**Personal Protective Equipment (PPE)**

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

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

**User Safety Recommendations**

Users should:
- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**Environmental Hazards**

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

**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 Supplemental Labeling.

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

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

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coversalls, chemical resistant gloves (CPR Chemical Resistance Category AI 8 mils in thickness or greater composed of materials such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber, shoes plus socks and protective eyewear.

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

**Stage of Weeds:** Annual weeds are easiest to control when they are small. Best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity. Refer to the “ANNUAL WEEDS”, “PERENNIAL WEEDS” and “WOODY BRUSH AND TREES RATE TABLES” for recommendations for specific weeds.

**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.

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

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

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

**Annual Maximum Use Rate:** Except as otherwise specified in a crop section of this label, the combined total of all treatments must not exceed 8 quarts of this product per acre per year. For applications in non-crop sites or in tree, vine, or shrub crops, the combined total of all treatments must not exceed 10.6 quarts of this product per acre per year. The maximum use rates stated throughout this product’s labeling apply to this product combined with the use of all other herbicides containing glyphosate or sulfosate as the active ingredient, whether applied as mixtures or separately. Calculate the application rates and ensure that the total use of this and other glyphosate or sulfosate containing products does not exceed stated maximum use rate.

**Non-Agricultural Use Requirements**

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

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

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

Keep container closed to prevent spills and contamination.

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

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

See container label for STORAGE AND DISPOSAL instructions.

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

**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.

**Stage of Weeds:** Annual weeds are easiest to control when they are small. Best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity. Refer to the “ANNUAL WEEDS”, “PERENNIAL WEEDS” and “WOODY BRUSH AND TREES RATE TABLES” for recommendations for specific weeds.

**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.

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

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

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

- **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.

- **User 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 labeling.**

- **Annual Maximum Use Rate:** Except as otherwise specified in a crop section of this label, the combined total of all treatments must not exceed 8 quarts of this product per acre per year. For applications in non-crop sites or in tree, vine, or shrub crops, the combined total of all treatments must not exceed 10.6 quarts of this product per acre per year. The maximum use rates stated throughout this product’s labeling apply to this product combined with the use of all other herbicides containing glyphosate or sulfosate as the active ingredient, whether applied as mixtures or separately. Calculate the application rates and ensure that the total use of this and other glyphosate or sulfosate containing products does not exceed stated maximum use rate.

**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 on the carrier source. Use approved anti-back-siphoning devices when required by state or local regulations. During mixing and application, foaming or foamed water in 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 need, use an approved anti-foam or defoaming agent.

**6.2 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 ammonium sulfate is used add it slowly through the screen into the tank. Continue agitation. Ensure that dry ammonium sulfate is completely dissolved in the spray tank before adding other products.
4. 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.
5. 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.
6. If an emulsifiable concentrate formulation is used, premix one part flowable concentrate with two parts water. Add diluted mixture slowly through the screen into the tank. Continue agitation.
7. Continue filling the spray tank with water and add the required amount of this product near the end of the filling process.
8. If a nonionic surfactant is used, add it to the spray tank before completing the filling process.
9. Add individual formulations to the spray tank as follows: wettable powder, flowable, emulsifiable concentrate, drift reduction additive, water-soluble liquid followed by surfactant.

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

Keep by-pass line 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.
For use in knapsack sprayers, it is suggested that the recommended amount of this product be mixed with water in a larger container. Fill sprayer with the mixed solution.

Nonionic surfactants (NIS) or wetting agents that are labeled for use with herbicides may be added to the spray solution. Do not reduce rates of this herbicide when adding surfactants. Read and carefully observe cautionary statements and other information appearing on the additives label.

When adding additional surfactant, use 0.5 percent surfactant concentration (2 quarts per 100 gallons of spray solution) when using surfactants that contain at least 70 percent active surfactant, or a 1 percent surfactant concentration (4 quarts per 100 gallons of spray solution) for those surfactants containing less than 70 percent active surfactant.

The addition of 1 to 2 percent dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this product, particularly under hard water conditions. Do not exceed 1 quart per 100 gallons of spray solution for those surfactants containing less than 70 percent active surfactant. Thoroughly rinse the spray system with clean water after use to reduce corrosion.

NOTE: When using ammonium sulfate, apply this product at rates recommended in this label. Lower rates will result in reduced performance. The use of ammonium sulfate as an additive does not preclude the need for additional surfactant.

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

Drift reduction additives may be used with all equipment types, except wiper applicators, sponge bars and Controlled Droplet Applicator (CDA) equipment. 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.

This product plus dicamba tank mixtures may not be applied by air in California. Ensure uniform application.—To avoid streaked, uneven or overlapped application, use appropriate marking devices.

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

Use the recommended rates of this herbicide in 3 to 15 gallons of water per acre unless otherwise specified on this label. Unless otherwise specified, do not exceed 1 quart per acre. Refer to the individual use area sections of this label for recommended volumes, application rates, and further instructions.

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

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

1. The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward, parallel with the air stream and never be pointed downwards more than 45 degrees. 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 downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upward. Swath adjustment 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 than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.

**Temperature Inversions**

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

**Sensitive Areas**
The 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).

Avoid direct application to any body of water.

**Aircraft Maintenance**
Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. PROPER USE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. LANDING GEAR IS MOST SUSCEPTIBLE. The maintenance of an organic coating (paint), which meets aerospace specification MIL-C-38413, may prevent corrosion.

**Ground Broadcast Equipment**
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 spray nozzles. Check for even distribution of spray droplets.

**Hand-Held or High-Volume 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 recommended rates and timing, refer to the “ANNUAL WEEDS—Hand-Held or High-Volume Equipment” section of this product label.

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

In cropping systems, hooded sprayers, shielded sprayers, and wipers may be used in row middles (in between rows of crop plants) where any dripping or leaking will not contact crop foliage. When used under “TYPES OF APPLICATION” in the crop sections of this product’s labeling, such equipment must be capable of preventing all crop contact with herbicide solutions and operated without leakage of spray mists or dripping onto crop. Wipers over-the-top of crops may be used only when specifically recommended in this product’s labeling.

**Avoid Contact of Herbicide with Desirable Vegetation.**
Contact of the herbicide solution with desirable vegetation may result in damage or destruction. Applicators used above desirable vegetation 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 may result in discoloration, stunting or destruction.

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

**Recirculating Spray System**
A recirculating spray system directs the spray solution onto weeds growing above desirable vegetation, while spray solution not intercepted by weeds is collected and returned to the spray tank for reuse.

**Shielded and Hooded Applicators**
When applied under the conditions described in the following paragraphs for shielded and hooded applications, this product at recommended rates will control those weeds listed in the “ANNUAL WEEDS RATE TABLE” and “PERENNIAL WEEDS RATE TABLE” sections of this label. A hooded sprayer is a type of shielded applicator where the spray pattern is fully enclosed including top, sides, front and back, thereby shielding the crop from the spray solution. Keep shields on these sprayers adjusted to protect desirable vegetation. When applying to crops grown on raised beds, ensure that the hood is designed to completely enclose the spray solution. If necessary, extend the front and rear flaps of the hoods to reach the ground in deep furrows. EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF HERBICIDE WITH DESIREABLE VEGETATION.

This equipment must be set up and operated in a manner that avoids bouncing or raising the hoods off the ground in any way. If the hoods are raised, spray particles may escape and come into contact with the crop, causing damage or destruction of the crop. Avoid operation on rough or sloping ground where the spray hoods might be raised off the ground.

Use hoods designed to minimize excessive dripping or run-off down the insides of the hoods. A single, low pressure/low drift flat-fan nozzle with an 80 to 95 degree spray angle positioned at the top center of the hood is recommended. Spray volume should be 20 to 30 gallons per acre.

These procedures will reduce the potential for crop injury:

- The spray hoods must be operated on the ground or skimming across the ground.
- Leave at least an 8-inch untreated strip over the drill row. For example, if the crop row width is 36 inches, the maximum width of the spray hood should be 30 inches.
- Maximum tractor speed: 5 miles per hour to avoid bouncing of the spray hoods.
- Maximum wind speed: 10 miles per hour.
- Use low-drift nozzles that provide uniform coverage within the treated area.

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

**Wiper Applicators**
When applied under the conditions described in the following paragraphs, this product CONTROLS many weeds, including volunteer corn, Texas panicum, common yoe, shattercane, sicklepod, spanishheneedles and brassily sturbit; and SUPPRESSES many weeds including Florida beggarweed, Bermudagrass, hemp dogbane, dogfennel, guineagrass, johnsongrass, milletweed, silverleaf nightshade, redroot pigweed, giant ragweed, smooth sunflower, Canada thistle, musk thistle, vasesegrasse, velvetleaf.

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 two 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 dry- ing 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.

Do not add surfactant to the herbicide solution.

**Rope or Sponge Wick Applicators—** Solutions ranging from 33 to 75 percent of this product in water may be used. Apply this solution to weeds listed in this section.

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

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

**CDA Equipment**
The rate of this product applied per acre by vehicle-mounted CDA equipment must not be less than the amount recommended in this label when applied by conventional broadcast equipment. For vehicle-mounted CDA equipment, apply 2 to 15 gallons of water per acre.

For the control of annual weeds with hand-held CDA units, apply a 20 percent solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 1.5 miles per hour (1 quart per acre). For the control of perennial weeds, apply a 20 to 40 percent solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 0.75 miles per hour (2 to 4 quarts per acre).

Controlled droplet application equipment produces a spray pattern that is not easily visible. Extreme care must be exercised to avoid spray or drift contacting the foliage or any other green tissue of desirable vegetation, as damage or destruction may result.

**Annual and Perennial Crops (Alphabetical)**

**Note:** This section gives general directions that apply to all listed crops within section & group listed alphabetically below. Use the individual crop categories for specific instructions, preharvest intervals, and additional precautions and restrictions. See the “ROUNDUP READY CROPS” section of this label or separately published Supplemental Labeling for instructions for treating Roundup Ready crops.

**Types of Applications:** Chemical Fallow, Preplant Fallow Beds, Preplant, Preemergence, Air-Planting, Hooded Sprayers in Row-Middles, Shielded Sprayers in Row-
Middles, Wiper Applications in Row-Middles, and Post-Harvest Treatments.

GENERAL USE INSTRUCTIONS: Apply this product during fallow intervals preceding planting, prior to planting or transplanting, at-planting, or preemergent to annual and perennial crops listed in this label, except where specifically limited. For any crop not listed in this label, applications must be made at least 30 days prior to planting. Unless otherwise specified, weed control applications may be made according to the rates listed in the “ANNUAL WEEDS”, “PERENNIAL WEEDS”, and “WOODY BRUSH AND TREES RATE TABLES” in this label. Repeat applications may be made up to a maximum of 8 quarts per acre per year.

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

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

GENERAL PRECAUTIONS, RESTRICTIONS: Avoid contact of herbicide with foliage, green shoots or stems, bark, exposed roots (including those emerging from plastic mulch), or fruit of crops because severe injury or destruction may result. When making preemergence and at-planting applications, applications must be made before crop emergence to avoid severe crop injury. Broadcast applications made at emergence will result in injury or death to emerged seedlings. Apply before seed germination in coarse sandy soils to further minimize the risk of injury. Unless otherwise specified in this product’s labeling, treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest. Post-harvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop. See “APPLICATION EQUIPMENT AND TECHNIQUES” section of this label for additional information.

In crops where spot treatments are allowed, do not treat more than 10 percent of the total field to be harvested. The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside the target area for the same reason. For broadcast postemergent treatments, do not harvest or feed treated vegetation for 8 weeks following application, unless otherwise specified.

8.1 Cereal and Grain Crops

LABELED CROPS: Barley, Buckwheat, Millet (pearl, proso), Oats, Rice, Ryegrass, Teff, Teosinte, Triticale, Wheat (all types), Wild Rice.

PRECAUTIONS, RESTRICTIONS: Do not treat rice fields or levees when field contains water.

TYPES OF APPLICATIONS: Those listed in Section 8.0 plus the following: Red Rice Control Prior to Planting Rice.

Preplant, Preemergence, At-Planting

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

Red Rice Control Prior to Planting Rice

USE INSTRUCTIONS: Apply 1.5 quarts of this product in 5 to 10 gallons of water per acre. Fluff fields prior to application to obtain uniform germination and stand of red rice. Make application when the majority of the red rice plants are in the 2-leaf stage and no more than 4 inches tall. Red rice plants with less than 2 true leaves may be only partially controlled. PRECAUTIONS, RESTRICTIONS: Avoid spraying during low humidity conditions, as reduced control may result. Do not treat rice fields or levees when the fields contain floodwater. Do not re-flod treated fields for 8 days following application.

Spot Treatment (except Rice)

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

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

Over-the-Top Wiper Applicators (Feed Barley and Wheat only)

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

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

Preharvest (Feed Barley and Wheat only)

USE INSTRUCTIONS: This product provides weed control when applied prior to harvest of wheat or feed barley. For wheat, apply after the hard-dough stage of grain (30 percent or less grain moisture). For feed barley, apply after the hard-dough stage and when the grain contains 20 percent moisture or less. Shuckle may be grazed immediately after harvest. This product may be applied using either aerial or ground spray equipment. For ground applications, apply this product in 10 to 20 gallons of water per acre. For aerial applications, apply this product in 3 to 10 gallons of water per acre.

PRECAUTIONS, RESTRICTIONS: Do not apply more than 1 quart of this product per acre. Allow 7 days between application and harvest, feeding or grazing. Preharvest application is not recommended for wheat or barley grown for seed, as a reduction in germination or vigor may occur.

Post-Harvest

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

PRECAUTIONS, RESTRICTIONS: For any crop not listed on this label, applications must be made at least 30 days prior to planting the next crop. Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.

8.2 Corn

TYPES OF CORN: Field Corn, Seed Corn, Silage Corn, Sweet Corn and Popcorn.

TYPES OF APPLICATIONS: Those listed in Section 8.0 plus the following: Preharvest. For Roundup Ready corn, see the “ROUNDUP READY CORN” section of this label.

Preplant, Preemergence, At-Planting

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

TANK MIXTURES: This product may be tank mixed with the following products provided that the specific product is registered for application prior to planting corn. Apply these tank mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre.

2,4-D Atrazine

Atrazine

Balance

Bencarz

Bicrep Magnum

Bicrep II Magnum

Bulb

Degree

Degree Xtra

Distinct

Dow

Duall MAGNUM

Duall II MAGNUM

Epic

Frontier/Outlook

FFA

Foliar

Growth Enhancer

Harnessed

Harness Xtra

Harvest

Heather Xtra

Herbicide

Herbicides

Herbicides

Herbicide

Herbicide

Herbicide

Herbicide

Herbicide

Herbicide

Herbicide

Herbicide

Herbicide

Herbicide

Herbicide

Herbicide

Herbicide

Herbicide

Herbicide

Herbicide

Herbicide
PRECAUTIONS, RESTRICTIONS: Allow a minimum of 7 days between application and harvest, feeding or grazing. Preharvest application is not recommended for corn grown for seed, as a reduction in germination or vigor may occur.

Post-Harvest

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

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.

8.3 Cotton

TYPES OF APPLICATIONS: Those listed in Section 8.0 plus the following: Selective Equipment, Spot Treatment, Preharvest.

Preplant, Preemergence, At-Planting

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

TANK MIXTURES: This product may be tank mixed with the following products provided that the specific product is registered for application prior to planting cotton. Apply these tank mixtures in 10 to 20 gallons of water per acre.

Caparol® Dual II MAGNUM
Clarity Karmex®
Command Metoluron®
Cotton-Pro® Prowl
Diuron Staple®
Zonal® Dual Magnum

PRECAUTIONS/RESTRICTIONS: Refer to individual product labels for rates, restrictions, precautionary statements and preplant intervals.

Hooded Sprayer, Selective Equipment

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

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

Spot Treatment

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

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

Preharvest

USE INSTRUCTIONS: This product provides weed control and cotton regrowth inhibition when applied shortly after harvest of cotton. For weed control, apply at rates given in the “ANNUAL WEEDS”, “PERENNIAL WEEDS” and “WOODY BRUSH AND TREES RATE TABLES” sections of this label. For cotton regrowth inhibition, apply 1 pint to 2 quarts of this product per acre. Apply these tank mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre.

Atrazine Lariat
Bicep II MAGNUM Lasso
Bullet Micro-Tech
Dual II MAGNUM

For difficult-to-control annual weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 2 pints per acre in these tank mixtures. For other labeled annual weeds, apply 1.5 to 2 pints of this product per acre when weeds are less than 6 inches tall, and 2 to 3 pints when weeds are over 6 inches tall. When using nitrogen solutions as the carrier, the use rate may need to be increased for acceptable weed control.

Spot Treatment, Over-the-Top Wiper Applications

USE INSTRUCTIONS: This product may be applied as a spot treatment in grain sorghum. Make spot treatments before heading of milo. This product may be applied with wiper applicators to control or suppress the weeds listed under “Wiper Applicators” in the “Selective Equipment” section of this label.

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

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

Hooded Sprayers

USE INSTRUCTIONS: This product may be used through hooded sprayers for weed control between the rows of milo. Only hooded sprayers that completely encapsulate the spray pattern may be used. See additional instruction for the use of hooded sprayers in the “APPLICATION EQUIPMENT AND TECHNIQUES” section of this label.

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

PRECAUTIONS, RESTRICTIONS: Milo must be at least 12 inches tall, measured without extending leaves. Treat before milo sends tillers between the drill rows. If such tillers are contacted with the spray solution, the main plant may be killed. Contact of this product in such a manner to any vegetation to which treatment is not intended may cause damage. Such damage shall be the sole responsibility of the applicator. Do not graze or feed milo forage or fodder following applications of this product through hooded sprayers. Do not apply more than 1 quart of this product per acre per application and no more than 3 quarts per acre per year for hooded sprayer applications.

8.5 Grain Sorghum (Milo)

TYPES OF APPLICATIONS: Those listed in Section 8.0 plus the following: Spot Treatment, Over-the-Top Wiper Applications, Preharvest.

Preplant, Preemergence, At-Planting

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

TANK MIXTURES: This product may be tank mixed with the following products provided that the specific product is registered for application prior to planting grain sorghum. Apply these tank mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre.

Atrazine Lariat
Bicep II MAGNUM Lasso
Bullet Micro-Tech
Dual II MAGNUM

For difficult-to-control annual weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 2 pints per acre in these tank mixtures. For other labeled annual weeds, apply 1.5 to 2 pints of this product per acre when weeds are less than 6 inches tall, and 2 to 3 pints when weeds are over 6 inches tall. When using nitrogen solutions as the carrier, the use rate may need to be increased for acceptable weed control.

Spot Treatment, Over-the-Top Wiper Applications

USE INSTRUCTIONS: This product may be applied as a spot treatment in grain sorghum. Make spot treatments before heading of milo. This product may be applied with wiper applicators to control or suppress the weeds listed under “Wiper Applicators” in the “Selective Equipment” section of this label.

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

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

Hooded Sprayers

USE INSTRUCTIONS: This product may be used through hooded sprayers for weed control between the rows of milo. Only hooded sprayers that completely encapsulate the spray pattern may be used. See additional instruction for the use of hooded sprayers in the “APPLICATION EQUIPMENT AND TECHNIQUES” section of this label.

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

PRECAUTIONS, RESTRICTIONS: Milo must be at least 12 inches tall, measured without extending leaves. Treat before milo sends tillers between the drill rows. If such tillers are contacted with the spray solution, the main plant may be killed. Contact of this product in such a manner to any vegetation to which treatment is not intended may cause damage. Such damage shall be the sole responsibility of the applicator. Do not graze or feed milo forage or fodder following applications of this product through hooded sprayers. Do not apply more than 1 quart of this product per acre per application and no more than 3 quarts per acre per year for hooded sprayer applications.
Preharvest
USE INSTRUCTIONS: Make applications at 30 percent grain moisture or less.

PRECAUTIONS, RESTRICTIONS: Do not apply more than 2 quarts of this product per acre. As with other herbicides that cause sudden plant death, avoid preharvest applications of this product to milo infected with charcoal rot as lodging can occur. Allow a minimum of 7 days between application and harvest, feeding, or grazing of sorghum. Preharvest application is not recommended for sorghum grown for seed, as a reduction in germination or vigor may occur. The use of this product for preharvest grain sorghum (milo) is not registered in California

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

This product may be applied to grain sorghum (milo) stubble following harvest to suppress or control regrowth. Apply 1 quart of this product per acre for control, or 1.5 pints of this product per acre for suppression.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.

8.6 Herbs and Spices

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

TYPES OF APPLICATIONS: Those listed in Section 8.0 plus the following: Over-the-Top Wiper Applications (Peppermint and Spearmint only), Spot Treatments (Peppermint and Spearmint only).

PRECAUTIONS, RESTRICTIONS: When applying this product prior to transplanting or direct-seeding crops into plastic mulch, care must be taken to remove residues of this product, which could cause crop injury, from the plastic prior to transplanting. Residues can be removed by a single 0.5-inch application of water, either by natural rainfall or via a sprinkler system. Care should be taken to ensure that the water flushes off the plastic mulch and does not enter the transplant holes. For some crops below, it is recommended to make applications 3 days before transplanting or planting.

Over-the-Top Wiper Applications or Spot Treatments (Peppermint and Spearmint only)

USE INSTRUCTIONS: This product may be used as a spot treatment or wiper application in peppermint and spearmint. Apply spot treatments on a spray-to-wet basis with hand-held equipment, such as backpack and knapsack sprayers, hand-guns, hand-wands or any other hand-held or motorized spray equipment used to direct the spray solution to a limited area. In wiper applications, the applicator should be adjusted so that the wiper contact point is at least 2 inches above the crop. Weeds should be a minimum of 6 inches taller than the crop.

PRECAUTIONS, RESTRICTIONS: Allow at least 7 days between application and harvest. Further applications may be made in the same area at 30-day intervals. In spot treatment applications, no more than 10 percent of the total field area to be harvested should be treated at one time. The crop receiving spray in the treated area will be killed. Take care to avoid drift or spray outside the target area for this reason. In wiper applications, contact of the herbicide solution with the crop may result in damage or destruction.

8.7 Oil Seed Crops

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

For Roundup Ready canola, see the “ROUNDUP READY CROPS” section of this label.

TYPES OF APPLICATIONS: Those listed in Section 8.0.

USE INSTRUCTIONS: This product may be applied before, during or after planting oil seed crops. Broadcast applications must be made prior to emergence of the listed oil seed crops. Wiper applicators or hooded sprayers may be used between the rows once the crop is established.

TANK MIXTURES: For sunflowers, a tank mixture with Prowl may be applied before, during or after the crop is established. Wiper applicators or hooded sprayers may be used between the rows once seed crops. Broadcast applications must be made prior to emergence of the crop.

PRECAUTIONS, RESTRICTIONS: Do not apply more than 2 quarts of this product per acre on canola. Do not apply more than 1 quart of this product per acre for sunflowers as a single preplant or preemergence application per year. Do not feed or graze sunflower forage following application of this product.

8.8 Soybeans

TYPES OF APPLICATIONS: Those listed in Section 8.0 plus the following: Spot Treatment, Preharvest, Selective Equipment.

For Roundup Ready soybeans, see the “ROUNDUP READY CROPS” section of this label.

Preplant, Preemergence, At-Planting

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

TANK MIXTURES: Apply these tank mixtures in 10 to 20 gallons of water per acre.

Am®
Amplify®
Assure®
Authority®
Boundary®
Canopy®
Canopy XL®
Command®
Command Xtra®
Domain®
Dual MAGNUM
Dual II MAGNUM
Firstate®
Fusion
Fusion®
Gauntlet®
Lasso
Line
Lorox/Linuron
Lorox Plus®
Micro-Tech
Prowl
Pursuit®
Pursuit Plus®
Reflex®
Scopet®
Sencor/Lexone®
Squadron
Steel®
Valer®

This product may be tank mixed with 2,4-D or 2,4-DB provided that the specific product is registered for application prior to planting soybeans. See the 2,4-D label for intervals between application and planting.

For difficult-to-control annual weed species such as fall panicle, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvanis smutwheat up to 6 inches tall, apply this product at 2 pints per acre in these tank mixtures. For other labeled annual weeds, apply 1.5 to 2 pints of this product per acre when weeds are less than 6 inches tall, and 2 to 3 pints when weeds are over 6 inches tall.

PRECAUTIONS, RESTRICTIONS: Tank mixtures with some of the above listed herbicides may result in reduced weed control due to antagonism. Read and carefully observe the cautionary statements and all other information appearing on the product labels, supplemental labeling or fact sheets published separately for all herbicides used. Use according to the most restrictive directions for each product in the mixture.

Spot Treatment

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

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

Preharvest

USE INSTRUCTIONS: This product provides weed control when applied prior to harvest of soybeans. Apply at rates given in the “ANNUAL WEEDS”, “PERENNIAL WEEDS” and “WOODY BRUSH AND TREES RATE TABLES”. This product may be applied using either aerial or ground spray equipment. Apply after pods have set and lost all green color. Care should be taken to avoid excessive seed shatter loss due to ground application equipment.

PRECAUTIONS, RESTRICTIONS: Do not apply more than 5 quarts per acre of this product for preharvest applications. Do not apply more than 2 quarts per acre of this product by air. Allow a minimum of 7 days between application and harvest of soybeans. Do not graze or harvest treated hay or fodder for livestock feed within 25 days of last preharvest application. (If the application rate is 1 quart per acre or lower, the grazing restriction is reduced to 14 days after last preharvest application.) Preharvest application is not recommended for soybeans grown for seed, as a reduction in germination or vigor may occur.

Selective Equipment

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

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

8.9 Sugarcane

TYPES OF APPLICATIONS: Those listed in Section 8.0.

Preplant, Preemergence, At-Planting

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

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

USE INSTRUCTIONS: This product may be applied as a spot treatment in sugarcane. For control of volunteer or diseased sugarcane, make a 1 percent solution of this product in water and spray to-wet the foliage of vegetation to be controlled. Volunteer or diseased sugarcane should have at least 7 new leaves.

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

Fallow Treatments

USE INSTRUCTIONS: This product may be used as a replacement for tillage in fields that are lying fallow between sugarcane crops. This product may also be used to remove the last stubble of ratoon cane. For removal of last stubble of ratoon cane, apply 4 to 5 quarts of this product in 10 to 40 gallons of water per acre to new growth having at least 7 leaves. Allow 7 or more days after application before tillage. Ground or aerial application equipment may be used. Applications up to 3 quarts per acre may be made by aerial application in fallow sites where there is sufficient buffer to prevent injury due to drift onto adjacent crops. Tank mixtures with 2, 4-D and dicamba may be used.

Hooded Sprayers

USE INSTRUCTIONS: This product may be used through hooded sprayers for weed control within the rows of sugarcane. See the “APPLICATION EQUIPMENT AND TECHNIQUES” section of this label for additional use instructions.

PRECAUTIONS, RESTRICTIONS: Do not allow treated weeds to come into contact with the crop. Droplets, mist, foam or splatter of the herbicide solution settling on the crop may result in discoloration, stunting or destruction. Such damage shall be the sole responsibility of the applicator.

8.10 Vegetable Crops

NOTE: This “VEGETABLE CROPS” SECTION GIVES GENERAL DIRECTIONS THAT APPLY TO ALL LISTED VEGETABLE CROPS WITHIN SECTION 8.10 GROUPED ALPHABETICALLY BELOW. SEE THE INDIVIDUAL CROP CATEGORIES FOR SPECIFIC INSTRUCTIONS, PREHARVEST INTERVALS, PRECAUTIONS AND RESTRICTIONS.

TYPES OF APPLICATIONS: Chemical Fallow, Preplant Fallow Beds, Preplant, Preemergence, Pre-Transplanting Vegetables, At-Planting, Hooded Sprayers in Row-Middles, Shielded Sprayers in Row-Middles, Wiper Applications in Row-Middles, and Post-Harvest, Directed Applications (Non-bearing Ginseng), Over-the-Top Wiper Applications (Rutabagas only).

PRECAUTIONS, RESTRICTIONS: When applying this product prior to transplanting or direct-seeding crops into plastic mulch, care must be taken to remove residues of this product, which could cause crop injury, from the plastic prior to planting. Residues can be removed by a single 0.5-inch application of water, either by natural rainfall or via a sprinkler system. Care should be taken to ensure that the water flushes off the plastic mulch and does not enter the transplant holes. Applications made at emergence will result in injury or death to emerged seedlings.

Avoid contact of herbicide with foliage, green shoots or stems, bark, exposed roots (including those emerging from plastic mulch), or fruit of crops because severe injury or destruction may result. When making preemergence and at planting applications, applications must be made before crop emergence to avoid severe crop injury. Broadcast applications made at emergence will result in injury or death to emerged seedlings. In crops with vines, hooded sprayer, shielded sprayer, and wiper application to row middles should be made prior to vine development otherwise severe injury or destruction may result. Unless otherwise specified in this product’s labeling, treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest. Post-harvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop. See “APPLICATION EQUIPMENT AND TECHNIQUES” section of this label for additional information.

8.10.1 Brassica Vegetables

LABELLED CROPS: Broccoli, Chinese broccoli (gai lon), Broccoli raab (rapin), Brussels sprouts, Cabbage, Chinese cabbage (bok choy), Chinese cabbage (napa), Chinese mustard cabbage (gai choy), Cauliflower, Cabbage broccoli, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens.

8.10.2 Bulb Vegetables

LABELLED CROPS: Garlic, Great-headed garlic, Leek, Onion (dry bulb and green), Welsh Onion, Shallot.

8.10.3 Cucurbit Vegetables and Fruits

LABELLED CROPS: Chayote (fruit), Chinese wasgurum (Chinese preserving melon), Citron melon, Cucumber, Gherkin, Edible gourd (includes hyotan, cucumis, hechima, Chinese okra), Melons (all), Momordica cowa (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (includes cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey ball melon, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon), Pumpkin, Summer squash (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini), Winter squash (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash, watermelon).

PRECAUTIONS, RESTRICTIONS: For Cantaloupe, Casaba melon, Crenshaw melon, Cucumber, Gherkin, Gourds, Honeydew melon, Honey ball melon, Mango melon, Melons (all), Muskmelon, Persian melon, Pumpkins, Squash (summer, winter), and Watermelon, allow at least 3 days between application and planting.

8.10.4 Leafy Vegetables

LABELLED CROPS: Amaranth (Chinese spinach), Arugula (escholtzia), Beet greens, Cardoon, Celery, Chinese celery, Celtuce, Chaya, Chervil, Edible-leaved chrysanthemum, Greenland chrysanthemum, Corn salad, Cress (garden and upland), Dandelion, Dock (seaweed), Dokudami, Endive (escarole), Florence fennel, Gay leek, Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Rhubarb, Spinach, New Zealand spinach, Vine spinach, Swiss chard, Watercress (upland), Water spinach.

PRECAUTIONS, RESTRICTIONS: For Watercress, avoid applications within 3 days prior to seeding and during the period between seeding and emergence to minimize the risk of injury.

8.10.5 Fruiting Vegetables

LABELLED CROPS: Eggplant, Groundcherry (Physalis spp), Pigeon pea, Pepper (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper), Tomatillo, Tomato.

PRECAUTIONS, RESTRICTIONS: For Eggplant, Ground cherry, Pepper (all), and Tomatillo, allow at least 3 days between application and planting. For Tomato, hooded or shielded sprayer applications in row middles are not recommended.

8.10.6 Legume Vegetables ( Succulent or Dried)

LABELLED CROPS: Bean (Lupinus: includes grain lupin, sweet lupin, white lupin, and white sweet lupin), Bean (Phaseolus: includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean), Bean (Vigna: includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese long bean, cow-pea, crowder pea, moth bean, mug bean, rice bean, southern pea, urd bean, yardlong bean), Broad bean (fava), Chickpea (garbanzo), Gaur (Jambos), Labrador bean, Lentil, Pea (Pisum: includes dwarf pea, edible-podded pea, English pea, field pea, garden pea, green pea, snowpea, sugar snap pea), Pigeon pea, Soybean (immature seed), Sword bean.

8.10.7 Root and Tuber Vegetables

LABELLED CROPS: Arracacha, Arrowroot, Chinese artichoke, Jerusalem artichoke, Beet (garden), Burdock, Canna, Carrot, Cassava (bitter and sweet), Celery (Chinese), Chayote (root), Chervil (turnip-rooted), Chicory, Chufa, Dasheen (taro), Galangal, Ginger, Ginseng, Horseradish, Leren, Kava (turnip-rooted), Parsley (turnip-rooted), Parsnip, Potato, Radish, Oriental radish, Rutabaga, Salsify, Black salsify, Spanish salsify, Skirret, Sweet potato, Tapiort, Turmeric, Turnip, Wasabi, Yacon, Yam bean, True yam.

Directed Applications (Non-bearing Ginseng only)

USE INSTRUCTIONS: This product may be used for general weed control in established non-bearing ginseng. Applications may be made with boom equipment, CDA, shielded sprayers, hand-held and high volume wands, lances, and orchard guns or with wiper application equipment.

PRECAUTIONS, RESTRICTIONS: Direct applications so that there is no contact of this product with the ginseng plant. Applications must be made at least one year prior to harvest.

Over-the-Top Wiper Applications (Rutabagas only)

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

PRECAUTIONS, RESTRICTIONS: Allow at least 14 days between application and harvest of rutabagas.

8.11 Miscellaneous Crops

LABELLED CROPS: Aloe vera, Asparagus, Bamboo shoots, Globe artichoke, Okra, Peanut (ground nut), Pineapple, Strawberry, Sugar beet.

TYPES OF APPLICATIONS: Those listed in Section 8.0 plus the following: General Weed Control, Site Preparation, Spot Treatment (Asparagus).

PRECAUTIONS, RESTRICTIONS: Avoid contact of herbicide with foliage, green shoots or stems, bark, exposed roots (including those emerging from plastic mulch), or fruit of crops because severe injury or destruction may result. Unless otherwise specified in this product’s labeling, treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest. Post-harvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop. See “APPLICATION EQUIPMENT AND TECHNIQUES” section of this label for additional information.

General Weed Control, Site Preparation

USE INSTRUCTIONS: This product may be applied for general weed control or for site preparation prior to planting or transplanting crops listed in this section.
PRECAUTIONS, RESTRICTIONS: When applying this product prior to transplanting or direct-seeding crops into plastic mulch, care must be taken to remove residues of this product, which could cause crop injury, from the plastic prior to planting. Residues can be removed by a single 0.5-inch application of water, either by natural rainfall or via a sprinkler system. Care should be taken to ensure that the water flushes off the plastic mulch and does not enter the transplant holes. Applications made at emergence will result in injury or death to emerged seedlings.

Do not apply within a week before the first asparagus spears emerge. Do not feed or graze treated pineapple forage following application.

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

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

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

PRECAUTIONS, RESTRICTIONS: Direct contact of the spray with the asparagus may result in serious crop injury. Select and use recommended types of spray equipment for postemergence post-harvest applications. A directed spray is any application where the spray pattern is aligned in such a way as to avoid direct contact of the spray with the crop. A shielded spray is any application where a physical barrier is positioned and maintained between the spray and the crop to prevent contact of spray with the crop.

9.0 TREE, VINE, AND SHRUB CROPS (Alphabetical)

NOTE: THIS SECTION GIVES GENERAL DIRECTIVES THAT APPLY TO ALL LISTED TREE, VINE, AND SHRUB CROPS WITHIN SECTION 9 GROUPED ALPHABETICALLY BELOW. SEE THE INDIVIDUAL CROP CATEGORIES FOR SPECIFIC INSTRUCTIONS, PREHARVEST INTERVALS, PRECAUTIONS AND RESTRICTIONS.

TYPES OF APPLICATIONS: Preplant (Site Preparation) Broadcast Sprays, General Weed Control, Middles (between rows of trees, vines or bushes), Strips (within rows of trees, vines or bushes), Selective Equipment (Shielded Sprayers, Wiper Applications), Directed Sprays, Spot Treatments, Perennial Grass Suppression, Cut Stump.

Applications may be made with boom equipment, CDA equipment, shielded sprayers, hand-held and high-volume wands, lances, orchard guns or with wiper applicator equipment, except as directed.

GENERAL USE INSTRUCTIONS: This product may be applied in middles (between rows of trees or vines), strips (within rows of trees or vines), and for general weed control or perennial grass suppression in established tree fruit and nut groves, orchards, berries, and vineyards. It may also be used for site preparation prior to planting or transplanting these crops. Apply 1 pint to 5 quarts per acre according to the “ANNUAL WEEDS RATE TABLE” and “PERENNIAL WEEDS RATE TABLE” sections of this label. Utilize rates at the higher end of the recommended range when weeds are stressed, growing in dense populations or are greater than 12 inches tall. Repeat applications may be made up to a maximum of 10.6 quarts per acre per year.

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

GENERAL PRECAUTIONS, RESTRICTIONS: Extreme care must be exercised to avoid contact of herbicide solution, spray, drift or mist with foliage or green bark of trunk, branches, suck-ers, fruit or other parts of trees, canes and vines. Avoid applications when recent pruning wounds or other mechanical injury has occurred. Contact of this product with other than mature brown bark can result in serious crop damage or destruction. Only shielded or directed sprayers may be used in crops with potential for crop contact, and then only where this is sufficiently controlled. For applications in strips (within rows of vines), only selective equipment (directed sprays, hooded sprayers, shielded applicators, or wipers) should be used to minimize the potential for leakage or drift of herbicide sprays onto crop. For berry crops, hooded or shielded sprayers must be fully enclosed including top, sides, front and back. Only wipers or shielded applicators capable of preventing all contact with crop may be used. See “APPLICATION EQUIPMENT AND TECHNIQUES” section of this label for additional directions and precautions.

Allow a minimum of 3 days between application and transplanting.

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

TANK MIXTURES: A tank mixture of this product plus Goal 2XL may be used for annual weeds in middles between rows of citrus crops, tree fruits, tree nuts and vine crops. This mixture is recommended when weeds are stressed or growing in dense populations. 16 to 32 fluid ounces per acre of this product plus 3 to 12 fluid ounces per acre of Goal 2XL will control common cheeseweed (malva) or hairy fleabane (Conyza bonariensis) with a maximum height or diameter of 3 inches, and annual weeds with a maximum height or diameter of 6 inches, including crabgrass, common groundsel, junglerice, common lambsquarters, redroot pigweed, London rocket, common ryegrass, shepherd’s-purse, annual sowthistle, filaree (suppression), horseweed/maneetail (Conyza canadensis), stinging nettle and common purslane (suppression).

Strips (In Rows)
TANK MIXTURES: This product may be applied in rows of tree or vine crops in tank mixtures with the following products:
Devinex® 50 DF
Simazine 4L
Direz 4L
Simazine 80W
Goal 2XL
Sim-Trol® 4L
Karmex DF
Solicam® DF
Krovar® 1
Surflan® AS
Princep Caliber® 90
Surflan 75W

Prowl

Do not apply these tank mixtures in Puerto Rico.

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

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

For suppression of tall fescue, fine fescue, orchardgrass and quackgrass, apply 8 fluid ounces of this product in 10 to 20 gallons of water per acre.

For suppression of Kentucky bluegrass covers, apply 6 fluid ounces of this product per acre.

Do not add ammonium sulfate.

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

For suppression of vegetative growth and seedhead inhibition of bahiagrass for approximately 45 days, apply 6 fluid ounces of this product in 10 to 20 gallons of water per acre. Apply 1 to 2 weeks after full green-up or after mowing to a uniform height of 3 to 4 inches. This application must be made prior to seedhead emergence.

For suppression up to 120 days, apply 4 fluid ounces of this product per acre, followed by an application of 2 to 4 fluid ounces per acre about 45 days later. Make no more than 2 applications per year.

For burndown of Bermudagrass, apply 1 to 2 quarts of this product in 3 to 20 gallons of water per acre. Use this treatment only if reduction of the Bermudagrass stand can be tolerated.

When burndown is required prior to harvest, allow at least 21 days to ensure sufficient time for burndown to occur.

For suppression of Bermudagrass, apply 6 to 16 fluid ounces of this product per acre east of the Rocky Mountains and 16 fluid ounces of this product per acre west of the Rocky Mountains. Apply in a total spray volume of 3 to 20 gallons per acre, no sooner than 1 to 2 weeks after full green-up. If the Bermudagrass is mowed prior to application, maintain a minimum of 3 inches in height. Sequential applications may be made when regrowth occurs and Bermudagrass injury and stand reduction can be tolerated.

East of the Rocky Mountains, rates of 6 to 10 fluid ounces of this product per acre should be used in shaded conditions or where a lesser degree of suppression is desired.

Cut Stump (Tree Crops)
USE INSTRUCTIONS: Cut stump applications of this product may be made during site preparation or site renovation, prior to transplanting tree crops. This product will control regrowth of cut stumps and resprouts of many types of tree species, some of which are listed below.

Citrus Trees; Calamondin, Chironja, Citron, Citrus hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarins (Tangerine), Orange (all), Pummelo, Tangor, Tanger.

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

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

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 prior to application. Delays in application may result in reduced performance. For best results, applications should be made during periods of active growth and full leaf expansion.

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

9.1 Berry Crops
LABELLED CROPS: Blackberry (including bingberry, black satin berry, boysenberry, Chokecherry blackberry, cherryberry, Cheyenne blackberry, coralberry, drowberry, dewberry, Dirkoan thornless berry, Himalayaberry, hullberry, juneberry, lavacberry, lowberr-ry, lacruteraberry, marionberry, nectarberry, ollalieberry, Oregon evergreen berry, phenom-
around established poplar, eucalyptus, Christmas trees and other non-food tree crops.

USE INSTRUCTIONS: This product may be used as a post-directed spray and spot treatment

LABELED CROPS: Pine, Poplar, Eucalyptus, Christmas trees, Other Non-Food Tree Crops.

9.4 Non-Food Tree Crops

LABELED CROPS: Pine, Poplar, Eucalyptus, Christmas trees, Other Non-Food Tree Crops.

Directed Sprays, Spot Treatment, Wiper Applications

USE INSTRUCTIONS: This product may be used as a post-directed spray and spot treatment

around established poplar, eucalyptus, Christmas trees and other non-food tree crops.

PRECAUTIONS, RESTRICTIONS: Care must be exercised to avoid contact of spray, drift or mist with foliage or green bark of established Christmas trees and other pine trees. Desirable plants may be protected from the spray solution by using shields or coverings made of cardboard or other impermeable material. UNLESS OTHERWISE DIRECTED, THIS PRODUCT IS NOT RECOMMENDED FOR USE AS AN OVER-THE-TOP BROADCAST SPRAY IN CHRISTMAS TREES AND OTHER PINE TREES.

Site Preparation

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

PRECAUTIONS, RESTRICTIONS: Precautions should be taken to protect nontarget plants during site preparation applications.

9.5 Pome Fruit

LABELED CROPS: Apple, Crabapple, Loquat, Mayhaw, Pear (including oriental pear), Quince.

TYPES OF APPLICATIONS: Those listed in Section 9.0.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 1 day between last application and harvest in pome crops.

9.6 Stone Fruit

LABELED CROPS: Apricot, Cherry (sweet, tart), Nectarine, Olive, Plum/Plumcots (all types), Plumcot.

TYPES OF APPLICATIONS: Those listed in Section 9.0.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 17 days between last application and harvest in stone fruit crops.

Restrictions on Application Equipment

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

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

For PEACHES grown in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee only, apply with a shielded boom or shielded wiper applicator, which prevents any contact of this product with the foliage or bark of trees.

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

For PEACHES grown in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee only, apply with a shielded boom or shielded wiper applicator, which prevents any contact of this product with the foliage or bark of trees.

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

9.8 Tropical and Subtropical Trees and Fruits

LABELED CROPS: Ambarella, Atemoya, Avocado, Banana, Barbados cherry (aceraola), Bibina, Blimbe, Breadfruit, Cassava (cacaue) bean, Canistel, Carambola (starfruit), Cherimoya, Coffee, Custard apple, Dates, Durian, Feijoa, Figs, Governor’s plum, Guava, Ilama, Lime, Imbe, Jaboticaba, Jackfruit, Longan, Lychee, Mammea apple, Mango, Mangosteen, Marmaladebox (genip), Mountain papaya, Papaya, Pawpaw, Plantain, Persimmon, Pomegranate, Pulsuman, Rambutan, Rose apple, Sapodilla, Sapote (black, mammy, white), Spanish lime, Soursop, Star apple, Sugar apple, Surinam cherry, Tamarind, Tea, Ti (roots and leaves), Wax jambu.

TYPES OF APPLICATIONS: Those listed in Section 9.0.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 14 days between last application and harvest in tree nuts, except coconut. Allow 14 days between application and harvest in coconut.

9.9 Vine Crops

LABELED CROPS: Grapes (juice, raisin, table, wine), Hops, Kiwi, Passion fruit.

TYPES OF APPLICATIONS: Those listed in Section 9.0.

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

In the northeast and Great Lakes regions, applications must be made prior to the end of bloom stage of grapes to avoid injury, or make applications with shielded sprayers or wiper equipment.
PRECAUTIONS, RESTRICTIONS: Allow a minimum of 14 days between last application and harvest in vine crops. Do not use selective equipment in kiwi.

10.0 PASTURE GRASSES, FORAGE LEGUMES AND RANGELANDS

GENERAL USE INSTRUCTIONS: This product may be applied to turf or pasture grasses, forage legumes, and rangelands for weed control as directed below. Apply 12 fluid ounces to 5 quarts per acre according to the "ANNUAL WEEDS", "PERENNIAL WEEDS", and "WOODY BRUSH AND TREES RATE TABLES" in this product label booklet.

GENERAL PRECAUTIONS, RESTRICTIONS: Follow the specific limitations below with regard to application methods, timing, treatment rates, and post-application intervals. All applications must be made at least 30 days before planting any crop that is not specified for treatment in this label booklet or supplemental labeling.

10.1 Alfalfa, Clover, and Other Forage Legumes


TYPES OF APPLICATIONS: Preplant, Preemergence, At-Planting, Spot Treatment, Over-the-Top Wiper Applications, Renovation, Preharvest (except Kenaf and Leucaena).

Preplant, Preemergence, At-Planting

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

PRECAUTIONS, RESTRICTIONS: Remove domestic livestock before application. The crop may be fed or grazed as soon as it reaches sufficient maturity.

Preharvest (except Kenaf and Leucaena)

USE INSTRUCTIONS: This product may be used in declining stands or any stand where severe crop injury or destruction is acceptable. This product will control annual and perennial weeds, including quackgrass, when applied prior to crop harvest. Applications may be made at any time of the year. For control of quackgrass, apply in the spring, late summer or fall when quackgrass is actively growing. Treatments for quackgrass must be followed by deep tillage for complete control.

PRECAUTIONS, RESTRICTIONS: Make only one application to an existing crop stand per year. The treated crop and weeds will be harvested and fed to livestock according to the intervals below.

<table>
<thead>
<tr>
<th>Maximum Single Application Rate</th>
<th>Minimum Interval between application and harvest/grazing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfalfa</td>
<td>2 quarts per acre</td>
</tr>
<tr>
<td>All other labeled legumes above</td>
<td>3 pints per acre</td>
</tr>
</tbody>
</table>

This application may destroy an alfalfa stand and may severely injure or destroy other labeled crops such as clover. Preharvest application is not recommended for alfalfa grown for seed, as a reduction in germination or vigor may occur.

Spot Treatment, Over-the-Top Wiper Applications

USE INSTRUCTIONS: This product may be applied as a spot treatment or with wiper applicators. For wipers, see the "Wiper Applicators" in the "Selective Equipment" section of this product label booklet. Applications may be made in the same area at 30-day intervals.

PRECAUTIONS, RESTRICTIONS: For spot treatment and wiper applications, apply in areas where the movement of domestic livestock can be controlled. No more than 10 percent of the total field area should be treated at one time. Remove domestic livestock before application and wait 3 days after application before grazing livestock or harvesting.

Renovation

USE INSTRUCTIONS: This product may be applied as a broadcast spray to renovate existing stands of alfalfa, clover, and other labeled forage legumes. If the crop is to be grazed or harvested for feed, use up to 2 quarts per acre in alfalfa and up to 3 pints per acre in other labeled legumes. For complete removal of established stands of clover, it may be necessary to use the higher treatment rates listed in the "PERENNIAL WEEDS RATE TABLE" in this label booklet.

PRECAUTIONS, RESTRICTIONS: When treatment rates of 2 quarts per acre for alfalfa or 3 pints per acre for other forage legumes are used, remove domestic livestock before application and wait 3 days after application before reintroduction. If treatment rates above these levels are necessary, do not graze or harvest treated foliage for livestock feed. Crops listed for treatment in this label booklet may be planted into the treated area at any time, for other crops, wait 30 days between application and planting.

10.2 Conservation Reserve Program (CRP)

TYPES OF APPLICATIONS: Renovation (Rotating out of CRP), Site Preparation, Postemergence Weed Control in Dormant CRP Grasses, Wiper Applications Over-the-Top.

Renovation (Rotating out of CRP), Site Preparation

USE INSTRUCTIONS: This product may be used to prepare CRP land for crop production. Refer to Federal, state or local use guides for CRP renovation recommendations. For any crop not listed for treatment in this product’s label booklet, applications must be made at least 30 days prior to planting.

Postemergence Weed Control in Dormant CRP Grasses, Wiper Applications Over-the-Top

USE INSTRUCTIONS: This product may be used to suppress competitive growth and seed production of undesirable vegetation in CRP acres. Such applications may be made with wiper application equipment or as a broadcast or spot treatment to dormant CRP grasses. For selective applications with broadcast spray equipment, apply 12 to 16 fluid ounces of this product per acre in early spring before desirable CRP grasses, such as red clover and tall wheatgrass, break dormancy and initiate green growth. Late fall applications can be made after desirable perennial grasses have reached dormancy.

PRECAUTIONS, RESTRICTIONS: Some stunting of CRP perennial grasses will occur if broadcast applications are made when plants are not dormant. No waiting period is required between application and grazing or harvesting for feed. Do not apply more than 3 quarts per acre per year onto CRP grasses.

10.3 Grass Seed or Sod Production

LABELED CROPS: Any grass (Gramineae family) except Corn, Sorghum, Sugarcane and those listed in this product’s label booklet under “Cereal and Grain Crops”.

TYPES OF APPLICATIONS: Preplant, Preemergence, At-Planting, Renovation, Site Preparation, Shielded Sprayers, Wiper Applications Over-the-Top, Spot Treatments, Creating Rows in Annual Ryegrass.

Preplant, Preemergence, At-Planting, Renovation, Site Preparation

USE INSTRUCTIONS: This product controls most existing vegetation prior to renovating turf or forage grass seed areas or establishing turf grass grown for sod. Make applications before, during or after planting or for renovation. For maximum control of existing vegetation, delay planting to determine if any regrowth from escaped underground plant parts occurs. Where existing vegetation is growing under mowed turfgrass management, apply this product before or after a single summer mowing to allow sufficient growth for good interception of the spray. Where repeat treatments are necessary, sufficient regrowth must be attained prior to application. For warm-season grasses, such as Bermudagrass, summer- or fall applications provide best control. Broadcast equipment may be used to control sod remnants or other unwanted vegetation after sod is harvested.

PRECAUTIONS, RESTRICTIONS: Do not disturb soil or underground plant parts before treatment. Tillage or renovation techniques such as vertical mowing, careening or slicing should be delayed for 7 days after application to allow proper translocation into underground plant parts. If application rates total 3 quarts per acre or less, no waiting period between treatment and feeding or livestock grazing is required. If the rate is greater than 3 quarts per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting. For any crop not listed for treatment in this product’s label booklet, applications must be made at least 30 days prior to planting. Applications must be made prior to the emergence of the crop to avoid crop injury.

Shielded Sprayers

USE INSTRUCTIONS: Apply 3 to 9 quarts of this product in 10 to 20 gallons of water per acre to control weeds between grass seed rows. Uniform planting in straight rows aids in shielded sprayer applications. Best results are obtained when the grass seed crop is small enough to easily pass by the protective shields. For additional instructions, see “Shielded Applicators” in the “APPLICATION EQUIPMENT AND TECHNIQUES” section of this product’s label booklet.

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

Wiper Applications Over-the-Top

USE INSTRUCTIONS: Applicators should be adjusted so that the wiper contact point is at least 2 inches above the desirable vegetation. Weeds should be a minimum of 6 inches above the desirable vegetation. Better results may be obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. This may occur in dense clumps, severe infestations, or when height of weeds varies so that not all weeds are contacted. In these instances, repeat treatments may be necessary. For additional instructions, see “Wiper Applicators” in the “APPLICATION EQUIPMENT AND TECHNIQUES” section of this product’s label booklet.

PRECAUTIONS, RESTRICTIONS: Contact of the herbicide solution with desirable vegetation may result in damage or destruction.

Spot Treatments

USE INSTRUCTIONS: Use a 1.0-to 2.0-percent solution.

PRECAUTIONS, RESTRICTIONS: Apply this product prior to heading of grasses grown for seed. The crop receiving the spray in the treated area will be killed. Take care to avoid drift or spray outside the target area for the same reason. Hand-held equipment may be used to control sod remnants or other unwanted vegetation after sod is harvested.

Creating Rows in Annual Ryegrass

USE INSTRUCTIONS: Use 1 to 2 pints of this product per acre. Use the higher rate when the ryegrass is greater than 6 inches tall. Best results are obtained when applications are made before the ryegrass reaches 6 inches in height.

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

Grower assumes all responsibility for crop losses from misapplication.
10.4 Pastures

LABELED CROPS: Any grass (Gramineae family) except Corn, Sorghum, Sugarcane and those listed in this product’s label booklet under “Cereal and Grain Crops”. Grasses that may be treated include Bahiagrass, Bermudagrass, Bluegrass, Brome, Fescue, Guinea grass, Kikuyagrass, Orchardgrass, Pangola grass, Ryegrass, Timothy, Wheatgrass.

TYPES OF APPLICATIONS: Preplant, Preemergence, Spot Treatment, Over-the-Top Wiper Applications, Postemergence Renovation, Postemergent Weed Control (Broadcast Treatments). Preplant, Preemergence, Postemergence Renovation

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

PRECAUTIONS, RESTRICTIONS: If application rates total 3 quarts per acre or less, no waiting period between treatment and feeding or livestock grazing is required. If the rate is greater than 3 quarts per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting. Crops listed in this label booklet may be planted into the treated area at any time; for other crops, wait 30 days between application and planting.

Spot Treatment, Over-the-Top Wiper Applications

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

PRECAUTIONS, RESTRICTIONS: For spot treatments or wiper application methods using rates of 3 quarts per acre or less, the entire field or any portion of it may be treated. When spot treatments or wiper application are made using rates above 3 quarts per acre, no more than 10 percent of the total pasture may be treated at any one time. To achieve maximum performance, remove domestic livestock before application and wait 7 days after application before grazing livestock or harvesting.

Postemergent Weed Control (Broadcast Treatments)

USE INSTRUCTIONS: This product may be used to suppress competitive growth and seed production of annual weeds and undesirable vegetation in pastures. For selective applications with broadcast spray equipment, apply 12 to 16 fluid ounces of this product per acre in early spring before desirable perennial grasses break dormancy and initiate green growth. Late fall applications can be made after desirable perennial grasses have reached dormancy.

PRECAUTIONS, RESTRICTIONS: Some stunting of perennial grasses will occur if broadcast applications are made when plants are not dormant. No waiting period is required between application and grazing or harvesting for feed. Use of higher application rates will cause stand reductions. Do not apply more than 3 quarts per acre per year onto pasture grasses except for renovation uses (see instructions above). If replanting is needed due to severe stand reduction, applications must be made at least 30 days prior to planting any crop not listed for treatment in this product’s label booklet.

10.5 Rangelands

TYPES OF APPLICATIONS: Postemergence.

This product will control or suppress many annual weeds growing in perennial cool and warm-season grass rangelands. Preventing viable seed production is key to the successful control and invasion of annual grassy weeds in rangelands. Follow-up applications in sequential years should eliminate most of the viable seeds.

Grazing of treated areas should be delayed to encourage growth of desirable perennials. Allowing desirable perennials to flower and reseed in the treated area will encourage successful transition.

USE INSTRUCTIONS: Apply 12 to 16 fluid ounces of this product per acre to control or suppress many weeds, including downy brome, cheatgrass, cereal rye and jointed goatgrass in rangelands. Apply when most brome plants are in early flower and before the plants, including seedheads, turn color. Allowing for secondary weed flushes to occur in the spring following rain events further depletes the seed reserve and encourages perennial grass conversion on weedy sites. Fall applications are possible, and recommended, where spring moisture is usually limited and fall germination allows for good weed growth.

For medusahead, apply 16 fluid ounces of this product per acre at the 3-leaf stage. Delaying applications beyond this stage will result in reduced or unacceptable control. Controlled burning may be useful in eliminating the thatch layer produced by slow decaying culms prior to application. Allow new growth to occur before spraying after a burn. Repeat applications in subsequent years may be necessary to eliminate the seedbank before reestablishing desirable perennial grasses in medusahead-dominated rangelands.

PRECAUTIONS, RESTRICTIONS: Slight discoloration of the desirable grasses may occur, but they will regrow and regrow under moist soil conditions as effects of this product wear off. Do not use ammonium sulfate when spraying rangeland grasses with this product. No waiting period between treatment and feeding of livestock grazing is required. Do not apply more than 3 quarts per acre per year.

11.0 ROUNDUP READY CROPS

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

This COMPANY RECOMMENDS USE OF THIS PRODUCT FOR POSTEMERGENCE APPLICATION ONLY ON CROP VARIETIES DESIGNATED AS CONTAINING THE ROUNDUP READY GENE.

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

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

NOTE: Roundup Ready seed, and the method of selectively controlling weeds using glyphosate on a Roundup Ready crop, are protected under several U.S. Patents, including 5,352,905 and 5,833,435. A license to use Roundup Ready seed must be obtained prior to use. Monsanto retains ownership of the gene and process technologies, and the Purchaser of the seed receives the right to use the licensed genes and technologies subject to the limited use license conditions. Seed containing the Roundup Ready trait cannot be used for research and demonstration, reverse engineering or in connection with herbicide registration. Progeny seed containing the Roundup Ready trait cannot be saved for replanting or transferred to others for replanting. Contact Your Authorized Retailer for information on obtaining a limited use license.

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

For aerial applications apply this product in 3 to 15 gallons of water per acre. See the “APPLICATION EQUIPMENT AND TECHNIQUES” section of this label for procedures to avoid drift that may cause injury to any vegetation not intended for treatment. Use of appropriate buffer zones will help prevent injury to adjacent vegetation.

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

See the “MIXING” and “APPLICATION EQUIPMENT AND TECHNIQUES” sections of this label for additional directions and restrictions on the application of this product. Tank mixtures with other herbicides, insecticides, fungicides, microinsecticides or foliar fertilizers may result in reduced weed control or crop injury and are NOT recommended for over-the-top applications of this product unless otherwise noted in this product label, supplemental labeling or fact sheets published separately.

Unless otherwise directed, nonionic surfactant may be added to the spray solution for applications to Roundup Ready crops. The addition of certain surfactants to this product may result in some crop response including leaf necrosis, leaf chlorosis or leaf speckling due to the surfactant added to the spray mixture. Read and carefully observe cautionary statements and other information appearing on the surfactant label.

Ammonium sulfate may be mixed with this product for applications to Roundup Ready crops. Refer to the “MIXING” section for use instructions for ammonium sulfate.

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

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

11.1 Canola with the Roundup Ready Gene

TYPES OF APPLICATIONS: Preplant, At-Planting, Preemergence, Postemergence

DO NOT USE THIS PRODUCT ON CANOLA WITH THE ROUNDUP READY GENE PLANTED IN THE FOLLOWING STATES: ALABAMA, DELAWARE, FLORIDA, GEORGIA, KENTUCKY, MARYLAND, NEW JERSEY, NORTH CAROLINA, SOUTH CAROLINA, TENNESSEE, VIRGINIA AND WEST VIRGINIA.

Maximum Allowable Combined Application Quantities Per Season

| Preplant, At-Planting, Preemergence applications | 2 quarts per acre |
| Total in-crop applications from emergence to 6-leaf stage | 1 quart per acre |
Preplant, Preemergence, At-Planting

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

Postemergence

USE INSTRUCTIONS: This product may be applied postemergence to Roundup Ready canola from emergence through the 6-leaf stage of development. Applications made during bolting or flowering may result in crop injury and yield loss. To maximize yield potential, make applications early to eliminate competing weeds.

Weeds Controlled: For specific rates of application and instructions, refer to the "ANNUAL WEEDS RATE TABLE" and "PERENNIAL WEEDS RATE TABLE" in this booklet.

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

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

PRECAUTIONS, RESTRICTIONS: See the "ROUNDUP READY CROPS" section of this label for general precautionary instructions for use in Roundup Ready crops. No more than two over-the-top broadcast applications may be made from crop emergence through the 6-leaf stage of development and the total in-crop application should not exceed 32 fluid ounces per acre. Allow a minimum of 60 days between last application and canola harvest.

11.2 Corn with the Roundup Ready Gene

TYPES OF APPLICATIONS: Preplant, At-Planting, Preemergence, Postemergence (In-Crop), Spot Treatment, Preharvest, Post-Harvest.

Preplant, Preemergence, At-Planting

USE INSTRUCTIONS: This product may be applied alone or in a tank-mixture before, during or after planting corn.

TANK MIXTURES: This product may be tank mixed with Bullet, Degree, Degree Xtra, Harness, Harness Xtra, Harness Xtra 5.6L, Lariat, Lasso or Micro-Tech at 50 to 100 percent of labeled rate. Refer to the specific product label and observe all precautions and restrictions. Minimum recropping interval and rotational guidelines—the more restrictive requirements apply.

NOTE: For maximum weed control, a postemergence (in-crop) application of this product should be applied following the use of less than labeled rates of the preemergence residual products listed above.

Postemergence (In-Crop)

USE INSTRUCTIONS: This product may be applied postemergence to Roundup Ready corn from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 30 inches, whichever comes first.

When applied as directed, this product controls labeled annual grass and broadleaf weeds in Roundup Ready corn. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more application of this product. The postemergent application of 24 to 32 fluid ounces per acre of this product should be made before the weeds reach a height and/or density that the weeds become competitive with the crop, generally 4 inch tall weeds or less.

This product may be applied alone as a postemergence in-crop application to control of emerged weeds listed on this label. If new flushes of weeds occur, a sequential application of this product at 24 to 32 fluid ounces per acre will control the labeled grasses and broadleaf weeds.

TANK MIXTURES: This product may be applied in tank mixture with Bullet, Degree, Degree Xtra, Harness, Harness Xtra 5.6L, and Micro-Tech at 50 to 100 percent of labeled rate. This product may be applied in tank mixture with Permit* and atrazine at labeled rates. Refer to the specific product label and observe all precautions and limitations on the label for all products used in tank mixtures, including application timing restrictions, soil restrictions, minimum recropping interval and rotational guide-

lines; the more restrictive requirements apply.

<table>
<thead>
<tr>
<th>Tank-Mix Partner</th>
<th>Maximum Height of Corn For Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree, Degree Xtra</td>
<td>11 inches</td>
</tr>
<tr>
<td>Harness, Harness Xtra</td>
<td>11 inches</td>
</tr>
<tr>
<td>Harness Xtra 5.6L</td>
<td>11 inches</td>
</tr>
<tr>
<td>Bullet* Micro-Tech*</td>
<td>5 inches</td>
</tr>
<tr>
<td>Permit</td>
<td>30 inches</td>
</tr>
<tr>
<td>atrazine</td>
<td>12 inches</td>
</tr>
</tbody>
</table>

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

PRECAUTIONS, RESTRICTIONS: See the "ROUNDUP READY CROPS" section of this label for general precautionary instructions for use in Roundup Ready crops. Single in-crop applications of this product are not to exceed 1 quart per acre. Sequential in-crop applications of this product from emergence through the V8 stage or 30 inches must not exceed 2 quarts per acre per growing season. Allow a minimum of 10 days between in-crop applications of this product. Allow a minimum of 50 days between application of this product and harvest of corn forage.

Preharvest

USE INSTRUCTIONS: In Roundup Ready corn, up to 1 quart per acre of this product can be applied preharvest. Make applications at 25 percent grain moisture or less. Ensure that maximum kernel fill is complete and the corn is physiologically mature (black layer formed).

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 7 days between application and harvest, feeding or grazing.

Post-Harvest

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

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 7 days between application and harvest or feeding of treated vegetation.

11.3 Cotton with the Roundup Ready Gene

TYPES OF APPLICATIONS: Preplant, At-Planting, Preemergence, Selective Equipment, Preharvest

PRECAUTIONS, RESTRICTIONS: See the "ROUNDUP READY CROPS" section of this label for general precautionary instructions for use in Roundup Ready crops. ALLOW A MINIMUM OF 7 DAYS BETWEEN APPLICATION AND HARVEST.

Preplant, Preemergence, At-Planting

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

Selective Equipment

USE INSTRUCTIONS: This product may be applied using precision hooded sprayers at rates up to 1 quart per acre per application to Roundup Ready cotton through layby. For best results, make applications while weeds are small (less than 3 inches).

PRECAUTIONS, RESTRICTIONS: See the "Selective Equipment" part of the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information on proper use and calibration of this equipment.

Preharvest

USE INSTRUCTIONS: This product may be applied for preharvest annual and perennial weed control as a broadcast treatment to Roundup Ready cotton after 20 percent boll crack. Up to 2 quarts of this product may be applied using either aerial or ground spray equipment. NOTE: This product will not enhance the performance of harvest aids when applied to Roundup Ready cotton.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 7 days between application and harvest of cotton. Do not apply this product to cotton grown for seed, as a reduction in germination or vigor may occur. THE USE OF ADDITIVES FOR PREHARVEST APPLICATION OF THIS PRODUCT TO ROUNDUP READY COTTON IS PROHIBITED.

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

11.4 Soybeans with the Roundup Ready Gene

TYPES OF APPLICATIONS: Preplant, At-Planting, Preemergence, Postemergence (In-Crop), Preharvest, Post-Harvest.
types of Applications: General Non-Crop Weed Control, Trim-and-Edge, Bare Ground, Ornamentals, Plant Nurseries, Christmas Trees, Chemical Mowing, Turfgrass Renovation, Weed or Soil Production, Cut Stumps, Habitat Management, Injection and Frill, Parks, Recreational and Residential Areas, Railroads, Roadsides.

Unless otherwise specified, applications may be made to control any weeds listed in the "ANNUAL WEEDS", "PERENNIAL WEEDS", and "WOODY BRUSH AND TREES RATE TABLE" sections. Refer also to the "Selective Equipment" section.

12.1 General Non-Crop Weed Control, Trim-and-Edge, Bare Ground

USE INSTRUCTIONS: Use in areas such as airports, apartment complexes, Christmas tree farms, ditch banks, dry ditches, dry canals, fencerows, golf courses, industrial sites, lumber yards, manufacturing sites, office complexes, ornamental nurseries, parks, parking areas, petroleum tank farms and pumping installations, railroads, recreational areas, residential areas, roadsides, sod or turf seed farms, schools, storage areas, substations, warehouse areas, other public areas, and similar industrial and non-crop sites.

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 provided that the specific product is registered for use on such non-crop sites. Refer to these products' labels for approved non-crop sites and application rates.

- **Arsenal**: Pendulum 3.3 EC
- **Barricade 65WG**: Pendulum WDG
- **Clarity**: Plateau
- **Diron**: Prinop OF
- **Endurance**: Prinop Liquid
- **Escort®**: Sonstar® 65WP
- **Garlon®3A**: Sahara®
- **Garlon 4**: Simazine
- **Hyvar X**: Spicov® BDD
- **Karmex DF**: Surflan
- **Krovar I DF**: Tellar
- **Manage®**: Vanquish
- **Oust**: 2,4-D

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

Brush Control 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 2WSL | 6 to 32 fluid ounces per acre
Escort | 1 to 2 ounces per acre
Garlon 3A | 1 to 4 quarts per acre
Garlon 4 | 0.06 to 0.12% by volume

**PRODUCT** | **SPRAY-TO-WET RATES**
---|---
Arsenal 2WSL | 1 to 2 ounces per acre
Escort | 0.1 to 0.5% by volume

**PRODUCT** | **DIRECTED SPRAY RATES**
---|---
Arsenal 2 WSL | 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.

**12.2 Ornamentals, Plant Nurseries, Christmas Trees**

USE INSTRUCTIONS: This product may be used to maintain weed control in tree or ornamental sites.

Post-Directed, Trim-and-Edge

This product may be used as a post-directed spray around established woody ornamental species such as azalea, azalea, boxwood, crabapple, eucalyptus, euonymus, fir, Douglas fir, jojoba, hollies, lilac, magnolia, maple, oak, poplar, privet, pine, spruce and yew. This product may also be used to trim and edge around trees, buildings, sidewalks and roads, potted plants and other objects in a nursery setting. Desirable plants may be protected from the spray solution by using shields or coverings made of cardboard or other impermeable material. UNLESS OTHERWISE DIRECTED, THIS PRODUCT IS NOT RECOMMENDED FOR USE AS AN OVER-THE-TOP BROADCAST SPRAY IN ORNAMENTALS AND CHRISTMAS TREES. Care must be exercised to avoid contact of spray, drift or mist with foliage or green bark of established ornamental species.

Site Preparation

This product may be used prior to planting any ornamental, nursery or Christmas tree species.
USE INSTRUCTIONS: This product may be used to control or suppress many annual and perennial grasses listed in this section of this label, which gives rates for active growth and full leaf expansion. For best results, applications should be made during periods of active growth and full leaf expansion.

12.5 Cut Stumps

USES: Habitat Restoration and Maintenance, Wildlife Food Plots. Habitat Restoration and Maintenance

USE INSTRUCTIONS: This product may be used to control exotic and other undesirable vegetation in habitat management areas. Applications can be made to allow recovery of native plant species, prior to planting desirable native species, and for similar broad-spectrum vegetation control requirements in habitat management areas. Spot treatments can be made to selectively remove unwanted plants for habitat maintenance and enhancement.

Wildlife Food Plots

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

12.7 Injection and Frill (Woody Brush and Trees)

USE INSTRUCTIONS: 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 0.04 fluid ounce (1 mL) 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.

12.8 Parks, Recreational, and Residential Areas

USE INSTRUCTIONS: All of the instructions in the “General Non-Crop Weed Control, Trim-and-Edge, Bare Ground” section apply to park and recreational areas. This product may be used in parks, recreational and residential areas. It may be applied with any application equipment described in this label. This product may be used to trim-and-edge around trees, fences, and paths, around buildings, sidewalks, and other objects in these areas. This product may be used for spot treatment of unwanted vegetation. This product may be used 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 (seed or sod), or prior to laying asphalt or beginning construction projects.
12.9 Railroads

USE INSTRUCTIONS: All of the instructions in the “General Non-Crop Weed Control, Trim-and-Edge, Bare Ground” section apply to railroads.

Bare Ground, Ballast and Shoulders, Crossings, Spot Treatments
This product may be used to maintain bare ground on railroad ballast and shoulders. Repeat applications of this product may be used, as weeds emerge, to maintain bare ground. This product may be used to control tall-growing weeds to improve line-of-sight at railroad crossings and reduce the need for mowing along rights-of-way. For crossing applications, up to 80 gallons of spray solution per acre may be used.

TANK MIXTURES: This product may be tank mixed with the following products provided that the specific product is registered for ballast, shoulder, spot, bare ground and cross- ing treatments:

- Arsenal
- Clarity
- Diuron
- Escort
- Garlon 3A
- Garlon 4
- Hyvar X

Brush Control
This product may be used to control woody brush and trees on railroad rights-of-way. Apply 4 to 10 quarts of this product per acre as a broadcast spray, using boom-type or boomless nozzles. Up to 80 gallons of spray solution per acre may be used. Apply a 0.75 to 2 percent solution of this product when using high-volume spray-to-water applications. Apply a 5 to 10 percent solution of this product when using low volume direct- ed sprays for spot treatment.

TANK MIXTURES: This product may be mixed with the following products for enhanced control of woody brush and trees:

- Arsenal
- Escort
- Garlon 3A

Bermudagrass Release
This product may be used to control or partially control many annual and perennial weeds for effective release of actively growing Bermudagrass. Apply 1 to 3 pints of this product in up to 80 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
- Blackberry
- Bluestem, silver
- Broomsedge
- Dallisgrass
- Dewberry
- Dock, curly
- Dogfennel

TANK MIXTURES: This product may be tank-mixed with Oust. If tank-mixed, use no more than 1 to 3 pints 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
- Blackberry
- Bluestem, silver
- Broomsedge
- Dallisgrass
- Dewberry
- Dock, curly
- Dogfennel

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

12.10 Roadsides

USE INSTRUCTIONS: All of the instructions in the “General Non-Crop Weed Control, Trim-and-Edge, Bare Ground” section apply to roadsides.

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

- Clarity
- Diuron
- Endurance
- Escort
- Krovair 1 DF
- Dust
- Outsider
- Pendulum 3.3 EC
- Pendulum WDG

See the “General Non-Crop Weed Control, Trim-and-Edge, Bare Ground” section of this label for general instructions for tank mixing.

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 sign- posts and other objects along the roadside.

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

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 Outsider 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-inch stage.

Apply 8 to 64 fluid ounces of this product in a tank mixture with 0.75 to 1.3 ounces Outsider herbicide per acre. Read and follow all label directions for Outsider herbicide.

Apply 8 to 64 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 1 to 3 pints 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
- Bluestem, silver
- Broomsedge
- Dallisgrass
- Dewberry
- Dock, curly
- Dogfennel

TANK MIXTURES: This product may be tank mixed with Outsider herbicide for control or partial control of Johnsongrass and other weeds listed in the Outsider herbicide label. Use 8 to 32 fluid ounces of this product with 0.75 to 1.3 ounces of Outsider herbicide. Use the higher rates of both products for control of perennial weeds or annual weeds greater than 6 inches in height.

This product may be tank-mixed with Oust. If tank-mixed, use no more than 1 to 2 pints 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
- Bluestem, silver
- Broomsedge
- Dallisgrass
- Dock, curly
- Dogfennel

PRECAUTIONS, RESTRICTIONS: 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 approxi- mately 45 days, apply 6 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 4 fluid ounces of this product per acre, followed by an application of 2 to 4 fluid ounces per acre about 45 days later. Make no more than two applications per year.

TANK MIXTURES: This product may be used for control or partial control of Johnsongrass and other weeds listed on the Outsider herbicide label in actively growing bahiagrass. Apply 1.5 to 5 fluid ounces of this product with 0.75 to 1.3 ounces of Outsider 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 bahiagrasses.

A tank mixture of this product plus Oust may be used. Apply 6 fluid ounces of this prod- uct plus 0.25 ounce of Oust per acre 1 to 2 weeks following an initial spring mowing,
This product may be used up to 48 fluid ounces per acre where heavy weed densities exist.

Older, mature (hardened) annual weed species may require higher rates even if they meet the size requirements.

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

Apply to actively growing annual weeds. Annual weeds are generally easiest to control when they are small.

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

For improved control of wild buckwheat over 2 inches in size, use sequential treatments of 32 fluid ounces followed by 32 fluid ounces of this product per acre.

To control downy brome in no-till systems, use 24 fluid ounces per acre.

Performance is better if application is made before the weed reaches the boot stage of growth.

Do not treat kochia in the button stage.

Control of Russian Thistle may vary based on environmental conditions and spray coverage. Whenever possible, a tank mixture with 2,4-D as described below may improve control.

### ANNUAL WEEDS RATE TABLE

<table>
<thead>
<tr>
<th>WEED SPECIES</th>
<th>RATE (fluid ounces per acre)</th>
<th>Maximum height/length (in inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammiania, purple</td>
<td>3 6 12 - 18</td>
<td></td>
</tr>
<tr>
<td>Anoda, spurred</td>
<td>3 5 8</td>
<td></td>
</tr>
<tr>
<td>Barley</td>
<td>18 18+ - - -</td>
<td></td>
</tr>
<tr>
<td>Barnyardgrass</td>
<td>- 3 6 7 9</td>
<td></td>
</tr>
<tr>
<td>Basia, fireweed</td>
<td>- - 6</td>
<td></td>
</tr>
<tr>
<td>Beggarweed,Florida</td>
<td>- 5 8</td>
<td></td>
</tr>
<tr>
<td>Bittercress</td>
<td>12 20 - - -</td>
<td></td>
</tr>
<tr>
<td>Bluegrass, annual</td>
<td>10 - - -</td>
<td></td>
</tr>
<tr>
<td>Bluegrass, bulbous</td>
<td>6 - - -</td>
<td></td>
</tr>
<tr>
<td>Brome, downy</td>
<td>6 12 - - -</td>
<td></td>
</tr>
<tr>
<td>Brome, Japanese</td>
<td>6 12 24 -</td>
<td></td>
</tr>
<tr>
<td>Browntop panicum</td>
<td>6 8 12 - 24</td>
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<tr>
<td>Buckwheat, wild</td>
<td>- 1 2 -</td>
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<td>Burdick</td>
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<td>Cheat</td>
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<td>Chickweed</td>
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<tr>
<td>Cocklebur</td>
<td>12 18 24 - 36</td>
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<td>Copperleaf, hophornbeam</td>
<td>2 4 - 6</td>
<td></td>
</tr>
<tr>
<td>Coppeeleaf, Virginia</td>
<td>- 2 4 - 6</td>
<td></td>
</tr>
<tr>
<td>Coreopsis, plains</td>
<td>- 6 12 - 18</td>
<td></td>
</tr>
<tr>
<td>Corn, volunteer</td>
<td>6 12 20 -</td>
<td></td>
</tr>
<tr>
<td>Corn speedwell</td>
<td>12 - - -</td>
<td></td>
</tr>
<tr>
<td>Crabgrass</td>
<td>3 6 12 -</td>
<td></td>
</tr>
<tr>
<td>Crowfootgrass</td>
<td>- - 6 - 12</td>
<td></td>
</tr>
<tr>
<td>Culm leaf evening primrose</td>
<td>- 3 6</td>
<td></td>
</tr>
<tr>
<td>Desvilew (uncorn plant)</td>
<td>- 3 6 -</td>
<td></td>
</tr>
<tr>
<td>Dwarf dandelion</td>
<td>12 - - -</td>
<td></td>
</tr>
<tr>
<td>Eastern mannangrass</td>
<td>8 12 - -</td>
<td></td>
</tr>
<tr>
<td>Eclipta</td>
<td>- 4 8 12 -</td>
<td></td>
</tr>
<tr>
<td>Fall panicum</td>
<td>4 - 6 - 12</td>
<td></td>
</tr>
<tr>
<td>False brome</td>
<td>- 20 - -</td>
<td></td>
</tr>
<tr>
<td>Falseflox, smallseed</td>
<td>12 - - -</td>
<td></td>
</tr>
<tr>
<td>Fiddleneck</td>
<td>- 6 12 -</td>
<td></td>
</tr>
<tr>
<td>Field pennycress</td>
<td>6 12 - -</td>
<td></td>
</tr>
<tr>
<td>Filaria</td>
<td>- 6 - 12</td>
<td></td>
</tr>
<tr>
<td>Fleabane, annual</td>
<td>6 20 - -</td>
<td></td>
</tr>
<tr>
<td>Fleabane, hairy</td>
<td>- 6 - 10</td>
<td></td>
</tr>
<tr>
<td>Fleabane, rough</td>
<td>3 6 12 -</td>
<td></td>
</tr>
<tr>
<td>Florida pusley</td>
<td>- 4 6</td>
<td></td>
</tr>
<tr>
<td>Foxtail, giant, bristly, yellow</td>
<td>6 12 20 -</td>
<td></td>
</tr>
<tr>
<td>Foxtail, Carolina</td>
<td>10 - - -</td>
<td></td>
</tr>
<tr>
<td>Foxtail, green</td>
<td>12 - - -</td>
<td></td>
</tr>
<tr>
<td>Glinus</td>
<td>- 3 6 - 12</td>
<td></td>
</tr>
<tr>
<td>Goosgrass</td>
<td>- 3 6 - 12</td>
<td></td>
</tr>
<tr>
<td>Grain sorghum (milo)</td>
<td>6 12 20 -</td>
<td></td>
</tr>
<tr>
<td>Ground cherry</td>
<td>- 3 6 - 9</td>
<td></td>
</tr>
<tr>
<td>Groundsel, common</td>
<td>- 6 10 -</td>
<td></td>
</tr>
<tr>
<td>Hemp sesbania</td>
<td>- 4 6 8</td>
<td></td>
</tr>
<tr>
<td>Henbit</td>
<td>6 - 12 -</td>
<td></td>
</tr>
<tr>
<td>Horseweed/ Marestail</td>
<td>(Conyza bonanensis)</td>
<td>- 6 12 - 18</td>
</tr>
<tr>
<td>Iciclegrass</td>
<td>6 8 12 - 18</td>
<td></td>
</tr>
<tr>
<td>Jimsonweed</td>
<td>- 12 - 18</td>
<td></td>
</tr>
</tbody>
</table>
| **13.1 Annual Weeds—Rates for 10 to 40 Gallons per Acre**

Apply 1 to 2 quarts of this product per acre. Use 1 quart per acre if weeds are less than 6 inches tall. 1.5 quarts per acre if weeds are 6 to 12 inches tall and 2 quarts per acre if weeds are greater than 12 inches tall. These rates will provide control of weeds listed in the "ANNUAL WEEDS RATE TABLE" when water carrier volumes of 10 to 40 gallons...
13.2 Annual Weeds—Tank Mixtures with 2,4-D, Dicamba, or Tordon 22K

12 to 16 fluid ounces of this product plus 0.25 pound of dicamba or 0.5 pound of 2,4-D or 1 to 2 fluid ounces of Tordon 22K per acre will control the following weeds with the maximum height or length indicated: 6 inches—pickly lettuce, marestail/horseweed, morningglory, kochia (dicamba only) wild buckwheat (Tordon 22K only); 12 inches—cocklebur, lambsquar ters, pigweed, Russian thistle (2,4-D only).

16 fluid ounces of this product plus 0.5 pound of 2,4-D per acre will control the follow ing weeds when they are a maximum height or length of 6 inches: common ragweed, giant ragweed, Pennsylvania smartweed, and velvetleaf. Refer to the specific product labels for crop rotation restrictions and cautionary statements of all products used in tank mixtures. Ensure that the specific product is registered for application at the desired site. Some crop injury may occur if dicamba or Tordon 22K is applied within 45 days of planting.

DO NOT APPLY DICAMBA TANK MIXTURES BY AIR IN CALIFORNIA.

13.3 Annual Weeds—Hand-Handled or High-Volume Equipment

For control of weeds listed in the “ANNUAL WEEDS RATE TABLE,” 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 unless otherwise specified, use a 1 percent solution. For best results, use a 2 percent solution on harder-to-control perennials, such as Bermudagrass, dock, field bindweed, hemp dogbane, milkweed and Canada thistle.

When using application methods that result in less than complete coverage, use a 5 percent solution for annual and perennial weeds and a 5 to 10 percent solution for woody brush and trees.

13.4 Annual Weeds—Tank Mixtures with Atrazine for Fallow and Reduced Tillage Systems

For use only in Colorado, Kansas, Nebraska, Oklahoma, Oregon, South Dakota, and Washington. In Oregon and Washington, do not exceed 1 pound of atrazine per acre.

24 to 28 fluid ounces of this product plus 1 to 2 pounds of atrazine per acre will control the following weeds: Barnyardgrass (requires 28 ounces for control), Downy brome, Green foxtail, Lambsquarters, Pickly lettuce, Tansy mustard, Pigweed, Field sandbur, Stinkgrass, Russian thistle, Volunteer wheat, Witchgrass and Kochia (add 0.125 pound of dicamba for control). Ensure that the specific atrazine product is registered for application at the desired site.

14.0 PERENNIAL WEEDS RATE TABLE (alphabetically by species)

Apply to actively growing perennial weeds.

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

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

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

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

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Handled % Solution</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Handled % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfalfa</td>
<td>1-2</td>
<td>3-10</td>
<td>2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dandelion</td>
<td>1-2</td>
<td>3-10</td>
<td>2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alligatorweed</td>
<td>4</td>
<td>3-20</td>
<td>1.5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partial control. Apply when most of the plants are in bloom. Repeat applications will be required to maintain control.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anise (fennel)</td>
<td>—</td>
<td>—</td>
<td>1-2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For hand-held, apply as a spray-to-wet treatment. Optimum results are obtained when plants are treated at the bud to full-bloom stage of growth.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bahiagrass</td>
<td>3-5</td>
<td>3-20</td>
<td>2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apply when most plants have reached the early bud stage.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bentgrass</td>
<td>1-2</td>
<td>10-20</td>
<td>2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For suppression in grass seed production areas. For ground applications only. Ensure entire crown area has resumed growth prior to a fall application. Bentgrass should have at least 3 inches of growth. Tillage prior to treatment should be avoided. Tillage 7 to 10 days after application is recommended for best results.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18
Weed Species | Rate (QT/A) | Water Volume (GPA) | Hand-Held % Solution
---|---|---|---
Dugbane, hemp | 4 | 3-40 | 2%
Applying when most plants have reached the late bud to flower stage of growth. For suspension, apply 16 fluid ounces of this product plus 0.5 pound of 2,4-D in 3 to 10 gallons of water per acre for ground applications and 3 to 5 gallons of water per acre for aerial applications. Delay applications until maximum emergence of dugbane has occurred.

Fescue (except tall) | 3-5 | 3-20 | 2%
Apply when most plants have reached the early head stage.

Fescue, tall | 1-3 | 3-40 | 2%
Apply 3 quarts of this product per acre when most plants have reached boot-to-early seedhead stage of development.

Guineagrass | 2-3 | 3-40 | 1%
Apply when most plants have reached at least the 7-leaf stage of growth. Ensure thorough coverage when using hand-held equipment.

Horsenettle | 3-5 | 3-20 | 2%
Apply when most plants have reached the early bud stage.

Horsedash | 4 | 3-40 | 2%
Apply when most plants have reached the late bud to flower stage of growth. For best results, apply in late summer or fall.

Iceplant | — — | 1.5-2%
Iceplant should be at or beyond the early bud stage of growth. Thorough coverage is necessary for best control.

Jerusalem artichoke | 3-5 | 3-20 | 2%
Apply when most plants are in the early bud stage.

Johnsongrass, common | 0.5-3 | 3-40 | 1%
In an annual cropping systems, apply 1 to 2 quarts of this product per acre. Apply 1 quart of this product in 3 to 10 gallons of water per acre. Use 2 quarts of this product when applying 10 to 40 gallons of water per acre. In non-crop, or areas where annual tillage is not practiced (no-till), apply 2 to 3 quarts of this product in 10 to 40 gallons of water per acre.

For best results, apply when most plants have reached the boot-to-head stage of growth or in the fall prior to frost. Allow 7 or more days after application before tillage. Do not tank-mix with residual herbicides when using 1 quart of this product per acre.

For burnout of Johnsongrass, apply 1 pint of this product in 3 to 10 gallons of water per acre before the plants reach a height of 12 inches. For this use, allow at least 3 days after treatment before tillage.

Spray spot treatment (partial control or suppression)—Apply a 1 percent solution of this product when Johnsongrass is 12 to 18 inches in height. Coverage should be uniform and complete.

Kikuyagrass | 2-3 | 3-40 | 2%
Spray when most kikuyagrass is at least 8 inches in height (3- or 4-leaf stage of growth). Allow 3 or more days after application before tillage.

Knapsweed | 4 | 3-40 | 2%
Apply when most plants have reached the late bud to flower stage of growth. For best results, apply in late summer or fall.

Lantana | — — | 1-1.25%
Apply at or beyond the bloom stage of growth. Use the higher application rate for plants that have reached the woody stage of growth.

Lespedeza | 3-5 | 3-20 | 2%
Apply when most plants are in the early bud stage.

Milkweed, common | 3 | 3-40 | 2%
Apply when most plants have reached the late bud stage to flower stage of growth.

Muhly, wisteria | 2 | 3-40 | 2%
Use 1 quart of this product in 3 to 10 gallons of water per acre. Use 2-3 quarts of this product when applying 10 to 40 gallons of water per acre in or pasture, sod, or non-crop areas. Spray with the wisteria mully is 8 inches or more in height. Do not till between harvest and fall applications or in the fall or spring prior to spring applications. Allow 3 or more days after application before tillage.

Mullein, common | 3-5 | 3-20 | 2%
Apply when most plants are in the early bud stage.

Napiergrass | 3-5 | 3-20 | 2%
Apply when most plants are in the early head stage.

Nightshade, silverleaf | 2 | 3-10 | 2%
Applications should be made when at least 60 percent of the plants have berries. Fall treatments must be applied before a killing frost.

Nutgrass, purple or yellow | 0.5-3 | 3-40 | 1-2%
Apply 3 quarts of this product per acre or apply a 1 to 2 percent solution for control of nutgrass plants and immature nutlets attached to treated plants. Treat when plants are in flower or when new nutlets can be found at rhizome tips. Nutlets that have not germinated will not be controlled and may germinate following treatment. Repeat treatments will be required for long-term control of ungerminated tubers.

Sequential applications: 1 to 2 quarts of this product in 3 to 10 gallons of water per acre will also provide control. Make applications when a majority of the plants are in the 3- to 5-leaf stage (less than 6 inches tall). Repeat this application, as necessary, when newly emerging plants reach the 3- to 5-leaf stage. Subsequent applications will be necessary for long-term control.

For partial control of existing plants, apply 1 pint to 2 quarts of this product in 3 to 10 gallons of water per acre. Treat when plants have 3 to 5 leaves and are less than 6 inches tall. Repeat treatments will be required to control subsequent emerging plants or regrowth of existing plants.

Orchardgrass | 1-2 | 3-40 | 2%
Apply 2 quarts of this product in 10 to 40 gallons of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 1 to 1.5 quarts of this product in 12 to 10 gallons of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height.

Orchardgrass sods going to no-till corn: Apply 1 to 1.5 quarts of this product in 3 to 10 gallons of water per acre. Apply to orchardgrass that is a minimum of 12 tall for spring applications and 6 inches tall for fall applications. Allow at least 3 days following application before planting. A sequential application of abamectin will be necessary for optimum results.

Paspalum, purple or yellow | 0.5-3 | 3-40 | 1-2%
Paspalum should be at or beyond the boot stage of growth. Thorough coverage is necessary for best control.

Paragrate | 3-5 | 3-20 | 2%
Apply when most plants are in the early head stage.

Paragrate | 3-5 | 10-40 | 2%
For partial control and for best results, treat during late summer or fall when plants are actively growing and in full bloom. Treatment before or after this stage may lead to reduced control. Due to the dense nature of the vegetation, which may prevent good spray coverage or uneven stages of growth, repeat treatments may be necessary to maintain control. Visual control symptoms will be slow to develop.

Poison hemlock | — — | 1-2%
For hand-held, apply as a spray-to-wet treatment. Optimum results are obtained when plants are treated at the bud to full-bloom stage of growth. Thorough coverage is necessary for best control.

Pokeweed, common | 1.0 | 3-40 | 2%
Apply to actively growing plants up to 24 inches tall.

Quackgrass | 1-3 | 3-40 | 2%
In annual cropping systems, or in pastures and sods followed by deep tillage: Apply 1 quart of this product in 3 to 10 gallons of water per acre. For 10 to 40 gallons of water per acre, apply 2 quarts of this product. Do not tank-mix with residual herbicides when using the 1-quart rate. Spray when quackgrass is 6 to 8 inches in height. Do not till between harvest and fall applications or in fall or spring prior to spring application. Allow 3 or more days after application before tillage. In pastures or sods, use a moldboard plow for best results.

In pastures, sods or non-crop areas where deep tillage does not follow application: Apply 2 to 3 quarts of this product in 10 to 40 gallons of water per acre where the quackgrass is greater than 8 inches tall.

Redvine | 0.75-2 | 5-10 | 2%
For suppression, apply 24 fluid ounces of this product per acre at each of two applications 7 to 14 days apart or a single application of 2 quarts per acre. Apply recommended rates in 5 to 10 gallons of water per acre. Apply in late September or early October to plants that are at least 18 inches tall and have been growing 45 to 60 days since the last tillage operation. Make applications at least 1 week before a killing frost.

Reed, giant | — — | 2%
Best results are obtained when applications are made in late summer to fall.

Ryegrass, perennial | 1-3 | 3-40 | 1%
In an annual cropping systems, apply 1 to 2 quarts of this product per acre. Apply 1 quart of this product in 3 to 10 gallons of water per acre. Use 2 quarts of this product when applying 10 to 40 gallons of water per acre. In non-crop, or areas where annual tillage is not practiced (no-till), apply 2 to 3 quarts of this product in 10 to 40 gallons of water per acre.

For best results, apply when most plants have reached the boot-to-head stage of growth or in the fall prior to frost. Do not tank-mix with residual herbicides when using 1 quart of this product per acre.

Smartweed, swamp | 3-5 | 3-40 | 2%
Apply when most plants have reached the early bud stage of growth. Also for control, apply 16 fluid ounces of this product plus 0.5 pound of 2,4-D in 3 to 10 gallons of water per acre in the late summer or fall.

Spotted alfalfa, yellow | 2 | 10-40 | 2%
Apply when most plants are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late summer or fall, allow at least 4 weeks for initiation of active growth and rosette development prior to the application of this product. Fall treatments must be applied before a killing frost. Allow 3 or more days after application before tillage.

Sorghum, leafy | 3-10 | 2%
For suppression, apply 16 fluid ounces of this product plus 0.5 pound of 2,4-D in 3 to 10 gallons of water per acre in the late summer or fall. If mowing has occurred prior to treatment, apply when most of the plants are 12 inches tall.

Starthistle, yellow | 2 | 10-40 | 2%
Best results are obtained when applications are made during the rosette, budding and early flower stages.

Sweet potato, wild | 2 | 10-40 | 2%
For partial control, apply to plants that are at or beyond the bloom stage of growth. Repeat applications may be required.

Thistle, arctothca | — — | 2%
For partial control, apply to plants that are at or beyond the bloom stage of growth. Repeat applications may be required.
Apply when most plants are at or beyond the bud stage of growth. For suppression in the spring, apply 1 quart of this product, or 1 pint of this product plus 0.5 pound of 2,4-D, in 3 to 10 gallons of water per acre. Allow rosette regrowth to a minimum of 6 inches in diameter before treating. Applications can be made as long as leaves are still green and plants are actively growing at the time of application. Allow 3 or more days after application before tillage.

For partial control, apply when most plants are at or beyond the seedhead stage of growth. Repeat applications may be required to maintain control. Fall treatments must be applied after frost.

To control eucalyptus resprouts, apply when resprouts are 6 to 12 feet tall. Ensure complete coverage. Avoid application to drought-stressed plants.

### Woody Brush and Trees Rate Table (Alphabetically by Species)

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thistle, Canada</td>
<td>2-3</td>
<td>3-40</td>
<td>2%</td>
</tr>
</tbody>
</table>

### Poison Ivy/Parson oak

Apply when at least 50 percent of the new pin leaves are fully developed. Repeat treatments may be required to maintain control. Fall treatments must be applied before a killing frost. For control of eucalyptus resprouts, apply when resprouts are 6 to 12 feet tall. Ensure complete coverage. Avoid application to drought-stressed plants.

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coyote brush</td>
<td>3-5</td>
<td>1.5-2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dogwood*</td>
<td>2-5</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elderberry</td>
<td>2-3</td>
<td>1-1.5%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elm*</td>
<td>2-5</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eucalyptus</td>
<td>—</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida holly (Brazilian Pepperbush)*</td>
<td>2-5</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gorse*</td>
<td>2-5</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hasardia*</td>
<td>2-4</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hickory*</td>
<td>2-5</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honeysuckle</td>
<td>3-4</td>
<td>1-1.5%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honeysuckle, American*</td>
<td>2-5</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutuz</td>
<td>4-5</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locust, black*</td>
<td>2-4</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madrone resprouts*</td>
<td>2-4</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manzanita*</td>
<td>2-5</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maple, red</td>
<td>2-4</td>
<td>1-1.5%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maple, sugar</td>
<td>—</td>
<td>1-1.5%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monkey flower*</td>
<td>2-4</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oak, black, white*</td>
<td>2-4</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oak, post</td>
<td>3-4</td>
<td>1-1.5%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oak, northern</td>
<td>—</td>
<td>1-1.5%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oak, southern red</td>
<td>2-3</td>
<td>1-1.5%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persimmon*</td>
<td>2-5</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pine</td>
<td>2-5</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poison ivy/Parson oak</td>
<td>4-5</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
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<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russian olive*</td>
<td>2-5</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
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<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sage, black</td>
<td>2-4</td>
<td>1%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sage, white*</td>
<td>2-5</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sage brush, California</td>
<td>2-4</td>
<td>1%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th>Rate (QT/A)</th>
<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shadowbush</td>
<td>2-3</td>
<td>1-1.5%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Species</th>
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<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saltcedar</td>
<td>2-5</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

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<tr>
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<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sassafras*</td>
<td>2-5</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
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<tr>
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<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sourwood**</td>
<td>2-5</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
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<tr>
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<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sumac, poison, smooth, winged*</td>
<td>2-4</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

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<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweetgum</td>
<td>2-3</td>
<td>1-1.5%</td>
<td></td>
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</tbody>
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<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tallowtree, Chinese</td>
<td>—</td>
<td>1%</td>
<td></td>
</tr>
</tbody>
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<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tan oak resprouts*</td>
<td>—</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
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<tr>
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<th>Water Volume (GPA)</th>
<th>Hand-Held % Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thimbleberry</td>
<td>2-3</td>
<td>1-1.5%</td>
<td></td>
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</tbody>
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</tr>
</thead>
<tbody>
<tr>
<td>Tobacco, tree*</td>
<td>2-4</td>
<td>1-2%</td>
<td></td>
</tr>
</tbody>
</table>

### Woody Brush and Trees Rate Table (Alphabetically by Species)

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

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

Unless otherwise directed, apply broadcast treatments in 3 to 40 gallons of water per acre. Ensure thorough coverage when using hand-held equipment. Symptoms may not appear prior to frost or senescence with fall treatments.

Allow 7 or more days after application before tillage, mowing or removal. Repeat treatments may be necessary to control plants regenerating from underground parts or seed.

Some autumn colors on undesirable deciduous species are acceptable provided no plant is killed. Some plants may be necessary to control plants regenerating from underground parts or seed. For partial control, apply when most plants are at or beyond the seedhead stage of growth. Repeat applications may be required to maintain control. Fall treatments must be applied after frost.

For best results, apply when most plants have reached the boot-to-head stage of growth.
**Weed Species** | **Rate (OT/A)** | **Hand-Held % Solution**
--- | --- | ---
Trumpet creeper | 2-3 | 1-1.5%
Vine maple* | 2-5 | 1-2%
Virginia creeper | 2-5 | 1-2%
Waxmyrtle, southern* | 2-5 | 1-2%
Willow | 3-4 | 1-1.5%

16. LIMIT OF WARRANTY AND LIABILITY

This 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.

**Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.**

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, application to or contact with desirable vegetation, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

This Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company’s stewardship requirements and with express written permission from this Company.

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

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