GENERAL INFORMATION (How This Product Works)

**Product Description:** This product is a postemergent, systemic herbicide with no soil residual activity. It gives broad-spectrum control of many annual weeds, perennial weeds, woody brush and trees.

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

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

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

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

**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.

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

When this label recommends a tank mixture with a generic active ingredient such as diuron, 2,4-D or dicamba, the user is responsible for ensuring that the mixture product's label allows the specific application.

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

**Annual Maximum Use Rate:** The combined total of all treatments must not exceed 8 quarts of this product per acre per year in terrestrial sites. Any single broadcast application made over water must not exceed 7.5 pints per acre. 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 rates.

### ATTENTION

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.

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) that are likely to drift. AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE.

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

## 6.0 MIXING

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

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

### 6.1 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 recommended 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.

### 6.2 Surfactant

This product requires the use of a nonionic surfactant. When using this product, mix 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution. Increasing the rate of surfactant may enhance performance. Examples of when to use the higher surfactant rate include, but are not limited to: hard-to-control woody brush, trees and vines, high water volumes, adverse environmental conditions, tough-to-control weeds, weeds under stress, surfactants with less than 70 percent active ingredient, tank mixes, etc. These surfactants should not be used in excess of 1 quart per acre when making broadcast applications.

Always read and follow the manufacturer's surfactant label recommendations for best results. Carefully observe all cautionary statements and other information appearing in the surfactant label.

When applied as recommended under the conditions described, this product controls annual and perennial weeds listed in the label booklet. Do not reduce rates of this product when adding surfactant.

### 6.3 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.

- Add nonionic surfactant to the spray tank before completing the filling process.
- Add individual formulations to the spray tank as follows: wettable powder, flowable, emulsifiable concentrate, drift control additive, water soluble liquid and nonionic surfactant.

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

Keep by-pass line on or near the bottom of the tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50-mesh.

Always predetermine the compatibility of labeled tank mixtures of this product with water carrier by mixing small proportional quantities in advance. Ensure that the specific tank mixture product is registered for application at the desired site.

Refer to the “**Tank Mixing**” section of “GENERAL INFORMATION” for additional precautions.

## 6.4 Mixing Percent Solutions

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

### Spray Solution

DESIRED VOLUME	Amount of AquaMaster Herbicide					
	0.5%	0.75%	1%	1.5%	4%	8%
1 gal	2/3 oz	1 oz	1.3 oz	2 oz	5 oz	10 oz
25 gal	1 pt	1.5 pt	1 qt	1.5 qt	4 qt	2 gal
100 gal	2 qt	3 qt	1 gal	1.5 gal	4 gal	8 gal

2 tablespoons = 1 fluid ounce

For use in backpack, knapsack or pump-up sprayers, it is suggested that the recommended amount of this product be mixed with water in a larger container. Fill sprayer with the mixed solution.

## 6.5 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 dilution. Use colorants or dyes according to the manufacturer’s recommendations.

## 6.6 Drift Reduction Additives

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

## 7.0 APPLICATION EQUIPMENT AND TECHNIQUES

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

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

### SPRAY DRIFT MANAGEMENT

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

Do not allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended.

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 and the grower are responsible for considering all these factors when making decisions.

## 7.1 Aerial Equipment

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

FOR AERIAL APPLICATION IN CALIFORNIA, REFER TO THE FEDERAL SUPPLEMENTAL LABEL FOR AERIAL APPLICATIONS IN THAT STATE FOR SPECIFIC INSTRUCTIONS, RESTRICTIONS AND REQUIREMENTS.

This product plus Oust, 2,4-D or dicamba tank mixtures may not be applied by air in California.

TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.

Avoid direct application to any body of water.

Use the recommended rates of this herbicide in 3 to 25 gallons of water per acre.

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

### AERIAL SPRAY DRIFT MANAGEMENT

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

- The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- 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 should be observed.

### Importance of Droplet Size

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

### Controlling Droplet Size

- Volume:** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with the higher rated flows produce larger droplets.
- Pressure:** Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles:** Use the minimum number of nozzles that provide uniform coverage.
- Nozzle orientation:** Orienting nozzles so that the spray is released backwards, parallel to the airstream, will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- Nozzle type:** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.
- Boom length:** For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.
- Application height:** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces the exposure of the droplets to evaporation and wind.

### Swath Adjustment

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

### Wind

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

### Temperature and Humidity

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

### Temperature Inversions

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



while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### Sensitive Areas

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

#### Aircraft Maintenance

PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. The maintenance of an organic coating (paint) which meets aerospace specification MIL-C-38413 may prevent corrosion. To prevent corrosion of exposed parts, thoroughly wash aircraft after each day of spraying to remove residues of this product accumulated during spraying or from spills. Landing gear is most susceptible.

## 7.2 Ground Broadcast Equipment

When used according to label directions this product will give control or partial control of herbaceous weeds, woody brush and trees listed in the "WEEDS CONTROLLED" section of this label. Use the recommended rates of this product in 3 to 40 gallons of water per acre as a broadcast spray unless otherwise specified. As density of weeds increases, spray volume should be increased within the recommended range to ensure complete coverage. Carefully select proper nozzles to avoid spraying a fine mist. For best results with ground application equipment, use flat-fan nozzles. Check for even distribution of spray droplets.

## 7.3 Hand-Held Equipment

Apply to foliage of vegetation to be controlled. For applications made on a spray-to-wet basis, spray coverage should be uniform and complete. Do not spray to the point of runoff. Use coarse sprays only.

For low-volume directed spray applications, use a 4- to 8-percent solution of this product for control or partial control of annual weeds, perennial weeds, or woody brush and trees. Spray coverage should be uniform with at least 50 to 75 percent of the foliage contacted. Coverage of the top one-half of the plant is important for best results. 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 zig-zag motion. For flat-fan and cone nozzles and with hand-directed mist blowers, mist the application over the foliage of the targeted vegetation. To ensure adequate spray coverage, spray both sides of large or tall woody brush and trees, when foliage is thick and dense, or where there are multiple sprouts. For best results, apply to actively growing woody brush and trees after full leaf expansion and before fall color and leaf drop.

Unless otherwise specified, use the recommended rates listed in the following "Application Rates" table for various methods of foliar application using high-volume, backpack, knapsack and similar types of hand-held equipment. When used according to label directions this product will give control or partial control of herbaceous weeds, woody brush and trees listed in the "WEEDS CONTROLLED" section of this label.

APPLICATION RATES		
APPLICATION	AQUAMASTER	SPRAY VOLUME GALLONS/ACRE
<b>SPRAY-TO-WET</b>		
Handgun or Backpack	0.5 to 1.5% by volume	spray-to-wet*
<b>LOW-VOLUME DIRECTED SPRAY</b>		
Backpack	4 to 8% by volume	15 to 25**
Modified High-Volume	1.5 to 3% by volume	40 to 60**

\*For applications made on a spray-to-wet basis, spray coverage should be uniform and complete. Do not spray to the point of runoff.

\*\*Low-volume directed applications with backpacks work best when treating weeds and brush less than 10 feet tall. For taller weeds and brush, high-volume handguns can be modified by reducing nozzle size and spray pressure to produce a low-volume directed spray.

## 7.4 Selective Equipment

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

AVOID CONTACT OF HERBICIDE WITH DESIRABLE VEGETATION, AS SERIOUS INJURY OR DEATH IS LIKELY TO OCCUR.

Applicators used above desired vegetation should be adjusted so that the lowest spray stream or wiper contact point is at least 2 inches above the

desirable vegetation. Droplets, mist, foam or splatter of the herbicide solution settling on desirable vegetation is likely to result in discoloration, stunting or destruction.

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

#### Shielded and Hooded Applicators

A shielded or hooded applicator directs the herbicide solution onto weeds, while shielding desirable vegetation from the herbicide. 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.

#### 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 miles per hour. Performance may be improved by reducing speed in areas of heavy weed infestations to ensure adequate wiper saturation. Better results may be obtained if 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.

Nonionic surfactant at a rate of 10 percent by volume of total herbicide solution is recommended with all wiper applications.

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

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

## 8.0 SITE AND USE INSTRUCTIONS

Unless otherwise specified, applications may be made to control any weeds listed in the "Annual Weeds", "Perennial Weeds" and "Woody Brush and Trees" rate tables. Refer also to the "Selective Equipment" section.

### 8.1 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.

This product may also be used to control the labeled weeds, woody brush and trees growing in other terrestrial non-crop sites listed on this label or in aquatic sites within these areas.

If aquatic sites are present in a non-crop area and are part of the intended treatment, read and observe the following directions:

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

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

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

**NOTE:** Do not apply this product **directly to water** within 0.5 mile upstream of an active potable water intake in flowing water (i.e., river, stream, etc.) or within 0.5 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 0.5 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 parts per million as determined by laboratory analysis. These aquatic applications may be made **ONLY** in those cases where there are alternative water sources or holding ponds which would permit the turning off of an active potable

water intake for a minimum period of 48 hours after the applications. This restriction does **NOT** apply to intermittent inadvertent overspray of water in terrestrial use sites.

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

Floating mats of vegetation may require retreatment. Avoid wash-off of sprayed foliage by spray boat or recreational boat backwash or by rainfall within 6 hours of application. Do not retreat 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 7.5 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.

#### Tank Mixtures

Tank mixtures of this product plus 2,4-D amine may be used to increase the spectrum of vegetation controlled in aquatic sites. Use 1.5 to 2 pints of this product plus 2 to 4 pints of 2,4-D amine (4 pounds active ingredient per gallon, labeled for aquatic sites) for control of annual weeds. Use 3 to 7.5 pints of this product plus 2 to 4 quarts of 2,4-D amine (4 pounds per gallon, labeled for aquatic sites) for control or partial control of perennial weeds, woody brush and trees.

When tank mixing, read and carefully observe the label claims, cautionary statements and all information on the labels of all products used. Use according to the most restrictive precautionary statements for each product in the mixture. Mix in the following sequence: Fill sprayer tank one-half full with water, add AquaMaster herbicide, then 2,4-D amine and finally surfactant. Fill sprayer tank to final volume of water.

**NOTE:** DO NOT MIX AQUAMASTER HERBICIDE AND 2,4-D AMINE CONCENTRATES WITHOUT WATER CARRIER. DO NOT MIX AQUAMASTER HERBICIDE AND 2,4-D AMINE IN BYPASS INJECTOR-TYPE SPRAY EQUIPMENT.

## 8.2 Cut Stump

Cut stump treatments may be made on any site listed on this label. This product will control many types of woody brush and tree species. 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.

For control of *Ailanthus altissima* (Tree-of-heaven) make a cut stump treatment according to the directions in this section using a spray mixture of 50 percent AquaMaster herbicide and 10 percent Arsenal.

DO NOT MAKE CUT STUMP APPLICATIONS WHEN THE ROOTS OF DESIRABLE WOODY BRUSH OR TREES MAY BE GRAFTED TO THE ROOTS OF THE CUT STUMP. 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.

## 8.3 General Non-Crop Areas and Industrial Sites

Use in areas such as airports, apartment complexes, commercial sites, ditch banks, driveways, dry ditches, dry canals, fencerows, golf courses, greenhouses, industrial sites, lumber yards, manufacturing sites, municipal sites, natural areas, office complexes, ornamentals, parking areas, parks, pastures, petroleum tank farms and pumping installations, railroads, rangeland, recreational areas, residential areas, rights-of-way, roadsides, schools, sod or turf seed farms, sports complexes, storage areas, substations, utility sites, warehouse areas, other public areas, and wildlife management areas.

#### General Weed Control, Trim-and-Edge and Bare Ground

This product may be used in general non-crop areas. It may be applied with any application equipment described in this label. This product may be used to trim-and-edge around objects in non-crop sites, for spot treatment of unwanted vegetation and to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. This product may be used prior to planting an area to ornamentals, flowers, turfgrass (sod or seed), or prior to laying asphalt or beginning construction projects.

Repeated applications of this product may be used, as weeds emerge, to maintain bare ground.

**TANK MIXTURES:** This product may be tank-mixed with the following products. Refer to these products' labels for approved non-crop sites and application rates.

Arsenal®	Outrider®
Barricade® 65WG	Pendulum® 3.3 EC
Certainty®	Pendulum WDG
diuron	Plateau®
Endurance®	Princep® DF
Escort®	Princep Liquid
Garlon® 3A	Ronstar® 50 WP
Garlon 4	Sahara®
Hyvar® X	simazine
Karmex® DF	Surflan®
Krovar® I DF	Telar®
Oust®	2,4-D

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

#### Brush Control Tank Mixtures

**TANK MIXTURES:** Tank mixtures of this product may be used to increase the spectrum of control for herbaceous weeds, woody brush and trees. When tank mixing, read and carefully observe the label claims, cautionary statements and all information on the labels of all products used. Use according to the most restrictive precautionary statements for each product in the mixture. Any recommended rate of this product may be used in a tank mix.

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

**NOTE:** For side trimming treatments, it is recommended that this product be used alone or in tank mixture with Garlon 4.

PRODUCT	BROADCAST RATE
Arsenal	6 to 32 fluid ounces per acre
Escort	1 to 2 ounces per acre
Garlon 3A*, Garlon 4	1 to 4 quarts per acre
PRODUCT	SPRAY-TO-WET RATES
Arsenal	0.06 to 0.12% by volume
Escort	1 to 2 ounces per acre
PRODUCT	LOW-VOLUME DIRECTED SPRAY RATES
Arsenal	0.1 to 0.5% by volume
Escort	1 to 2 ounces per acre

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

## 8.4 Habitat Management

#### Habitat Restoration and Management

This product may be used to control exotic and other undesirable vegetation in habitat management and natural areas, including riparian and estuarine areas, 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. Spot treatments can be made to selectively remove unwanted plants for habitat management and enhancement.

#### Wildlife Food Plots

This product may be used as a site preparation treatment prior to planting wildlife food plots. Any wildlife food species may be planted after applying this product, or native species may be allowed to repopulate the area. If tillage is needed to prepare a seedbed, wait 7 days after application before tillage to allow translocation into underground plant parts.

## 8.5 Injection and Frill (Woody Brush and Trees)

This product may be used to control woody brush and trees by injection or frill applications. Apply this product using suitable equipment that must penetrate into the living tissue. Apply the equivalent of 1/25 fluid ounce (1 milliliter) of this product per each 2 to 3 inches of trunk diameter at breast height (DBH). This is best achieved by applying a 50- 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 diluted material to a continuous frill or more closely spaced cuttings. Avoid 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. For best results, application should be made during periods of active growth and after full leaf expansion.

## 8.6 Roadsides

All of the instructions in the “**General Non-Crop Areas and Industrial Sites**” section apply to roadsides.

### Shoulder Treatments

This product may be used on road shoulders. It may be applied with boom sprayers, shielded boom sprayers, high-volume off-center nozzles, hand-held equipment, and similar equipment.

### Guardrails and Other Obstacles to Mowing

This product may be used to control weeds growing under guardrails and around signposts and other objects along the roadside.

### Spot Treatment

This product may be used as a spot treatment to control unwanted vegetation growing along roadsides.

TANK MIXTURES: This product may be tank-mixed with the following products for shoulder, guardrail, spot and bare ground treatments, provided that the specific tank mixture product is labeled for this site:

diuron	Princep DF
Endurance	Princep Liquid
Escort	Ronstar 50 WP
Garlon 4	Sahara
Krovar I DF	simazine
Oust	Surflan
Outrider	Telar
Pendulum 3.3 EC	2,4-D
Pendulum WDG	

See the “MIXING” section of this label for general instructions for tank mixing.

### 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 Outrider herbicide or Oust for residual control. Tank mixtures of this product with Oust may delay greenup.

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 to 48 fluid ounces of this product in a tank mixture with 0.75 to 1.33 ounces Outrider herbicide per acre. Read and follow all label directions for Outrider herbicide.

TANK MIXTURES: Apply 6 to 48 fluid ounces of this product per acre alone or in a tank mixture with 0.25 to 1 ounce per acre of Oust. Apply the recommended 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. To avoid delays in greenup and minimize injury, add no more than 1 ounce of Oust per acre on Bermudagrass and no more than 0.5 ounce of Oust per acre on bahiagrass and avoid treatments when these grasses are in a semi-dormant condition.

#### 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 to 36 fluid ounces 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 Outrider herbicide for control or partial control of Johnsongrass and other weeds listed in the Outrider herbicide label. Use 6 to 24 ounces of this product with 0.75 to 1.33 ounces of Outrider herbicide per acre. Use the higher rates of both products for control of perennial weeds or annual weeds greater than 6 inches in height.

TANK MIXTURES: This product may be tank-mixed with Oust. If tank-mixed, use no more than 12 to 24 fluid ounces of this product with 1 to 2 ounces of Oust per acre. Use the lower rates of each product to control annual weeds less than 6 inches in height or runner length that are listed in this label and the Oust label. Use the higher rates as annual weeds increase in size and approach the flower or seedhead stages. These rates will also provide partial control of the following perennial weeds:

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

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

#### Actively Growing Bahiagrass

For suppression of vegetative growth and seedhead inhibition of bahiagrass for approximately 45 days, apply 4 fluid ounces of this product in 10 to 40 gallons of water per acre. Apply 1 to 2 weeks after full greenup or after mowing to a uniform height of 3 to 4 inches. This application must be made prior to seedhead emergence.

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

This product may be used for control or partial control of Johnsongrass and other weeds listed on the Outrider herbicide label in actively growing bahiagrass. Apply 1.5 to 3.5 fluid ounces of this product with 0.75 to 1.33 ounces of Outrider herbicide per acre. Use the higher rates for control of perennial weeds or annual weeds greater than 6 inches in height. Use only on well established bahiagrass.

TANK MIXTURES: A tank mixture of this product plus Oust may be used. Apply 4 fluid ounces of this product plus 0.25 ounce of Oust per acre 1 to 2 weeks following an initial spring mowing. Make only one application per year.

## 9.0 WEEDS CONTROLLED

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

Reduced results may occur when treating weeds heavily covered with dust. For weeds that have been mowed, grazed or cut, allow regrowth to occur prior to treatment.

Refer to the following label sections for recommended rates for the control of annual and perennial weeds and woody brush and trees. For difficult to control perennial weeds and woody brush and trees, where plants are growing under stressed conditions, or where infestations are dense, this product may be used at 4.5 to 8 quarts per acre for enhanced results.

### 9.1 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 the “GENERAL INFORMATION”, “MIXING”, and “APPLICATION EQUIPMENT AND TECHNIQUES” sections for labeled uses and specific application instructions.

Use 1.5 pints per acre if weeds are less than 6 inches in height or runner length and 1 to 4 quarts per acre if weeds are over 6 inches in height or runner length or when weeds are growing under stressed conditions.

For spray-to-wet applications, apply a 0.5-percent solution of this product to weeds less than 6 inches in height or runner length. Apply prior to seedhead formation in grass or bud formation in broadleaf weeds. For annual weeds over 6 inches tall, or for smaller weeds growing under stressed conditions, use a 0.75- to 1.5-percent solution. Use the higher rate for tough-to-control species or for weeds over 24 inches tall.

#### WEED SPECIES

Anoda, spurred	Cheeseweed
Balsamapple**	( <i>Malva parviflora</i> )
Barley*	Chervil*
Barnyardgrass*	Chickweed*
Bittercress*	Cocklebur*
Black nightshade*	Copperleaf, hophornbeam
Bluegrass, annual*	Corn*
Bluegrass, bulbous*	Corn speedwell*
Bassia, fivehook	Crabgrass*
Brome, downy*	Dwarfdandelion*
Brome, Japanese*	Eastern mannagrass*
Broomsedge	Eclipta*
Browntop panicum*	Fall panicum*
Buttercup*	Falsedandelion*
Carolina foxtail*	Falseflax, smallseed*
Carolina geranium	Fiddleneck
Castor bean	Field pennycress*
Cheatgrass*	Filaree



**WEED SPECIES (Cont'd)**

Fleabane, annual*	Ragweed, common*
Fleabane, hairy ( <i>Conyza bonariensis</i> )*	Ragweed, giant
Fleabane, rough*	Red rice
Florida pusley	Russian thistle
Foxtail*	Rye*
Goatgrass, jointed*	Ryegrass*
Goosegrass	Sandbur, field*
Grain sorghum (milo)*	Shattercane*
Groundsel, common*	Shepherd's-purse*
Hemp sesbania	Sicklepod
Henbit	Signalgrass, broadleaf*
Horseweed/Marestail ( <i>Conyza canadensis</i> )	Smartweed, ladysthumb*
Itchgrass*	Smartweed, Pennsylvania*
Johnsongrass, seedling	Sowthistle, annual
Junglerice	Spanishneedles***
Knotweed	Speedwell, purslane*
Kochia	Sprangletop*
Lamb's-quarters*	Spurge, annual
Little barley*	Spurge, prostrate*
London rocket*	Spurge, spotted*
Mayweed	Spurry, umbrella*
Medusahead*	Starthistle, yellow
Morningglory ( <i>Ipomoea spp.</i> )	Stinkgrass*
Mustard, blue*	Sunflower*
Mustard, tansy*	Teaweed/Prickly sida
Mustard, tumble*	Texas panicum*
Mustard, wild*	Velvetleaf
Oats	Virginia copperleaf
Pigweed*	Virginia pepperweed*
Plains/Tickseed coreopsis*	Wheat*
Prickly lettuce*	Wild oats*
Puncturevine	Witchgrass*
Purslane, common	Woolly cupgrass*
	Yellow rocket

\*When using field broadcast equipment (aerial applications or boom sprayers using flat-fan nozzles) these species will be controlled or partially controlled using 12 fluid ounces of this product per acre. Applications must be made using 3 to 10 gallons of carrier volume per acre. Use nozzles that ensure thorough coverage of foliage and treat when weeds are in an early growth stage.

\*\* Apply with hand-held equipment only.

\*\*\*Apply 3 pints of this product per acre.

## 9.2 Perennial Weeds

Best results are obtained when perennial weeds are treated after they reach the reproductive stage of growth (seedhead initiation in grasses and bud formation in broadleaves). For non-flowering plants, best results are obtained when the plants reach a mature stage of growth. In many situations treatments are required prior to these growth stages. Under these conditions, use the higher application rate within the recommended range.

Ensure thorough coverage when using spray-to-wet treatments using hand-held equipment. When using hand-held equipment for low-volume directed spot treatments, apply a 4- to 8-percent solution of this product.

Allow 7 or more days after application before tillage. If weeds have been mowed or tilled, do not treat until regrowth has reached the recommended stages. Fall treatments must be applied before a killing frost.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seed.

WEED SPECIES	RATE (QT/A)	HAND-HELD % SOLUTION
Alfalfa*	0.7	1.5
Alligatorweed*	3.0	1.3
Anise (fennel)	1.5 - 3.0	1.0 - 1.5
Bahiagrass	2.3 - 3.75	1.5
Beachgrass, European ( <i>Ammophila arenaria</i> )	—	3.5
Bentgrass*	1.0	1.5
Bermudagrass	4.0	1.5
Bermudagrass, water (knotgrass)	1.0	1.5
Bindweed, field	3.0 - 3.75	1.5
Bluegrass, Kentucky	1.5 - 2.3	0.75
Blueweed, Texas	3.0 - 3.75	1.5
Brackenfern	2.3 - 3.0	0.75 - 1.0
Bromegrass, smooth	1.5 - 2.3	0.75
Bursage, woolly-leaf	—	1.5
Canarygrass, reed	1.5 - 2.3	0.75

WEED SPECIES	RATE (QT/A)	HAND-HELD % SOLUTION
Cattail	2.3 - 3.75	0.75
Clover; red, white	2.3 - 3.75	1.5
Cogongrass	2.3 - 3.75	1.5
Cordgrass	2.3 - 3.75	1.0 - 2.0
Cutgrass, giant	3.0	1.0
Dallisgrass	2.3 - 3.75	1.5
Dandelion	2.3 - 3.75	1.5
Dock, curly	2.3 - 3.75	1.5
Dogbane, hemp	3.0	1.5
Fescue (except tall)	2.3 - 3.75	1.5
Fescue, tall	2.3	1.0
Guineagrass	2.3	0.75
Horsenettle	2.3 - 3.75	1.5
Horseradish	3.0	1.5
Iceplant	1.5	1.5
Ivy; German, cape	1.5 - 3.0	0.75 - 1.5
Jerusalem artichoke	2.3 - 3.75	1.5
Johnsongrass	1.5 - 2.3	0.75
Kikuyugrass	1.5 - 2.3	0.75
Knapweed	3.0	1.5
Lantana	—	0.75 - 1.0
Lespedeza	2.3 - 3.75	1.5
Loosestrife, purple	2.0	1.0 - 1.5
Lotus, American	2.0	0.75
Maidencane	3.0	0.75
Milkweed, common	2.3	1.5
Muhly, wirestem	1.5 - 2.3	0.75
Mullein, common	2.3 - 3.75	1.5
Napiergrass	2.3 - 3.75	1.5
Nightshade, silverleaf	3.0 - 3.75	1.5
Nutsedge; purple, yellow	2.3	0.75
Orchardgrass	1.5 - 2.3	0.75
Pampasgrass	2.3 - 3.75	1.5
Paragrass	3.0	0.75
Pepperweed, perennial	3.0	1.5
Phragmites*	2.0 - 3.75	0.75 - 1.5
Poison hemlock	1.5 - 3.0	0.75 - 1.5
Quackgrass	1.5 - 2.3	0.75
Redvine*	1.5	1.5
Reed, giant ( <i>Arundo donax</i> )	3.0 - 3.75	1.5
Ryegrass, perennial	1.5 - 2.3	0.75
Salvinia, ( <i>spp.</i> )	—	2.0
Smartweed, swamp	2.3 - 3.75	1.5
Spatdock	3.0	0.75
Spurge, leafy*	—	1.5
Starthistle, Yellow	—	1.5
Sweet potato, wild*	—	1.5
Thistle, artichoke	1.5 - 2.3	2.0
Thistle, Canada	1.5 - 2.3	1.5
Timothy	1.5 - 2.3	1.5
Torpedograss*	3.0 - 3.75	0.75 - 1.5
Trumpet creeper*	1.5 - 2.3	1.5
Tules, common	—	1.5
Vaseygrass	2.3 - 3.75	1.5
Velvetgrass	2.3 - 3.75	1.5
Waterhyacinth	2.5 - 3.0	0.75 - 1.0
Waterlettuce	—	0.75 - 1.0
Waterprimrose	—	0.75
Wheatgrass, western	1.5 - 2.3	0.75

\*Partial control

**Alligatorweed**—Apply 6 pints of this product per acre as a broadcast spray or as a 1.3-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**—Apply an 8-percent solution of this products plus 0.5- to 1.5-percent nonionic surfactant on a low-volume spray-to-wet basis. Best results are obtained when applications are made when European beachgrass is actively growing through the boot to the full heading stages of growth. Make applications prior to the loss of more than 50 percent green leaf color in the fall. Do not treat when weeds are under drought stress. Repeat applications may be necessary.

**Bermudagrass**—Apply 7.5 pints of this product per acre as a broadcast spray or as a 1.5-percent solution with hand-held equipment. Apply when target plants are actively growing and when seedheads appear.

**Bindweed, field / Silverleaf Nightshade / Texas Blueweed**—Apply 6 to 7.5 pints of this product per acre as a broadcast spray west of the Mississippi River and 4.5 to 6 pints of this product per acre east of the Mississippi River. With hand-held equipment, use a 1.5-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 appli-

cation 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 4.5 to 6 pints of this product per acre as a broadcast spray or as a 0.75- to 1-percent solution with hand-held equipment. Apply to fully expanded fronds which are at least 18 inches long.

**Cattail**—Apply 4.5 to 6 pints of this product per acre as a broadcast spray or as a 0.75-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 4.5 to 7.5 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**—Apply 4.5 to 7.5 pints of this product per acre as a broadcast spray or as a 1- to 2-percent solution with hand-held equipment. Schedule applications in order to allow 6 hours before treated plants are covered by tidewater. The presence of debris and silt on the cordgrass plants will reduce performance. It may be necessary to wash targeted plants prior to application to improve uptake of this product into the plant.

**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 1.5-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 4.5 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 4.5 pints of this product per acre as a broadcast spray or as a 0.75-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 4.5 pints of this product per acre as a broadcast spray or as a 0.75-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 0.75- 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 1.5-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 0.75-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 treatments 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 0.75-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 4.5 pints of this product per acre as a broadcast spray or as a 1.5-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 4.5 pints of this product per acre as a broadcast spray, or as a 0.75-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 1.5-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 7.5 pints per acre as a broadcast spray or apply a 1.5-percent solution with hand-held equipment. In other areas of the U.S., apply 4 to 6 pints per acre as a broadcast spray or apply a 0.75-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 4.5 pints of this product per acre as a broadcast spray or as a 0.75-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 1.5-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 to fall.

**Spatterdock**—Apply 6 pints of this product per acre as a broadcast spray or as a 0.75-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 1.5-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 4.5 pints of this product per acre as a broadcast spray or as a 1.5-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 are at or beyond the bud stage of growth.

**Torpedograss**—Apply 6 to 7.5 pints of this product per acre as a broadcast spray or as a 0.75- to 1.5-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 1.5-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.

**Waterhyacinth**—Apply 5 to 6 pints of this product per acre as a broadcast spray or apply a 0.75- 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 0.75- 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 0.75-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 4.5 to 7.5 pints of this product per acre as a broadcast spray or as a 0.75- to 1.5-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.

## 9.3 Woody Brush and Trees

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 spray-to-wet treatments using hand-held equipment. When using hand-held equipment for low-volume directed-spray spot treatments, apply a 4- to 8-percent solution of this product.

Symptoms may not appear prior to frost or senescence with fall treatments.

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

WEED SPECIES	BROADCAST RATE (QT/A)	HAND-HELD SPRAY-TO-WET % SOLUTION
Alder	2.3 - 3.0	0.75 - 1.2
Ash*	1.5 - 3.75	0.75 - 1.5
Aspen, quaking	1.5 - 2.3	0.75 - 1.2
Bearclover (Bearnat)*	1.5 - 3.75	0.75 - 1.5
Beech*	1.5 - 3.75	0.75 - 1.5
Birch	1.5	0.75
Blackberry	2.3 - 3.0	0.75 - 1.2
Blackgum	1.5 - 3.75	0.75 - 1.5
Bracken	1.5 - 3.75	0.75 - 1.5
Broom; French, Scotch	1.5 - 3.75	1.2 - 1.5
Buckwheat, California*	1.5 - 3.0	0.75 - 1.5
Cascara*	1.5 - 3.75	0.75 - 1.5
Castor bean	—	1.5
Catsclaw*	—	1.2 - 1.5
Ceanothus*	1.5 - 3.75	0.75 - 1.5
Chamise*	1.5 - 3.75	0.75
Cherry; bitter, black, pin	1.5 - 3.75	1.0 - 1.5
Cottonwood, eastern	1.5 - 3.75	0.75 - 1.5
Coyote brush	2.3 - 3.0	1.2 - 1.5
Cypress; swamp, bald	1.5 - 3.75	0.75 - 1.5
Deerweed	1.5 - 3.75	0.75 - 1.5
Dewberry	2.3 - 3.0	0.75 - 1.2
Dogwood*	3.0 - 3.75	1.0 - 2.0
Elderberry	1.5	0.75
Elm*	1.5 - 3.75	0.75 - 1.5
Eucalyptus	—	1.5
Gallberry	1.5 - 3.75	0.75 - 1.5
Gorse*	1.5 - 3.75	0.75 - 1.5
Hackberry, western	1.5 - 3.75	0.75 - 1.5
Hasardia*	1.5 - 3.0	0.75 - 1.5
Hawthorn	1.5 - 2.3	0.75 - 1.2
Hazel	1.5	0.75
Hickory*	3.0 - 3.75	1.0 - 2.0
Honeysuckle	2.3 - 3.0	0.75 - 1.2
Hornbeam, American*	1.5 - 3.75	0.75 - 1.5
Huckleberry	1.5 - 3.75	0.75 - 1.5
Knotweed; Japanese, Giant**	—	—
Kudzu	3.0	1.5
Locust, black*	1.5 - 3.0	0.75 - 1.5
Madrone resprouts*	—	1.5
Magnolia, sweetbay	1.5 - 3.75	0.75 - 1.5
Manzanita*	1.5 - 3.75	0.75 - 1.5
Maple, red	1.0 - 3.75	0.75 - 1.2
Maple, sugar	—	0.75 - 1.2
Maple, vine*	1.5 - 3.75	0.75 - 1.5
Monkey flower*	1.5 - 3.0	0.75 - 1.5
Oak; black, white*	1.5 - 3.0	0.75 - 1.5
Oak, northern pin	1.5 - 3.0	0.75 - 1.2
Oak, post	2.3 - 3.0	0.75 - 1.2
Oak, red	—	0.75 - 1.2
Oak, Scrub*	1.5 - 3.0	0.75 - 1.5
Oak, southern red	1.5 - 3.75	1.0 - 1.5
Orange, Osage	1.5 - 3.75	0.75 - 1.5
Peppertree, Brazilian (Florida holly)*	1.5 - 3.75	1.5
Persimmon*	1.5 - 3.75	0.75 - 1.5
Pine	1.5 - 3.75	0.75 - 1.5
Poison ivy	3.0 - 3.75	1.5
Poison oak	3.0 - 3.75	1.5
Poplar, yellow*	1.5 - 3.75	0.75 - 1.5
Prunus	1.5 - 3.75	1.0 - 1.5
Raspberry	2.3 - 3.0	0.75 - 1.2
Redbud, eastern	1.5 - 3.75	0.75 - 1.5
Redcedar, eastern	1.5 - 3.75	0.75 - 1.5
Rose, multiflora	1.5	0.75
Russian olive*	1.5 - 3.75	0.75 - 1.5
Sage, black	1.5 - 3.0	0.75
Sage, white*	1.5 - 3.0	0.75 - 1.5

WEED SPECIES	BROADCAST RATE (QT/A)	HAND-HELD SPRAY-TO-WET % SOLUTION
Sage brush, California	1.5 - 3.0	0.75
Salmonberry	1.5	0.75
Saltbush	—	1.0
Saltcedar**	1.5 - 3.75	0.75 - 1.5
Sassafras*	1.5 - 3.75	0.75 - 1.5
Sea Myrtle	—	1.0
Sourwood*	1.5 - 3.75	0.75 - 1.5
Sumac; laurel, poison, smooth, sugarbush, winged*	1.5 - 3.0	0.75 - 1.5
Sweetgum	1.5 - 2.3	0.75 - 1.5
Swordfern*	1.5 - 3.75	0.75 - 1.5
Tallowtree, Chinese	—	0.75
Tan oak resprouts*	—	1.5
Thimbleberry	1.5	0.75
Tobacco, tree*	1.5 - 3.0	0.75 - 1.5
Toyon*	—	1.5
Trumpet creeper	1.5 - 2.3	0.75 - 1.2
Vine maple*	1.5 - 3.75	0.75 - 1.5
Virginia creeper	1.5 - 3.75	0.75 - 1.5
Waxmyrtle, southern*	1.5 - 3.75	1.5
Willow	2.3	0.75
Yerba Santa*	—	1.5

\*Partial control

\*\*Refer to specific instructions below

**Alder / Blackberry / Dewberry / Honeysuckle / Oak, post / Raspberry**—For control, apply 4.5 to 6 pints per acre as a broadcast spray or as a 0.75- to 1.2-percent solution with hand-held equipment.

**Aspen, quaking / Hawthorn / Trumpet creeper**—For control, apply 3 to 4.5 pints of this product per acre as a broadcast spray or as a 0.75- to 1.2-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 0.75-percent solution with hand-held equipment.

**Broom; French, Scotch**—For control, apply a 1.2- to 1.5-percent solution with hand-held equipment.

**Buckwheat, California / Hasardia / Monkey flower / Tobacco, tree**—For partial control of these species, apply a 0.75- to 1.5-percent solution of this product as a foliar spray with hand-held equipment. Thorough coverage of foliage is necessary for best results.

**Castor bean**—For control, apply a 1.5-percent solution of this product with hand-held equipment.

**Catsclaw**—For partial control, apply a 1.2- to 1.5-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 / Sweetgum / Prunus**—For control, apply 3 to 7.5 pints of this product per acre as a broadcast spray or as a 1- to 1.5-percent solution with hand-held equipment.

**Coyote brush**—For control, apply a 1.2- to 1.5-percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed.

**Dogwood / Hickory**—For partial control, apply a 1- to 2-percent solution of this product with hand-held equipment or 6 to 7.5 pints per acre as a broadcast spray.

**Eucalyptus, bluegum**—For control of eucalyptus resprouts, apply a 1.5-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.

**Knotweed; Japanese, Giant (*Polygonum cuspidatum* and *P. sachalinense*) Stem Injection.** Apply 0.18 fluid ounce (5 milliliters) of this product injected below the 2nd node above the ground of each stem in the clump. Use suitable equipment that must penetrate into the internode region.

**Cut Stem.** Cut stems cleanly just below the 2nd or 3rd node above the ground. Immediately apply 0.36 fluid ounce (10 milliliter) of a 50-percent solution of this product into the 'well' or remaining internode. Ensure that removed upper plant material is carefully gathered and discarded so that it will not contact soil and regenerate plants from sprouting buds. Use of a bio-barrier such as cardboard, plywood or plastic sheeting is recommended. The combined total for all treatments must not exceed 8 quarts per acre. At 5 milliliters per stem, 8 quarts should treat about 1500 stems

**Kudzu**—For control, apply 6 pints of this product per acre as a broadcast spray or as a 1.5-percent solution with hand-held equipment. Repeat applications will be required to maintain control.

**Maple, red**—For control, apply as a 0.75- to 1.2-percent solution with hand-held equipment when leaves are fully developed. For partial control, apply 2 to 7.5 pints of this product per acre as a broadcast spray.

**Maple, sugar / Oak, northern pin, red**—For control, apply as a 0.75- to 1.2-percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed.

**Peppertree, Brazilian (holly, Florida) / Waxmyrtle, southern**—For partial control, apply this product as a 1.5-percent solution with hand-held equipment.

**Poison ivy / Poison oak**—For control, apply 6 to 7.5 pints of this product per acre as a broadcast spray or as a 1.5-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 0.75-percent solution with hand-held equipment. Treatments should be made prior to leaf deterioration by leaf-feeding insects.

**Sage, black / Sage brush, California / Chamise / Tallowtree, Chinese**—For control of these species, apply a 0.75-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.

**Saltcedar**—For partial control, apply a 1- to 2-percent solution of this product with hand-held equipment or 6 to 7.5 pints per acre as a broadcast spray. For control, apply a 1- to 2-percent solution of this product mixed with 0.25-percent Arsenal with hand-held equipment. For control using broadcast applications, apply 3 pints of this product in a tank mix with 1 pint of Arsenal to plants less than 6 feet tall. To control saltcedar greater than 6 feet tall using broadcast applications, apply 6 pints of this product in a tank mix with 2 pints of Arsenal.

**Willow**—For control, apply 4.5 pints of this product per acre as a broadcast spray or as a 0.75-percent solution with hand-held equipment.

**Other woody brush and trees listed in this label**—For partial control, apply 3 to 7.5 pints of this product per acre as a broadcast spray or as a 0.75- to 1.5-percent solution with hand-held equipment.

## 10.0 LIMIT OF WARRANTY AND LIABILITY

Monsanto Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet (“Directions”) when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

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