#### 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.

2119514-25



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

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

EPA Reg. No. 524-343

2009-2

GROUP 9 HERBICIDE

Read the entire label before using this product,

Use only according to label instructions.

Not all products listed 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 UMITATIONS.

#### PRODUCT INFORMATION

### 1.0 INGREDIENTS

ACTIVE INGREDIENT

\*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).

### **7.0 IMPORTANT PHONE NUMBERS**

FOR PRODUCT INFORMATION OR ASSISTANCE IN USING THIS PRODUCT.

CALL TOLL-FREE, 1-800-332-3111

IN CASE OF AN EMERGENCY INVOLVING THIS PRODUCT, OR FOR MEDICAL ASSISTANCE, CALL COLLECT, DAY OR NIGHT, (314) 594-4000.

### **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 equatic weeds can result in oxygen depletion or loss due to decomposition of dead plants. This oxygen loss can cause fish suffecation.

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, fibergrass, plastic or plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALYANIZED 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, Supplemental labeling can be found on the <a href="https://www.cfms.net">www.cfms.net</a> or <a href="https://www.cfms.net">www.greenbook.net</a> websites or obtained by contacting your Authorized Monsanto Retailer or Monsanto Company representative. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

### **⊿**.0 STORAGE AND DISPOSAL

Proper posticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage and disposal.

PESTICIPE 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 room 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. Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to answert soills and contamination.

PESTICIDE DISPOSAL: To avoid wastes, use all material in this container, including rinsate, by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal programs. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable Federal, state and local regulations and procedures.

CONTAINER HANDLING AND DISPOSAL: See container label for container handling and disposal instructions and refilling limitations.

# 5.0 GENERAL INFORMATION (How This Product Works)

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

Time to Symptoms: This product moves through the plant from the point of foliage contact to and into the root system. 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. Effects are visible on most annual weeds 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.

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 "WEEDS CONTROLLED" sections for specific weed instructions. Always use the higher product application rate in the labeled range

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

### 6.5 Surfactant

This product requires the use of a nonionic surfactant unless otherwise specified. When using this product, unless otherwise specified, 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 for best results. Carefully observe all cautionary statements and other information appearing in the surfactant label.

# **6**.6 Colorants or Dyes

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 instructions.

### 6.7 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 precautionary 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 MAKAGEMENT

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 determines 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 LABELING FOR AERIAL APPLICATIONS IN THAT STATE OR COUNTY FOR SPECIFIC INSTRUCTIONS, RESTRICTIONS AND REQUIREMENTS.

This product, when tank mixed with disamba, may not be applied by air in California. Only 2,4-D amine formulations may 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 labeled 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 eutermost 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 laversions" sections of this label).

#### Controlling Droplet Size

- Votume: 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.
- Nezzle orientation: Orienting nozzles so that the spray is released backwards, parallel
  to the air stream, 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.
- Beem 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 aquipment 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.

#### Tomperature and Humidity

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

#### Temperatura 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 leterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good verticat air mixing.

#### Sensitive Area

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

For broadcast ground applications, unless otherwise specified in this label or in separate supplemental labeling or Fact Sheets published by Monsanto, use this product at the rate of 1.5 to 3 pints per acre for annual weeds, 3 to 7.5 pints per acre for perential weeds and 3 to 7.5 pints per acre for woody brush and trees. 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 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 overage. Carefully select proper nozzles to avoid spraying a fine mist. For best results with ground application equipment, use flat-fan nozzles. Check spray pattern for even distribution of spray droplets.

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.

#### For Control of Cordgrass (Spartina spp.)

The presence of debris and silt on the surface of cordgrass plants will reduce product performance. It may be necessary to wash targeted plants prior to application to improve herbicide uptake. Where cordgrass has been cut or mowed prior to application, allow significant regrowth before application to ensure adequate interception and uptake of the herbicide solution. Rainfall within 2 hours or immersion within 4 hours after application may reduce effectiveness.

Prior to application, survey the areas to be treated to determine if shellfish beds exist within the intended treatment area. Wait either until shellfish have been harvested before application is made or do not harvest shelffish for 14 days following treatment.

Add 1 to 2 quarts or more of nonionic surfactant or other adjuvant approved for use on aquatic sites and compatible with this product per 100 gallons of spray solution for broadcast applications (ground or air) and when using optical sensing application equipment.

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

APPLICATION: Under ideal application conditions, that is, where silt and debris are not present on plant surfaces, good spray coverage is achievable, target plants are actively growing and labeled rates and application volumes are used, allow at least 4 hours drying time before plants are covered by tidewater. Where one or more of these conditions are not met, schedule applications to allow at least 5 hours drying time before plants are covered by tidewater. Do not apply when wind speed at the application site exceed 10 miles per hour.

**Breadcast Application (Ground):** Apply 2 to 8 quarts of this herbicide in 5 to 100 gallons of spray solution per acre. For best results, complete coverage of cordgrass clumps is required.

Broadcast Application (Greend/Optical Sensing Application Equipment): Apply 2 to 8 quarts of this product in 5 to 100 gallons of spray solution per acre using equipment designed and calibrated to deliver spray solution only when configrass plants are present and detected by optical sensors. For best results, complete coverage of configrass clumps is required.

Hand-Held Backpack or High-Volume Equipment: Apply a 5 to 8 percent solution of this product. Ensure that complete coverage of cordgrass clumps is achieved. Do not spray to the point of runoff.

Broadcast Application (Air): Apply 2 to 8 quarts of this product in 5 to 10 gallons of spray solution per acre. Meintain at least a 50-foot buffer between commercial shefflish beds and treated areas. The potential for spray drift is dependent upon weather- and equipment-related factors. The applicator must be familiar with local wind patterns and monitor and record temperature and wind speed prior to and periodically during application. Schedule application in order to allow at least 5 hours before treated plants are covered by tidewater.

#### For Control of Giant Salvicia

For control of Giant Salvinia, this product may be applied as a 2.0% v/v spray-to-wet solution with 0.5 to 2.0% v/v of a nonionic surfactant containing at least 70 percent active ingredient. Ensure thorough coverage when using spray-to-wet treatments using hand-held equipment.

For broadcast applications, apply 3 to 3.75 quarts of this product with an aquatic approved surfactant system containing 0.1% v/v nonionic organosilicone and 0.25% v/v nonionic spreader sticker surfactant in 3 to 40 gallons per acre as a broadcast treatment.

Allow at least 3 days after application before disturbing treated vegetation. This product does not control plants which are completely submerged or have a majority of their foliage under water.

### **8.2** Hollow Stem Injection

This product may be applied through hand-heid injection devices that deliver labeled amounts of this product into targeted hollow stem plants growing in any aquatic or non-crop site specified on this label. For control of the following hollow stem plants, follow the use instructions below:

#### Castorbean (Ricinus communis)

inject 4 mL/plant of this product into the lower portion of the main stem.

#### Hemleck, Poison (Conium maculatum)

Inject one leaf came per plant 10 to 12 inches above root crown with 5 mL of a 5% v/v solution of this product.

#### Hegweed, Glant (Heracleum mantegazzianum)

Inject one leaf cane per plant 12 inches above root crown with 5 mi. of a 5% v/v solution of this product.

#### Horsetail, Field (Equisetum arvense)

injectione segment above the root grown with 0.5 mL/stem of this product. Use a small syringe that calibrates to this rate.

Iris, Yellow Flag (Iris pseudocorus)

Cut flower stems with clippers 8 to 9 inches above the root crown. Use a cavity needle that is pushed into the stem center and then slowly removed as 0.5 mL/stem of this product is injected into the stem.

Knotweed, Bokemian (Polygonum bohemicum),

Knotweed, Glant (Polygonum sachalinense), and

Kastweed, Japanese (Polygonum cuspidatum)

Inject 5 mL/stem of this product between second and third intermode.

#### Reed, Giawt (Arundo donex)

Inject 6 mL/stem of this product between second and third internode.

#### Thistie, Canada (Cirsium 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 slowly removed as 0.5 mL/stem of this product is injected into the stem.

NOTE: Based on the maximum annual use rate of glyphosate for these non-crop sites, the combined total for all treatments must not exceed 8 quarts of this product per acre. At 5 mL per stem, 8 quarts should treat approximately 1500 stems.

### 8.3 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 resprauts 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 *Allanthus 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.

# 8.4 General Non-crop Areas and Industrial Sites

Use in areas such as airports, apartment complexes, commercial sites, ditch banks, driveways, dry drithes, dry canais, fencerows, forestry sites, golf courses, graenhouses, industrial sites, humber yards, manufacturing sites, municipal sites, natural areas, office complexes, crimentals, parks, parking areas, pastures, petroleum tank farms and pumping installations, railroads, rangeland, recreational areas, residential areas, rights-of-way, readsides, schools, sod or turf seed farms, sports complexes, storage areas, substations, utility sites, warehouse areas, and wildlife management areas.

#### General Wood Control, Trim-and-Edge and Sare 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, turigrass (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 MOXTURES: This product may be tank mixed with the following products. Refer to these product labels for approved non-crop sites and application rates. Read and carefully observe the cautienary statements and all other information appearing on the labels of all herbicides used. Use according to the most restrictive precautionary statements for each product in the mixture.

Arsenal Outrider® Barricade 65WG Pendulum 3.3 EC Certainty® Pendulum WDG diuron\* Plateau Endurance Princeo DF Escort XP Princep Liquid Garlon 3A Ronster 50 WP Garlon 4 Sahara Hvvar X simazine\* Karmex Surfian Krovar I DF Telar **Gust XP** 2.4-0\*

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

<sup>\*</sup>User is responsible for ensuring that tank mixtures with products containing this generic active ingredient may be made provided the specific product is registered for this use.

### 9.0 WEEDS CONTROLLED

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.

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 application 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 IMPORMATION" and "MIDDING" 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 rats for tough-to-control species or for weeds over 24 inches tall.

Anoda, spurred	Lamb's-quarters*	
Balsamapple**	Lettuce, prickly*	
Barley*	Mannagrass, eastern*	
Barley, littie*	Mayweed	
Barnyardgrass*	Medusahead*	
Bassia, fivehook		
Bittercress*	Morningglory <i>(Ipomoea spp)</i> Mustard, blue*	
Bluegrass, annual*	Mustard, tansy*	
Bluegrass, bulbous*	Mustard, tumble*	
Brome, downy*	Mustard, wild*	
Brome, Japanese*	Nightshade, black*	
Broomsedge	Oats	
Buttercup*	Panicum, browntop*	
Castorbean	Panicum, falt*	
Cheatgrass*	Panicum, Texas*	
Cheeseweed	Pennycress, field*	
(Malva parviflora)	Pepperweed, Virginia*	
Chervil*		
Chickweed*	Pigweed* Puncturevine	
Cocklebur*	Purslane, common	
Copperleaf, hophombeam	Pusley, Florida	
Copperient, Virginia	Ragweed, common*	
Coreopsis, plains/tickseed*	Ragweed, giant	
Com*	Rice, red	
Crabgrass*	Rocket, London*	
Cupgrass, woolly*	Rocket, yellow	
Dwarfdandelion*	Rys*	
Eclipta*	Ryegrass*	
Faisedandelion*	Sandbur, field*	
alseflax, smallseed*	Sesbania, hemp	
iddianack	Shattercane*	
ilares	Shepherd's-purse*	
leabane, annual*	Sicklepod	
Fleabane, hairy	•	
(Conyza bonariensis)*	Signalgrass, broadleaf* Smartweed, ladysthumb*	
leabane, rough*	Smartweed, Pennsylvania*	
oxtail*	Sorghum, grain (milo)*	
oxtail, Carolina*	Sowthistle, annual	
Geranium, Carolina	Spanishneedles***	
ioatgrass, jointed*	Spaedwell, com*	
Goosegrass	Speedwell, purstane*	
Groundsel, common*	Sprangletop*	
lenbit	Spurge, annual	
orseweed/Marestail	Spurge, prostrate*	
(Conyza canadensis)	Spurge, prostrate*	
tchgrass*		
ohnsongrass, seedling	Spurry, umbrella* Starthistle, yellow	
unglerice	Stinkgrass*	
Indiweed	Sunflower*	
	Suniterial	

Teaweed/prickly sida

Kochia

Thistle, Russian	Wild cats*
Velvetleaf	Witchgrass
Wheet	

- \*When using field broadcast equipment (aerial applications or boom sprayers using flat-fan nozzles) these species with the 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 labeled 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 specified 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		
(Ammophila arenaria)	_	3.5
Bentgrass*	1.0	1.5
Bermudagrass	4.0	1.5
Bermudagrass, water		
(knotgrass)	1.0	1.5
Bind <del>we</del> ed, 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
Ganarygrass, reed	1.5 ~ 2.3	0.75
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, hamp	3.0	1.5
Fescue (except tall)	2.3 - 3.75	1.5
Fescue, tall	2.3	1.0
Guineagrass Unadealte paine	2.3	0.75
Hemlock, poison Horsenettle	1.5 - 3.0	0.75 - 1.5
	2.3 – 3.75	1.5
Horseradish	3.0	1.5
icepiant	1.5	1.5
lvy; German, cape Jerusalem artichoke	1.5 – 3.0	0.75 1.5
Johnsongrass	2.3 - 3.75	1.5
Kikuyugrass	1.5 – 2.3	0.75
Knapweed	1.5 — 2.3 3.0	0.75
Lantana	3.0	1.5
Lespedeza	_ 2.3 - 3.75	0.75 — 1.0 1.5
Loosestrife, purple	2.0	
Lotus, American	2.0	1.0 – 1.5 0.75
Maidencane	2.0 3.0	
Milkweed, common	2.3	0.75
Muhly, wirestem	2.3 1.5 – 2.3	1.5
Mullein, common	2.3 - 3.75	0.75
Napiergrass	2.3 - 3.75 2.3 - 3.75	1.5 1.5
Nightshade, silverleaf	2.3 - 3.75 3.0 - 3.75	1.5
Nutsedge; purple, vellow	3.0 – 3.75 2.3	0.75
Orchardgrass	2.3 1.5 – 2.3	0.75 0.75
Pampasgrass	2.3 – 2.5 2.3 – 3.75	1.5
	1.3 - 3.72	1.0

After application, visual symptoms will be slow to appear and may not occur for 3 or more weeks.

Waterhyacinth—Apply 2.5 to 3 quarts 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, viscously 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 fail color changes occur. Thorough coverage is necessary for best control.

Other perexnials listed on this label—Apply 2.3 to 3.75 quarts 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 therough 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 undestrable deciduous species are acceptable provided no major leaf drop has occurred. Reduced performance may result if fall treatments are made following a frost.

		HAND-HELD
	BROADCAST RATE	SPRAY-TO-WET
WEED SPECIES	(QT/A)	% 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 (Bearmat)*	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
Castorbean	-	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* Elderberty	3.0 - 3.75	1.0 - 2.0
Elm*	1.5 1.5 – 3.75	0.75
Eucalyptus	1.5 - 5.75	0.75 – 1.5
Galiberty		1.5
Gorse*	1.5 - 3.75	0.75 - 1.5
Hackberry, western	1.5 - 3.75	0.75 - 1.5
Hasardia*	1.5 – 3.75 1.5 – 3.0	0.75 - 1.5 0.75 - 1.5
Hawthorn	1.5 - 2.3	0.75 - 1.5 0.75 - 1.2
Hazel	1.5 - 2.5	0.75 - 1.2
Hickory*	3.0 – 3.75	1.0 - 2.0
Honeysuckle	2.3 - 3.0	
Hornbeam, American*		0.75 – 1.2
	1.5 3.75	0.75 – 1.5
Huckleberry	1.5 - 3.75	0.75 - 1.5
ivy, poison	3.0 - 3.75	1.5

Knotweed; Bohemian,		
Giant, Japanese**	_	_
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
Mapie, sugar	_	0.75 - 1.2
Maple, vins*	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, poison	3.0 - 3.75	1.5
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
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
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 Myrtie	_	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
Trumpetcreeper	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, California*		1,5

<sup>\*</sup>Partial control

Alder / Blackberry / Dewberry / Honeysuckle / Oak, Pest / Raspberry—For control, apply 2.3 to 3 quarts per acre as a broadcast spray or as a 0.75- to 1.2-percent solution with hand-held equipment.

Aspen, Quaking / Hawthern / Trumpetcreeper—For control, apply 1.5 to 2.3 quarts 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 / Satmonberry / Thimbleberry**—For control, apply 1.5 quarts 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.

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

Cataclaw—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 / Calx, Seutkern Red / Sweet Gem / Prenus—For control, apply 1.5 to 3.75 quarts of this product per acre as a broadcast spray or as a 1- to 1.5-percent solution with hand-held equipment.

<sup>\*\*</sup>Refer to specific instructions below