# Specimen Label

GLYPHOSATE

GROUP

HERBICIDE



Dow AgroSciences

# **Durango**® DMA®



<sup>®</sup><sup>TM</sup>Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

Roundup Ready® is a registered trademark of Monsanto Company

For control of annual and perennial weeds and woody plants in various cropping systems, fallow cropland and CRP acres, and farmsteads.

Avoid contact of this herbicide with foliage, green stems, exposed non-woody roots or fruit of crops (except crops tolerant to glyphosate), desirable plants and trees, because severe injury or destruction may result.

Active Ingredient:

glyphosate: N-(phosphonomethyl)glycine,

dimethylamine salt	

Contains 5.07 lb per gallon glyphosate, dimethylamine salt (4 lb per gallon glyphosate acid).

# **Precautionary Statements**

Hazards to Humans and Domestic Animals

EPA Reg. No. 62719-556

# Keep Out of Reach of Children CAUTION

Causes Moderate Eye Irritation • Prolonged Or Frequently Repeated Skin Contact May Cause Allergic Reactions In Some Individuals

Avoid contact with skin, eyes or clothing.

# Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry.

# **Engineering Controls**

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 thoroughly after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

### First Aid

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

**If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

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

# **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 or rinsate.

# **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 that 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 a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

This is an end-use product. Dow AgroSciences does not intend and has not registered it for reformulation.

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 regulation.

# **Agricultural Use Requirements**

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

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

# Non-Agricultural Use Requirements

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

Keep people and pets off treated areas until spray solution has dried.

# Storage and Disposal

Pesticide Storage: Do not contaminate water, food, feed or seed by storage or disposal.

**Pesticide Disposal:** Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a

# Storage and Disposal (cont.)

landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures. Emptied container contains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

#### Nonrefillable containers 5 gallons or less:

**Container Handling:** Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

#### Refillable containers 5 gallons or larger:

**Container Handling:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

#### Nonrefillable containers 5 gallons or larger :

**Container Handling:** Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

# **Product Information**

Durango<sup>®</sup> DMA<sup>®</sup> herbicide is a postemergence, systemic herbicide with no soil residual activity. This product 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.

When applied as specified and under the conditions described, this product controls annual and perennial weeds listed in the label booklet.

Do not add surfactants, additives containing surfactants, buffering agents, or pH adjusting agents to the spray solution when this product is the only pesticide being applied. Ammonium sulfate, drift control additives, or dyes and colorants may be used. See Mixing Directions section of this label for instructions.

**Time to Symptoms:** The active ingredient in this product moves through the plant from the point of foliage contact to and into the root system. Visible effects are a gradual wilting and yellowing of the plant that

advances to complete browning of above ground growth and deterioration of underground plant parts. Visible effects on most annual weeds occur within 2 to 4 days, but on most perennial weeds visible effects may not occur for 7 days or more. Extremely cool or cloudy weather following treatment may slow activity of this product and delay development of visual symptoms.

**Stage of Weeds:** Annual weeds are easiest to control when they are small. Best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity. Refer to the annual, perennial, woody brush and trees rate tables for specific weeds. Always use the higher rate within the rate range for heavy or dense weed growth or when weeds are growing in an undisturbed (non-cultivated) area. When treating weeds with disease or insect damage, weeds heavily covered with dust, or weeds under poor growing conditions, reduced weed control may result.

**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 specified stage for treatment.

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

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

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

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

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

**Maximum Application Rates:** The maximum application rates specified in this label are given in units of volume, either fluid ounces, pints or quarts, of this product per acre. The maximum allowed application rates apply to this product combined with the use of any and all other glyphosate-containing herbicides, either applied separately or in a tank mix, on the basis of total pounds of glyphosate (acid equivalents) per acre. If more than one glyphosate-containing product is applied to the same site within the same year, ensure that the total of pounds acid equivalent gyphosate does not exceed the maximum allowed.

Do not apply more than 6 quarts (6 lb glyphosate acid) of this product per acre per year for all crops listed in this label. Do not apply more than 8 quarts (8 lb glyphosate acid) of this product per acre per year for all noncrop sites, and all tree and vine crops listed in this label.

### **Herbicide Resistance Management**

Glyphosate, the active ingredient in this product, is a group 9 herbicide (inhibitor of EPSP synthase). Some naturally occurring weed biotypes that are tolerant (resistant) to glyphosate may exist due to genetic variability in a weed population. Where resistant biotypes exist, the repeated use of herbicides with the same mode of action can lead to the selection for resistant weeds. Certain agronomic practices reduce the likelihood that resistant weed populations will develop, and can be utilized to manage weed resistance once it occurs.

# To delay the selection for glyphosate resistant weeds, use the following practices:

- Scout fields before and after application.
- Start with a clean field by applying a burndown herbicide or by tillage.
- Control weeds early when they are small.
- Add other herbicides, such as a selective and/or a residual herbicide, and cultural practices, such as tillage or crop rotation, where appropriate.
- Rotating to other glyphosate tolerant crops is one method for adding other herbicides into a continuous glyphosate tolerant system.
- Use the application rate for the most difficult to control weed in the field. Do not tank mix with other herbicides that reduce this product's efficacy through antagonism or with ones that encourage application rates of this product below those specified on this label.
- · Control weed escapes and prevent weeds from setting seeds.
- Before moving from one field to another, clean equipment to minimize the spread of weed seeds or plant parts.
- Use new commercial seed that is as free of weed seed as possible.
- Report any incidence of repeated non-performance of this product against a particular weed species to the local retailer, county extension agent, or Dow AgroSciences representative.

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

- Tank mix this product or apply it sequentially with an appropriately labeled herbicide with a different mode of action to achieve control if a naturally occurring resistant biotype is present in the field.
- Cultural and mechanical control practices, such as crop rotation or tillage, may also be used.
- Rotating to other glyphosate tolerant crops is one method for adding other herbicides into a continuous glyphosate tolerant system.
- To control weed escapes, including resistant biotypes, before they set seed, scout treated fields after applying this product.
- Thoroughly clean equipment before leaving any field known to contain resistant biotypes.

Because the presence of glyphosate resistance in weed populations is difficult to detect prior to use, Dow AgroSciences accepts no liability for any losses that may result from the failure of this product to control glyphosate-resistant weeds, to the extent permitted by law.

# Control and Management of Glyphosate-Resistant Ryegrass (Not for Use in California)

**Preemergence:** To control other emerged weeds, apply this product in a tank mix with a preemergence herbicide labeled for control of ryegrass.

**Preemergence and Postemergence:** To control other emerged weeds, apply this product in a tank mix with a residual preemergence herbicide and a postemergence herbicide (other than glyphosate) labeled for control of ryegrass. Apply before ryegrass is more than 4 inches in height.

**Postemergence:** To control other emerged weeds, apply this product in a tank mix with another postemergence herbicide labeled for control of ryegrass. Apply before ryegrass is more than 4 inches in height.

Not all herbicides are registered in each state or for all use sites (orchards, noncrop areas, or ditch banks) or crops for the management of ryegrass. When using this product in a tank mix, refer to each product's label and observe the most restrictive label's precautions and limitations.

### Attention

Avoid contact of herbicide with foliage, green stems, exposed nonwoody roots or fruit of crops, desirable plants and trees, because severe injury or destruction may result.

# AVOID DRIFT. Use extreme care when applying this product to prevent injury to desirable plants and crops.

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

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

# Spray Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they must be observed.

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

#### Aerial Drift Reduction Advisory

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

**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 adverse effects from drift if applications are made improperly or

under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

### **Controlling Droplet Size:**

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Do not exceed the nozzle manufacturer's recommended pressures. Use the lower spray pressures 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 parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**Boom Length:** For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

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

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

Wind: Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Do not apply this product when wind speed is below 2 mph 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 spray drift.

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

Temperature Inversions: Do not apply this product 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 connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

**Sensitive Areas:** Apply this pesticide only 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).

### **Mixing Directions**

Use only clean, stainless steel, fiberglass, plastic or plastic-lined steel containers to mix, store and apply spray solutions of this product. 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.

Eliminate any risk of siphoning the contents of the tank mix back into the carrier source while mixing. Use approved anti-back-siphoning devices where required by state or local regulations. A 50-mesh nozzle screen or line strainer is sufficient to use on the spray equipment.

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.

#### Durango DMA - Alone

This product mixes readily with water. Mix spray solutions of this product as follows:

- 1. Fill the mixing or spray tank with the required amount of clean water.
- 2. Add the specified amount of this product near the end of the filling process and mix well.
- 3. During mixing and application, foaming of the spray solution may occur. To prevent or minimize foaming, avoid the use of mechanical agitators, terminate by-pass and return lines at the bottom of the tank and, if needed, use an approved anti-foam or defoaming agent.

#### Durango DMA – Tank Mix

This product does not provide residual weed control. For residual weed control or an alternate mode of action, tank mix this product with other herbicides. Read and carefully observe the precautionary 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.

Under certain conditions, at certain growth stages, and/or under other circumstances, some tank mix products have the potential to cause crop injury. Read all labels for products used in the tank mix prior to using them to determine the potential for crop injury.

Tank mixing with other herbicides, insecticides, fungicides, micronutrients or foliar fertilizers may result in reduced weed control or crop injury. Do not use these products in applications with this product unless otherwise noted in this label. 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 specified in this labeling. Mixing this product with herbicides or other materials not specified on this label may result in reduced performance.

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

Always predetermine the compatibility of all tank mix products, together in the carrier, by mixing small proportional quantities in advance of mixing and applying them to the crop.

For best results, apply tank mixes with this product in a minimum spray volume of 10 gallons per acre (gpa).

For tank mixes of this product:

- 1. Place a 20- to 35-mesh screen or wetting basket over filling port.
- Through the screen, fill the spray tank one-half full with water and start agitation.
- If ammonium sulfate is used, add it slowly into the tank through the screen and continue adding water into the tank through the screen. If dry ammonium sulfate is used, make sure it is completely dissolved in the 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.
- 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 emulsifiable 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 mix tank before completing the filling process.
- Add individual formulations to the spray tank in the following order: wettable powder, flowable, emulsifiable concentrate, drift control additive and water soluble liquid.

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 and return line on or near the bottom of the tank to minimize foaming. Screen size in nozzle or line strainers must be no finer than 50 mesh.

#### **Handheld Sprayers**

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

Spray Concentration	Amount of This Product for Desired Volume		
(percent)	1 gal	25 gal	100 gal
0.5	2/3 fl oz	1 pt	2 qt
0.75	1 fl oz	24 fl oz	3 qt
1	1 1/3 fl oz	1 qt	1 gal

Spray Concentration	Amount of This Product for Desired Volume		
(percent) (cont.)	1 gal	25 gal	100 gal
1.5	2 fl oz	1 1/2 qt	1 1/2 gal
2	2 2/3 fl oz	2 qt	2 gal
3.75	5 fl oz	3 3/4 qt	3 3/4 gal
5	6 1/2 fl oz	5 qt	5 gal
10	13 fl oz	10 qt	10 gal

For best results when using knapsack sprayers, mix the specified amount of this product with water in a larger container. Fill sprayer with the mixed solution.

#### Ammonium Sulfate

Adding 1 to 2 percent dry ammonium sulfate by weight or 8.5 to 17 lb per 100 gallons of water may increase the performance of this product, particularly when tank mixed with certain residual herbicides on annual and perennial weeds. The equivalent rate of ammonium sulfate in a liquid formulation may also be used. Ensure that ammonium sulfate is completely dissolved in the spray tank before adding herbicides. Thoroughly rinse the spray system with clean water after use to reduce corrosion. **Note:** When using ammonium sulfate, apply this product at rates listed in this label. Lower rates will result in reduced performance.

#### **Nonionic Surfactant**

Although not generally required, a surfactant may be added to spray solutions if water carrier volume is more than 30 gpa or the application rate for this product is less than 17 fl oz per acre.

Use nonionic surfactants that are labeled for use with herbicides. Do not reduce rates of this product when adding surfactant. When using additional surfactant, use a surfactant concentration of 0.25 to 0.5 percent (1 to 2 quarts per 100 gallons of spray solution) for surfactants containing at least 70 percent active ingredient, or a surfactant concentration of 1 percent (4 quarts per 100 gallons of spray solution) for surfactants containing less than 70 percent active ingredient. Read and follow the precautionary statements and applicable use directions on the label of the surfactant product.

Do not use surfactant with this product for applications made over the top of glyphosate tolerant crops and preharvest to cotton. Do not add buffering agents or pH adjusting agents to the spray solution when this product is the only pesticide used.

#### **Colorants or Dyes**

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

#### **Drift Control Additives**

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

#### **Application Equipment and Application Methods**

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

This product may be applied with the following application equipment. Apply spray solutions in properly maintained and calibrated equipment capable of delivering desired volumes.

Aerial: Fixed wing and helicopter

**Ground Broadcast Spray:** Boom or boomless systems, pull-type sprayer, floaters, pick-up sprayers, spray coupes and other ground broadcast equipment.

Handheld and Backpack Equipment: Knapsack and backpack sprayers, pump-up pressure sprayers, handguns, hand wands, mistblowers, lances and other handheld and motorized spray equipment used to direct the spray onto weed foliage. This product is not registered in California or Arizona for use in mistblowers.

Selective Equipment: Shielded and hooded sprayers, wiper applicators and sponge bars.

Injection Systems: Aerial or ground injection sprayers.

Controlled Droplet Applicator (CDA): Handheld or boom-mounted applicators that produce a spray consisting of a narrow range of droplet sizes.

#### Aerial Equipment in All States Except California and Arkansas Do not apply this product using aerial spray equipment except under conditions as specified within this label.

All applications listed on this product label, unless otherwise prohibited, may be made with aerial application equipment, provided that the

applicator complies with all specified precautions and restrictions on this label or any supplemental labeling for this product.

Use the specified rates of this herbicide in 3 to 15 gpa of water unless otherwise specified on this label. Unless otherwise specified, do not use more than 1.5 quarts of this product per acre when applying by air. Refer to the specific use directions of this label for volumes and application rates.

Do not directly apply to any body of water.

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

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

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. **Prolonged exposure of this product to uncoated steel surfaces may result in corrosion and possible failure of the part. Landing gear components are most susceptible.** The maintenance of an organic coating (paint), which meets aerospace specification MIL-C-38413, may prevent corrosion.

#### Aerial Application in California and Arkansas Only

Use the following guidelines when aerial applications are made near crops or desirable perennial vegetation after bud break and before total leaf drop, and/or near other desirable vegetation or annual crops:

- Do not apply within 100 feet of all desirable vegetation or crop(s).
- If wind up to 5 miles per hour is blowing toward desirable vegetation or crop(s), do not apply within 500 feet of the desirable vegetation or crop(s).
- Winds blowing from 5 to 10 miles per hour toward desirable vegetation or crop(s) may require buffer zones in excess of 500 feet.
- Do not apply when winds are in excess of 10 miles per hour or when inversion conditions exist.

When this product is applied under the conditions described, it controls annual and perennial weeds listed in the label affixed to the container.

Only 2,4-D amine formulations may be used for aerial applications in California. Tank mixes with 2,4-D amine formulations may be applied by air in California for fallow and reduced tillage systems, and for alfalfa and pasture renovation applications only. Do not aerially apply any tank mixes with dicamba in California.

#### Additional Information for Fresno County, California

Within the boundaries of Fresno County, California, the following information applies only from February 15 through March 31:

North: Fresno County line South: Fresno County line East: State Highway 99 West: Fresno County line

Always read and follow the label directions and precautionary statements for all products used in the aerial application. Observe the following directions to minimize off-site movement during aerial applications of this product. Minimizing off-site movement is the responsibility of the grower, pest control advisor and aerial applicator.

**Written Directions:** A written direction **must** be submitted by or on behalf of the applicator to the Fresno County Agricultural Commissioner 24 hours prior to application. The written direction **must** state the proximity of surrounding crops and that conditions of each manufacturer's product label and this label have been satisfied.

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

**Applications at Night:** Do not aerially apply this product earlier than 30 minutes prior to sunrise and/or later than 30 minutes after sunset. Doing so requires prior permission from the Fresno County Agricultural Commissioner.

#### Aerial Application in Arkansas Only

Use the following guidelines when aerial applications are made near crops or desirable vegetation:

- Do not apply within 100 feet of all desirable vegetation or crop(s).
- If wind up to 5 miles per hour is blowing toward desirable vegetation or crop(s), do not apply within 500 feet upwind of the desirable vegetation or crop(s).
- Winds blowing from 5 to 10 miles per hour toward desirable vegetation or crop(s) may require buffer zones in excess of 500 feet.
- Do not apply when winds are in excess of 10 miles per hour or when inversion conditions exist.

Avoid drift. Do not make applications into still air where there is a temperature inversion layer low enough for fine spray particles to become suspended and move outside the target area when the inversion layer moves. Do not apply when winds are gusty or under any other condition that favors drift because it is likely to cause damage to any vegetation that is contacted. Maintain appropriate buffer zones to prevent injury to adjacent desirable vegetation.

Apply this product in 3 to 15 gpa of water. Use a sufficient carrier volume and appropriate equipment that forms droplets large enough to avoid drift. Coarse droplets in the 300 to 500 (VMD) micron range have a lower potential for drift.

Unless a greater height is required for aircraft safety, make applications with the nozzle release point 8 to 15 feet above the top of the target plants. The distance of the outermost boom nozzles must not exceed 75 percent of the length of the wingspan or rotor. Reducing this distance to 65 percent of the length of the wingspan or rotor improves drift control without affecting the swath width.

The discharge from nozzles must always be backward, parallel with the air stream, and never downwards more than 45 degrees on a fixed wing aircraft or forward of the prevailing airflow on rotary winged aircraft. Do not use nozzles with a wide angle discharge.

Do not apply during a low level temperature inversion because fine spray particles could be suspended in still air and then move outside the target area when the inversion layer moves. These conditions can occur when wind speeds are less than 2 mph.

#### **Ground Broadcast Equipment**

Use the specified rates of this product in 3 to 40 gpa of water as a broadcast spray unless otherwise specified. As density of weeds increases, increase spray volume within the specified range to ensure complete coverage. Carefully select proper nozzles to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

#### Handheld and Backpack 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. Refer to the Handheld Sprayers section of this label for specified application rates and application timing.

Apply this product as a spot treatment using handheld equipment only when specifically directed on this label. Any crop that is sprayed with this product will be killed. In order to avoid unwanted crop destruction, be careful to not spray or allow spray to drift outside of the target area.

#### **Selective Equipment**

This product may be applied through shielded applicators, hooded sprayers, wiper applicators or sponge bars after dilution and thorough mixing with water to listed weeds growing in any noncrop site specified on this label and only when specified in cropping systems.

In cropping systems, use shielded sprayers, hooded sprayers, and wiper applicators in between rows of crop plants (row middles). Use wiper applicators over the top of crops only when specifically allowed to do so in this label. Selective equipment must be capable of preventing all contact of the herbicide solution with the crop and operated without spray mist escape, leakage, or dripping of the herbicide solution onto the corp.

Avoid contact of herbicide with desirable vegetation. Contact of the herbicide solution with desirable vegetation may result in damage or destruction.

Shielded and Hooded Applicators: When applied at the specified rates on the label and applied in shielded and hooded sprayers, this product controls the weeds listed in the rate tables in the Annual Weeds section and in the Perennial Weeds section. Use nozzles that provide uniform coverage within the treated area. Keep shields on these sprayers adjusted to protect desirable vegetation.

A hooded sprayer is a type of shielded applicator. The spray pattern is completely enclosed on the top and all sides by a hood, thereby shielding the crop from the spray solution. Adjust the shields on these sprayers to protect desirable vegetation. Ensure that the hood completely encloses the spray pattern when applying around crops grown on raised beds. If necessary, extend the front and rear flaps of the hooded sprayer downward to reach the ground in deep furrows. **Exercise extreme care to avoid**  **contact of herbicide with desirable vegetation.** Any unintended contact of this product with any vegetation could cause damage.

Configure and operate hooded sprayers in a manner that minimizes bouncing and avoids raising the hood up off of the surface of the ground at any time. If the hoods are raised, spray particles may escape and come into contact with the crop, causing damage or destruction of the crop. The spray hoods must be operated on the ground or skimming across the ground. 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 runoff down the inside of the hood. For best results, position a single, low pressure, low drift, flat fan nozzle with an 80 to 95 degree spray angle at the top center of the hood. Spray volume when using hooded sprayers is 20 to 30 gpa.

When using hooded sprayers, the following procedures reduce crop injury potential:

- Operate spray hoods on the ground or skimming across the ground surface.
- Leave at least an 8 inch untreated strip over the drill row. As an example, if the crop row width is 38 inches, the maximum width of the spray hood is 30 inches.
- To avoid bouncing of the spray hoods, operate at ground speeds of no more than 5 mph.
- Apply when wind speeds are 10 mph or less.
- Use low drift nozzles that provide uniform coverage within the treated area.

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

**Wiper Applicators:** 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.

Adjust wiper applicators used over the top of desirable vegetation so that the wiper contact point is at least 2 inches above the desirable vegetation. Better results may be obtained when more of the weed is exposed to the herbicide solution. Weeds should be 6 inches above the desirable vegetation. Adjust the applicator height to ensure adequate contact with weeds. Weeds that are not contacted by the herbicide will not be affected. When weeds are growing in dense clumps, in severe weed infestations, or when weed height varies dramatically, poor contact may occur. Repeat treatments may be necessary in these situations.

Operate this equipment at ground speeds no more than 5 mph. Performance may be improved by reducing speed in areas of heavy weed infestations to ensure adequate wiper saturation. Better results may be obtained if two applications are made in opposite directions.

Droplets, mist, foam or splatter of the herbicide settling onto desirable vegetation may result in discoloration, stunting or destruction. Avoid leakage or dripping onto desirable vegetation. Adjust height of applicator to ensure adequate contact with weeds. Keep wiping surfaces clean. Be aware that, on sloping ground, the herbicide solution may migrate, causing dripping on the lower end and drying of the wicks on the upper end of a wiper applicator.

Do not use wiper equipment when weeds are wet.

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

Do not add surfactant to the herbicide solution when using a wiper applicator.

# Rope or Sponge Wick Applicators: Use solutions of 33 to 75 percent of this product in water.

Panel Applicators: Use solutions of 33 to 100 percent of this product in water.

#### **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 controlled droplet application (CDA) equipment must not be less than the amount specified in this label when applied by conventional broadcast equipment. For vehicle-mounted CDA equipment, apply in 2 to 15 gpa of water.

For the control of annual weeds with handheld CDA units, apply a 20 percent solution of this product at a flow rate of 2 fl oz per minute and a walking speed of 1.5 mph (2 pints per acre). For the control of perennial weeds, apply

a 20 to 30 percent solution of this product at a flow rate of 2 fl oz per minute and a walking speed of 0.75 mph (2 to 3 quarts per acre).

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

#### Crops

This section is organized alphabetically by crop category. There may be several labeled crops listed in a crop category. Unless otherwise specified, applications may be made to control any weeds listed in the annual, perennial and woody brush tables.

See Glyphosate Tolerant Crops section for use of this product in crops that contain the glyphosate tolerant genes. Do not use the instructions in this Crops section.

#### **Types of Applications**

Chemical fallow, preplant fallow beds, preplant, at-planting, preemergence, hooded sprayer in row middles, shielded sprayer in row middles, wiper application in row middles, postharvest

#### **Product Application Directions**

Apply this product during fallow intervals before planting, prior to planting or transplanting, at-planting, or preemergence to annual and perennial crops listed on this label except where specifically limited. If a crop is not listed on this label, apply this product at least 30 days prior to planting. Apply this product according to the rates specified in the rate tables in the Annual Weeds section, Perennial Weeds section and Woody Brush and Trees section unless otherwise specified. Application rates specified on this label to control tough weeds, or those rates on supplemental labeling for this product, supersede the rates in the rate tables in the Annual Weeds section, Perennial Weeds section, and Woody Brush and Trees section.

Repeat applications up to a maximum of 1.5 gallons of this product per acre per year may be made.

Use hooded sprayers and wiper applicators capable of preventing all crop contact with the herbicide solution in mulched or unmulched row middles after crop establishment. To control tall weeds, wiper applicators may be used over the top of crops only when specifically directed in the individual crop sections. Refer to the Selective Equipment section for essential precautions regarding crop injury. Crop injury is possible with these types of application.

Applying this product as a spot treatment in a cropping system may only be made when specifically directed to do so.

All treatments may be made by aerial equipment were appropriate provided that the applicator follows the precautions and restrictions specified on this label or on separate supplemental labeling.

#### **Tank Mixes**

This product may be tank mixed with other herbicides to provide residual weed control, a broader weed control spectrum, or an alternate mode of action. Always read and follow label directions for all products used in the tank mix. Use all products according to the rates specified on the label. Some tank mix products have the potential to cause crop injury under certain conditions, at a certain crop growth stage, and/or under other circumstances. Read all product labels used in the tank mix prior to use to determine the potential for crop injury. Always perform a tank mix compatibility test by mixing small proportional quantities in advance. A tank mix of this product with other herbicides may cause incompatibility, antagonism, or a reduction in the efficacy of this product. Not all product formulations have been tested for compatibility or performance in a tank mix. Buyers and all users are responsible for any and all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials not specified on this label or on separate supplemental labeling.

#### **Product Precautions**

- Do not let this herbicide contact foliage, green shoots or stems, bark, exposed roots (including those emerging from plastic mulch), or fruit of crops as severe crop injury or destruction may result.
- Transplant seedlings that come into contact with freshly sprayed weeds could result in significant crop injury.
- When making at-planting and preemergence applications, apply before crop emergence to avoid severe crop injury.
- A broadcast application made at emergence will result in injury or death of emerged seedlings.
- Apply before seed germination in coarse sandy soils to further minimize the risk of injury.
- Making a preharvest application to crops grown for seed may result in a reduction in germination or vigor.

#### **Product Restrictions**

• Treatments with selective equipment, including wiper applicators and hooded sprayers, must be made at least 14 days before harvest unless other specified.

- Make postharvest and fallow applications at least 30 days before planting any crop not listed on this label.
- When spot treatment is allowed, do not treat more than 10 percent of the total field to be harvested. The crop receiving the spray in the treated area will be killed. Do not spray or allow spray to drift outside of the target area in order to avoid unwanted crop destruction.
- For broadcast postemergence treatments, do not harvest or feed treated vegetation for 8 weeks following application unless otherwise specified.
- Observe the maximum application rates specified in this label. The maximum application rate applies to the use of this product combined with the use of any and all other glyphosate-containing herbicides, whether applied separately or in a mixture. Calculate the application rates (glyphosate acid equivalents) and do not exceed the specified maximum rate for the total use of this and other glyphosate-containing products.

# Alfalfa, Clover, and Other Forage Legumes

Labeled Crops: Alfalfa, clover, kenaf, kudzu, lespedeza, leucaena, lupin, sainfoin, trefoil, velvet bean, vetch (all types)

Types of Applications: Preplant, at-planting, preemergence, preharvest (except kenaf and leucaena), spot treatment, wiper applicators, stand removal

Refer to the rate table in the Annual Weeds and Perennial Weeds sections for application rates of this product to specific weeds. This product controls specified annual and perennial grasses and broadleaf weeds when applied as directed.

#### Preplant, Preemergence and At-Planting

This product may be applied before, during or after planting crops listed in this section. Make applications prior to emergence of the crop.

#### **Restrictions:**

Remove domestic livestock before application.

## Spot Treatment and Wiper Applications

This product may be applied as a spot treatment or over the top to crops listed in this section with wiper applicators to control or suppress the weeds listed under Wiper Applicators and Sponge Bars in the Selective Equipment section of this label. Applications may be made in the same area at 30-day intervals.

#### **Restrictions:**

- For spot treatment and wiper applications, apply in areas where the movement of domestic livestock can be controlled.
- Remove domestic livestock before application and wait three days after application before grazing livestock or harvesting.
- Do not treat more than 10 percent of the total field area at one time.

#### Preharvest (Except Kenaf and Leucaena) and Stand Removal

This product may be used in declining stands or any stand where severe crop injury or crop destruction is acceptable. Apply this product as a broadcast application prior to harvest (except in kenaf and leucaena). It can also be used to remove established stands of any forage legumes listed in this section. This product will control annual and perennial weeds, including quackgrass, when applied at any time of the year. For control of guackgrass, apply in the spring, late summer or fall when quackgrass is actively growing. Follow treatments for quackgrass by deep tillage for complete control prior to the harvest of alfalfa. For complete removal of established stands of clover, it may be necessary to use the higher treatment rates listed in the rate table in the Perennial Weeds section.

#### **Restrictions:**

#### Alfalfa:

- --Maximum Single Preharvest Application Rate: 1.5 quarts per acre --Minimum Interval Between Application and Harvest or Grazing: 36 hours
- --If crop is to be harvested or grazed by livestock, use up to a maximum of 1.5 quarts per acre.
- All Other Legumes:
- --Maximum Single Preharvest Application Rate: 2.25 pints per acre --Minimum Interval Between Application and Harvest or Grazing: 3 days
- --If crop is to be harvested or grazed by livestock, use up to a maximum of 2.25 pints per acre.
- · A preharvest or stand removal application may destroy an alfalfa stand and may severely injury or destroy other labeled crops such as clover.
- Remove domestic livestock before application.
- Make only one application to an existing crop stand per year.
- Do not apply preharvest to alfalfa grown for seed as a reduction in
- germination or vigor may occur. If the application rate required is more than these levels, do not graze or
- harvest treated foliage for livestock feed. Labeled crops may be planted into the treated area at any time; for
- other crops, wait 30 days between application and planting.

#### Alfalfa (Dormant) (Not for Use in California)

Use this product to control or suppress many weeds, including quackgrass, downy brome and cheatgrass, in dormant alfalfa.

Applying this product to dormant alfalfa can cause crop injury. Apply 7 to 9 fl oz of this product per acre in the spring to alfalfa that is dormant. Apply after spring temperatures have warmed enough to encourage resumption of weed growth, but prior to initiation of trifoliate leaf expansion of the alfalfa. If applications of this product are made after expansion of the first trifoliate leaf of the alfalfa, growth reduction and reduced crop yield will result. Slight discoloration of the alfalfa may occur, but it will regreen and regrow under moist soil conditions as the effects of this product wears off.

#### **Restrictions:**

- Do not use ammonium sulfate when spraying dormant alfalfa with ٠ this product.
- Do not use this product where a slight yield reduction in the first cutting of alfalfa cannot be tolerated.
- Do not make more than one application per year.
- Wait 36 hours after application before grazing livestock or harvesting.

# Asparagus (See Miscellaneous Crops)

### Berries

Labeled Crops: Blackberry (including bingleberry, black satin berry, boysenberry, Cherokee blackberry, chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, hullberry, juneberry, lavacaberry, lowberry, lucretiaberry, marionberry, nectarberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, and youngberry), blueberry, boysenberry, cranberry, currant, elderberry, gooseberry, loganberry, salal

Types of Applications: Those listed in Tree, Vine and Shrub Crops section plus spot treatment (cranberry), postharvest (cranberry)

# **Restrictions:**

- Cranberry: -Preharvest Interval: Do not apply within 30 days of harvest. \_
- Other Small Fruits and Berries: --Preharvest Interval: Do not apply within 14 days of harvest.
- Do not permit herbicide solution to contact desirable vegetation, including green shoots, canes or foliage.

#### Spot Treatment (Cranberry)

Spot treatments may be used to control weeds growing in dry ditches (interior and perimeter) of cranberry production areas. Handheld sprayers or appropriate application equipment listed under Application Equipment and Application Methods in this label may be used. Reduce water level to remove standing water in ditches prior to application. For handheld sprayers, use 1 to 1.5 percent solution of this product. Spray to wet vegetation, but not to runoff.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 30 days of harvest.
- For treatments after draw down of water in dry ditches, allow two days or more after treatment before reintroducing water to achieve maximum weed control.
- · Apply this product within one day after draw down to ensure application to actively growing weeds. Do not make applications by air.
- Do not apply directly to water.
- Use nozzles that emit medium to large sized droplets to minimize drift in order to avoid crop injury.

#### Postharvest (Cranberry)

Application of this product may be made after the harvest of cranberries to control weeds growing within the field. Best results will be obtained if applications are made to vines that appear dormant (after they have turned red). Handheld sprayers, wipers, or other appropriate application equipment listed under Application Equipment and Application Methods\_in this label may be used. If using handheld sprayers, use a 0.4 to 0.75 percent solution of this product. Spray to wet vegetation, but not to runoff. If using handheld boom sprayers, apply 1.5 to 3 quarts of this product per acre.

#### Precautions:

• Even though vines appear dormant, contact of the herbicide solution with desirable vegetation may result in damage or severe plant injury. Cranberry plants that are directly sprayed may be killed.

#### **Restrictions:**

- Make applications only after cranberries have been harvested.
- Do not treat more than 10 percent of the total bog.
- Allow a minimum of 6 months after the last application and next harvest of cranberries.
- Do not make applications by air.
- Do not apply directly to water.

# Canola, Crambe, Mustard (Seed) (See Oilseeds) Cereal and Grain Crops

Labeled Crops: Barley, buckwheat, millet (pearl, proso), oats, quinoa, rice, rye, teff, teosinte, triticale, wheat (all), wild rice

**Types of Applications:** Those listed in Crops section plus red rice control prior to planting rice, spot treatment (except rice), barnyardgrass control in rice with renovation treatments (California only), wiper application (feed barley and wheat only), preharvest (wheat and feed barley only)

#### **Restrictions:**

• Do not treat rice fields or levees when field contains water.

#### Preplant, Preemergence and At-Planting

This product may be applied before, during or after planting of cereal crops. Make applications prior to emergence of the crop.

#### **Red Rice Control Prior to Planting Rice**

Apply 2.25 pints of this product in 5 to 10 gpa of water. Flush fields prior to application to obtain uniform germination and stand of red rice. Apply 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:**

 Avoid spraying during low humidity conditions as reduced control may result.

#### **Restrictions:**

- Do not treat rice fields or levees when the fields contain floodwater.
- Do not re-flood treated fields for eight days following application.

#### Spot Treatment (Except Rice)

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

#### **Precautions:**

• 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.

#### **Restrictions:**

• Do not treat more than 10 percent of the total field area to be harvested.

### Barnyardgrass Control in Rice with Renovation Treatments

#### (California Only)

Use this product applied as a renovation treatment in rice to control barnyardgrass infestations using ground broadcast spray or handheld equipment. Renovation is a herbicide treatment that produces crop and weed destruction in an entire field or a contiguous area treated within a field. Follow the application methods and specified rates in the label attached to this product's container.

#### **Restrictions:**

- The crop that is in the treated area will be killed. Do not spray or allow the spray to drift outside of the target area in order to avoid unwanted crop destruction.
- Do not use the rice straw and stubble from the treated area, including a 25-foot buffer zone on all sides, for grazing, animal bedding, or any feed purposes.
- Do not aerially apply this product.

#### Wiper Applications (Wheat and Feed Barley Only)

To control common rye or cereal rye, apply after the weeds have headed and achieved maximum growth and when the rye is at least 6 inches above the wheat or feed barley crop.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 35 days of harvest.
- Do not use roller applicators.

#### Preharvest (Wheat and Feed Barley Only)

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. Stubble may be grazed immediately after harvest.

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

#### **Restrictions:**

- Preharvest Interval: Do not apply within 7 days of harvest or grazing.
  Do not apply preharvest to wheat or barley grown for seed as a reduction
- in germination or vigor may occur.
- Do not apply more than 1.5 pints of this product per acre.

#### Postharvest

This product may be applied after harvest of cereal crops. Higher rates may be required for control of large weeds that were growing in the crop at the time of harvest. Tank mixtures of this product with 2,4-D or dicamba may be used provided the product to be tank mixed is registered for use on cereal crops.

#### **Restrictions:**

- **Preharvest Interval:** Do not apply within 7 days of harvest or feeding of treated vegetation.
- For any crop not listed on this label, make applications at least 30 days prior to planting the next crop.

### **Christmas Trees**

**Types of Applications:** Those listed in Tree, Vine, and Shrub Crops section, site preparation, broadcast application

#### **Directed Spray, Spot Treatment, and Wiper Application**

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

#### **Precautions:**

- Desirable plants may be protected from the spray solution by using shields or coverings made of cardboard or other impermeable material.
- Exercise care to avoid contact of spray, drift or mist with foliage or green bark of established Christmas trees.

#### Site Preparation

This product may be used prior to planting Christmas trees.

#### Precautions:

 Take precautions to protect nontarget plants during site preparation applications.

#### **Broadcast Application**

#### (Not for Use in California)

This product, if improperly applied, has the potential to cause severe injury to Christmas trees. Carefully follow all use directions. Broadcast apply this product over the established Christmas tree species douglas fir (*Pseudotsuga menziesii*), fir species (*Abies* spp.), and spruce species (*Piecea* spp.). Use 1.5 pints of this product per acre in 5 to 30 gpa of water. Apply after trees have completed at least a full growing season since planting or transplanting.

Apply only in the fall after the formation of the final conifer resting buds. Final resting buds must be fully hardened and in the dormant stage. Applying this product at any other time may result in unacceptable injury to the Christmas trees. Avoid spray pattern overlap as injury may occur.

In some areas, 1.5 to 3 pints of this product per acre may be used. Consult your local representative for specific use instructions if rates greater than 1.5 pints per acre are required.

For best results, do not use drift control additives as they may increase injury to Christmas trees.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 1 full year prior to tree harvest.
   Ensure that adequate buffers are maintained to prevent drift onto
- Ensure that adequate buffers are maintained to prevent drift onto nearby desirable crops or vegetation.
- Avoid spray pattern overlap as damage to Christmas trees could occur.
  Do not add surfactants, additives containing surfactants, or any other
- additive, including a drift control additive, to this product as severe Christmas tree injury may result.
- Do not use other herbicides, insecticides, or fungicides in a tank mix with this product as severe Christmas tree injury may occur.

### Citrus

Labeled Crops: Calamondin, chironja, citron, citrus hybrids, grapefruit, kumquat, lemon, lime, mandarin (tangerine), orange (all), pummelo, satsuma, mandarin, tangelo (ugli), tangor

Types of Applications: Those listed in Tree, Vine and Shrubs Crops section

**Florida and Texas Only:** For burndown or control of the weeds listed below, apply the listed rates of this product in 3 to 30 gpa of water. Where weed foliage is dense, use 10 to 30 gpa of water.

For goatweed, apply 1.5 to 2.25 quarts of this product per acre. Apply in 20 to 30 gpa of water when plants are actively growing. Use 1.5 quarts per acre when plants are less than 8 inches tall and 2.25 quarts per acre when plants are more than 8 inches tall. If goatweed is more than 8 inches tall, the addition of Krovar II or Karmex may improve control. Refer to the individual product labels for specific crops, rates, geographic restrictions and precautionary statements.

	Rate Per Acre			
Perennial Weeds	1.5 pt	1.5 qt	2.25 qt	3.75 qt
bermudagrass	В		PC	С
guineagrass (area) (Texas and Florida ridge)	В	С	С	С
(Florida flatwoods)		В	С	С
paragrass	В	С	С	С
torpedograss	S		PC	С

S = Suppression PC = Partial control

#### **Restrictions:**

- Preharvest Interval: Do not apply within 1 day of harvest.
- Apply as a directed spray only in citron groves.

## **Conservation Reserve Program (CRP)**

Types of Applications: Renovation (rotating out of CRP), site preparation, postemergence weed control in dormant CRP grasses, wiper applicator

Refer to the rate table in the Annual Weeds and Perennial Weeds sections for application rates of this product to specific weeds. This product controls specified annual and perennial grasses and broadleaf weeds when applied as directed.

#### Renovation (Rotating Out of CRP) and Site Preparation

This product may be used to prepare CRP land for crop production. For any crops not listed for treatment in this label, make applications at least 30 days prior to planting.

# Postemergence Weed Control in Dormant CRP Grasses and Wiper Applicator

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 to control tall weeds or as a broadcast or spot treatment to dormant CRP grasses. For selective weed control, apply 9 to 12 fl oz of this product per acre with broadcast spray equipment in early spring before desirable CRP grasses, such as crested and tall wheatgrass, break dormancy and initiate green growth. Late fall applications can be made after desirable perennial grasses have reached dormancy.

#### **Precautions:**

- 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.

#### **Restrictions:**

• Do not apply more than a total of 2.25 quarts per acre per year onto CRP grasses.

#### Corn

Use directions for corn hybrids tolerant to glyphosate (including glyphosate tolerant field corn and field corn products) or with sweet corn hybrids tolerant glyphosate (including glyphosate tolerant sweet corn and sweet corn products) are in the Glyphosate Tolerant Crops section of this label.

Labeled Crops: Field corn, seed corn, silage corn, sweet corn, popcorn

**Types of Applications:** Those listed in Crops section plus spot treatment, preharvest, preplant/preemergence/at-planting (glyphosate-resistant horseweed), preplant/preemergence/at-planting (glyphosate-resistant *Amaranthus* spp.), preplant/preemergence/at-planting (glyphosate-resistant common and giant ragweed *Ambrosia* spp.), preplant/ preemergence/at-planting (glyphosate-resistant johnsongrass)

#### Preplant, Preemergence and At-Planting

This product may be applied before, during or after planting corn. Make applications prior to emergence of the crop.

**Tank Mixes:** This product may be tank mixed with the products below provided that the product selected is labeled for application prior to the planting or emergence of corn. Read and follow all label directions on the label of the tank mix product. Apply in 10 to 20 gpa of water or in 10 to 60 gpa of nitrogen.

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2,4-D	Epic	Prowl
Aim	Frontier	Python
Aim EC	FulTime	Python II
Axiom	Guardsman	Radius
Balance Flexx	Guardsman MAX	Resolve
Banvel	Harness	Resource
Bicep Magnum	Harness Xtra	Shark
Bicep II Magnum	Harness Xtra 5.6L	Sharpen
Bicep Lite II Magnum	Hornet WDG	Simazine
Bullet	Keystone	Stalwart
Cinch	Keystone LA	Stalwart C
Cinch ATZ	Lariat	Stalwart Xtra
Clarity	Leadoff	Surpass EC
Corvus	Linex	SureStart
Degree	Lorox	TopNotch
Degree Xtra	Marksman	TripleFLEX
Distinct	Me-Too Lachlor II	
Dual Magnum	Micro-Tech	
Dual II Magnum	Outlook	

For tough to control annual weeds, such as fall panicum, barnyardgrass, crabgrass, shattercane, and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 1.5 pints per acre in tank mixes. For other annual weeds listed in this label, apply

18 fl oz to 1.5 pints of this product per acre when weeds are less than 6 inches tall, and 1.5 to 2.25 pints per acre when weeds are more than 6 inches tall. When using nitrogen solutions as the carrier, the rate may need to be increased for acceptable weed control.

#### **Restrictions:**

- Make applications with 2,4-D or dicamba at least 7 days prior to planting corn.
- İn southern states, do not apply this product in nitrogen solutions to tough to control grasses, such as barnyardgrass, fall panicum, broadleaf signalgrass, annual ryegrass, and any perennial weeds. This area includes Illinois and Indiana south of Route 50, Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, New Jersey, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.

#### **Hooded Sprayers**

This product may be used through hooded sprayers for weed control between the rows of corn. Only hooded sprayers that completely enclose the spray pattern may be used. See additional instructions on the use of hooded sprayers in the Application Equipment and Application Methods section.

#### Precautions:

• Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage.

#### **Restrictions:**

- Corn must be at least 12 inches tall, measured without extending the leaves.
- Do not apply more than 1.5 pints of this product per acre for each application by hooded sprayer.
- Do not apply more than a total of 2.25 quarts of this product per acre per year using hooded sprayer application.

# Spot Treatment

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

#### Precautions:

 The crop receiving spray in the treated area will be killed. Avoid drift or spray outside target area for the same reason.

#### **Restrictions:**

• Do not treat more than 10 percent of the total field area to be harvested.

#### Preharvest

Make applications at 35 percent grain moisture or less. Ensure that maximum kernel fill is complete and the corn is physiologically mature (black layer formed). For ground applications, apply up to 2.25 quarts of this product per acre. For aerial applications, apply up to 3.1 pints of this product per acre.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 7 days of harvest.
- Do not treat corn grown for seed because a reduction in germination or vigor may result.

#### Postharvest

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 of this product with 2,4-D or dicamba may be used provided the label of the tank mix product is registered for postharvest use in corn.

#### Restrictions:

• Preharvest Interval: Do not apply within 7 days of harvest or feeding of treated vegetation.

Apply at least 30 days before planting any crop not listed on this label.

Preplant, Preemergence, and At-Planting (Glyphosate-Resistant Horseweed)

#### (Not for Use in California)

Apply this product in a preplant application to control and manage glyphosate-resistant horseweed (marestail, *Conyza canadensis*). Apply in 10 to 20 gpa of water for ground applications or in 3 to 15 gpa of water for aerial applications. Use 1.5 pints of this product per acre in a tank mix with 2,4-D (0.5 lb active ingredient per acre) or Hornet WDG before horseweed is more than 6 inches in height. Dicamba may be used in a tank mix with this product. Include atrazine (1 to 2 lb active ingredient per acre) in the tank mix to provide residual control.

# Preplant, Preemergence, and At-Planting (Glyphosate-Resistant *Amaranthus* spp.)

#### (Not for Use in California)

Tank mix this product or apply it sequentially with a herbicide that has a different mode of action to control a naturally occurring glyphosateresistant biotype of an *Amaranthus* species. To control emerged weeds, apply this product in a tank mix with a preemergence herbicide such as Keystone, Keystone LA, FulTime, SureStart, or another residual herbicide to control *Amaranthus* spp. Appropriate cultural and mechanical control practices (e.g., crop rotation or tillage) may also be used. For best results, tillage or make a burndown application prior to planting.

#### Preplant, Preemergence, and At-Planting (Glyphosate-Resistant Common and Giant Ragweed *Ambrosia* spp.) (Not for Use in California)

Tank mix this product or apply it sequentially with a herbicide that has a different mode of action to control a naturally occurring glyphosateresistant biotype of common or giant ragweed. To control emerged weeds, apply this product in a tank mix with a preemergence residual herbicide containing atrazine, such as Keystone, Keystone LA, FulTime, or another residual herbicide such as SureStart labeled to control ragweed species prior to the emergence of corn. Appropriate cultural and mechanical control practices (e.g., crop rotation or tillage) may also be used. Not all herbicides are labeled for management of ragweed species in all states or for all sites and crops. When tank mixing this product with other herbicides, read each product's label and follow all precautions and limitations on the label. For best results, tillage or make a burndown application prior to planting.

# Preplant, Preemergence, and At-Planting (Glyphosate-Resistant Johnsongrass)

# (Not for Use in California)

Tank mix this product with a herbicide that has a different mode of action labeled for preemergence and/or postemergence control of a naturally occurring glyphosate-resistant biotype of johnsongrass in combination with appropriate cultural weed control practices (e.g., crop rotation). Applying a herbicide with a different mode of action can be made either in a single tank mix application with this product or in sequential applications. For best results, apply a burndown application to control emerged weeds prior to planting or the emergence of corn. Apply this product before, during or after planting but prior to crop emergence for burndown to control a broad spectrum of emerged weeds. For additional weed control and to suppress emerged johnsongrass, apply this product along with Keystone, Keystone LA, or FulTime.

#### Cotton

Use directions for glyphosate tolerant cotton are in the Glyphosate Tolerant Crops section of this label.

Types of Applications: Those listed in Crops section plus selective equipment, spot treatment, preharvest, preplant (glyphosate-resistant horseweed), preplant/preemergence/at-planting (glyphosate-resistant *Amaranthus* spp.), preplant/preemergence/at-planting (glyphosate-resistant common and giant ragweed *Ambrosia* spp.), preplant/ preemergence/at-planting (glyphosate-resistant johnsongrass)

#### Preplant, Preemergence, and At-Planting

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

**Tank Mixes:** Apply tank mixes in 10 to 20 gpa of water. This product may be tank mixed with 2,4-D or Clarity and applied as a preplant application only. This product may be tank mixed with the products listed provided the mixing partner is label for preplant or preemergence application to cotton. Read and follow all precautions and restrictions on each tank mix product label and use according to the most restrictive statements.

Caparol	Dual II Magnum	Sharpen
Command	Karmex	Stalwart
Cotoran	Meturon	Staple
Cotton-Pro	Parrlay	Valor
Dawn	Prowl	Warrant
Direx	Prowl H2O	Zorial
Dual Magnum	Reflex	

#### Selective Equipment

This product may be applied through hooded sprayers, shielded applicators or wiper applicators over the top in cotton. See Selective Equipment in Application Equipment and Application Methods section of this label for information on proper use and calibration of this equipment.

#### **Restrictions:**

• Preharvest Interval: Do not apply within 7 days of harvest.

#### Spot Treatment

For spot treatments, apply this product prior to boll opening of cotton. **Precautions:** 

• The crop receiving spray in treated area will be killed. Avoid drift or spray outside target area for the same reason.

# Restrictions: Do not treat

Do not treat more than 10 percent of the total field area to be harvested.

### Preharvest

This product provides weed control and cotton regrowth inhibition when applied prior to harvest of cotton. For weed control, apply at rates given in the annual, perennial and woody brush tables of this label. Apply 12 fl oz to 1.5 quarts of this product per acre for cotton regrowth inhibition. Apply after sufficient bolls have developed to produce the desired yield of cotton. Applications made prior to this time could affect maximum yield potential. **Tank Mixes:** This product may be tank mixed with DEF 6, Dropp, Folex, Ginstar or Prep to provide additional enhancement of cotton leaf drop.

## Restrictions:

- Preharvest Interval: Do not apply within 7 days of harvest.
- Do not add additional surfactant or additives containing surfactant to this product for preharvest application to cotton.

# Preplant (Glyphosate-Resistant Horseweed) (Not for Use in California)

Apply this product in a preplant application to control and manage glyphosate-resistant horseweed (marestail, *Conyza canadensis*). Apply in 10 to 20 gpa of water for ground applications or in 3 to 15 gpa of water for aerial applications. Use 1.5 pints of this product per acre in a tank mix with 8 fl oz of Clarity per acre. Make this application 21 to 35 days before planting cotton and before horseweed reaches 6 inches in height. Observe a minimum of 21 days between the Clarity application and planting cotton during which there is at least 1 inch of cumulative rainfall in order to avoid crop injury. 2,4-D may also be included in a tank mix with this product.

# Preplant, Preemergence, and At-Planting (Glyphosate-Resistant Amaranthus spp.)

#### (Not for Use in California)

Tank mix this product or apply it sequentially with a herbicide that has a different mode of action to control a naturally occurring glyphosateresistant biotype of an *Amaranthus* species. To control emerged weeds, apply this product in a tank mix with a preemergence soil residual herbicide labeled for control of *Amaranthus* spp. Such as fluometuron (Cotoran) and/ or pendimethalin (Prowl H2O). Appropriate cultural and mechanical control practices (e.g., crop rotation or tillage) may also be used. For best results, tillage or make a burndown application prior to planting.

#### Preplant, Preemergence, and At-Planting (Glyphosate-Resistant Common and Giant Ragweed *Ambrosia* spp.) (Not for Use in California)

Tank mix this product or apply it sequentially with a herbicide that has a different mode of action to control a naturally occurring glyphosateresistant biotype of common or giant ragweed. To control emerged weeds in a burndown application, apply this product in a tank mix with a preemergence broadleaf herbicide such as Clarity or 2,4-D. To help control emerged broadleaf weeds in a preplant application, add 2,4-D to the tank mix. For applications after planting but prior to the emergence of cotton to control emerged weeds, tank mix this product with Cotoran, a preemergence residual herbicide for continued control of common ragweed. Appropriate cultural and mechanical control practices (e.g., crop rotation or tillage) may also be used. Not all herbicides are labeled for management of ragweed species in all states or for all sites and crops. When tank mixing this product with other herbicides, read each product's label and follow all precautions and limitations on the label. For best results, tillage or make a burndown application prior to planting.

# Preplant, Preemergence, and At-Planting (Glyphosate-Resistant Johnsongrass)

#### (Not for Use in California)

Tank mix this product with a herbicide that has a different mode of action labeled for preemergence and/or postemergence control of a naturally occurring glyphosate-resistant biotype of johnsongrass in combination with appropriate cultural weed control practices (e.g., crop rotation). Applying a herbicide with a different mode of action can be made either in a single tank mix application with this product or in sequential applications. For best results, apply a burndown application to control emerged weeds prior to planting or the emergence of cotton. Apply this product before, during or after planting but prior to crop emergence for burndown to control a broad spectrum of emerged weeds. For additional weed control and to suppress rhizome johnsongrass prior to planting or trifluralin. For additional control of emerged johnsongrass, apply this product in a tank mix with SelectMAX (clethodim), Assure II (quizalofop) or Poast Plus (sethoxydim).

### Dry Peas, Lentils, Chickpeas (See Vegetable Crops) Fallow Systems

# Types of Applications: Chemical fallow, postharvest, preplant fallow beds, aid-to-tillage

#### **Chemical Fallow**

This product may be applied during the fallow period prior to planting or emergence of any crop listed on this label. For any crop not listed on this label, make applications at least 30 days prior to planting. This product may be used as a substitute for tillage to control annual weeds in fallow fields. Also, broadcast or spot treatments will control or suppress many perennial weeds in fallow fields. Ground or aerial application equipment may be used. Application of up to 1.5 quarts of this product per acre may be made by aerial application in fallow sites where there is sufficient buffer to prevent injury to adjacent crops from drift. Tank mixtures of this product with 2,4-D, dicamba or Tordon® 22K specialty herbicide may be used provided the tank mix product is labeled for postharvest or fallow land use

#### **Precautions:**

· Some crop injury may occur if dicamba is applied within 45 days of planting.

#### **Restrictions:**

- Do not aerially apply tank mixtures of this product with dicamba or Tordon 22K in California.
- Follow planting, cropping, crop rotation and other restrictions and use precautions on the labels of each product used in tank mixtures.

#### **Preplant Fallow Beds**

This product may be applied to fallow beds prior to planting or emergence of any crop listed on this label. For any crop not listed on this label, make applications at least 30 days prior to planting. This product will control weeds listed in the annual, perennial and woody brush tables.

Tank Mixes: 9 fl oz of this product plus 2 to 4 fl oz of Goal® 2XL herbicide per acre will control the following weeds with the maximum height or length indicated: 3 inches - common cheeseweed, chickweed, groundsel; 6 inches - London rocket, shepherd's-purse.

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

#### Aid-to-Tillage

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

#### Precautions:

 Tank mixtures of this product with residual herbicides may result in reduced performance.

#### Farmsteads

Types of Applications: Weed control, trim and edge, greenhouse/ shadehouse, chemical mowing, cut stump, habitat management.

#### Weed Control and Trim and Edge

This product may be used in farmsteads including around building foundations, equipment storage areas, along and in fences, in dry ditches, dry canals, along ditchbanks, driveways, farm roads, farm yards fencerows, parking areas, rangeland, rights-of way, shelterbelts, storage areas, and prior to ornamental landscape plantings.

Tank Mixes: The products listed below may be tank mixed with this product. Ensure that the specific product used is labeled for the same use sites. Read and follow all label directions for all products in the tank mixture. Use according to the most restrictive precautionary statements for each product in the tank mixture. Tank mixes of this product with herbicides, insecticides or fungicides may result in crop injury or reduced weed control.

Arsenal Banvel	Pendulum WDG Plateau
Barricade 65WG	Princep DF
Clarity	Princep 4L
diuron	Ronstar
Endurance	Sahara DG
Escort XP	Simazine
Karmex DF	Telar DF
Krovar I DF	Vanquish
Oust	2,4-D
Donalulum 0.0 EC	

Pendulum 3.3 FC

For annual weeds, apply 1.5 pints per acre when weeds are less than 6 inches tall, 2.25 pints per acre when weeds are 6 to 12 inches tall, and 1.5 quarts per acre when weeds are more than 12 inches tall. For perennial weeds, apply 1.5 to 3.75 guarts per acre in a tank mix with the above products. To apply this product using a backpack sprayer, handgun, or other handheld applicator, see the Annual Weeds section of this label for the required concentration of this product in the mix.

#### Greenhouse/Shadehouse

Use this product to control weeds in and around greenhouses and shadehouses.

#### **Restrictions:**

- Do not apply this product in residential greenhouses.
- Turn off air circulation fans until after the application has dried.
- Remove desirable vegetation during the application.

#### **Chemical Mowing**

This product suppresses perennial grasses listed in this section and serves as a substitute for mowing. Use 4.5 fl oz of this product per acre when treating Kentucky bluegrass, tall fescue, fine fescue, orchardgrass, bahiagrass, or quackgrass covers. Apply 12 fl oz per acre when treating bermudagrass. Apply 1.5 quarts of this product per acre when treating torpedograss or paragrass. Apply treatments in 10 to 20 gpa of spray solution. Chemical mowing applications may be made along farm ditches and other parts of farmsteads.

#### **Restrictions:**

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

#### Habitat Management

Types of Uses: Habitat restoration and maintenance, wildlife food plots

Habitat Restoration and Maintenance: 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. Spot treatments can be made to selectively remove unwanted plants for habitat maintenance and enhancement. The tank mixtures listed in this section of the label (Farmsteads) may be used for habitat restoration and maintenance.

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

#### Precautions:

• Following application of this product, there are no rotational restrictions for planting any wildlife food species or allowing native species to repopulate the area.

#### Fescue Grown for Seed (Not for Use in California)

Apply this product on glyphosate-tolerant tall and fine fescue grown for seed only. Use 4 to 12 fl oz of this product per acre as a postemergence spray on glyphosate-tolerant tall fescue selections. Apply six weeks after germination and to established crops after growth resumes in the fall until onset of dormancy, and in the spring after dormancy break until 60 days before harvest.

Applying this product postemergence controls or suppresses the following weeds: annual bluegrass mustards, Canada thistle, cheatgrass, chickweed, dandelion, downy brome, fleabane, pennycress, quackgrass, shepherd's-purse, sowthistle, and wild oat. The specified rate range of this product limits the level of control of certain weed species. Note: Some crop discoloration and yellowing may occur at higher rates of application with glyphosate-tolerant tall and fine fescue selections. Reduction in stand of these selections may occur under conditions of stress.

#### **Restrictions:**

- Do not spray during or within two weeks after periods when the air temperature is below 25°F.
- Remove domestic livestock from the seed production field prior to application.
- Do not resume grazing or harvesting the treated area for 60 days after application.
- Make only two applications of this product per crop growth cycle to any one site. If two applications are required, make only one fall and one spring application during one 12-month cycle.

# Flax (See Oilseeds)

### Grain Sorghum (Milo)

Types of Applications: Those listed in Crops section plus spot treatment, wiper applicators, preharvest-

#### Preplant, Preemergence, and At-Planting

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

Tank Mixes: The following herbicide products may be applied in tank mix combination with this product in 10 to 20 gpa of water or 10 to 60 gpa of nitrogen solution. Ensure that the product chosen is labeled for application prior to planting or emergence of grain sorghum.

Atrazine Bicep II Magnum Bullet Dual II Magnum	Lariat Micro-Tech Sharpen
Dual II Magnum	Warrant
Intrro	

For difficult to control weeds, such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 1.5 pints per acre in these tank mixtures. For other labeled annual weeds, apply 18 fl oz to 1.5 pints of this product per acre when weeds are less than 6 inches tall, and 1.5 to 2.25 pints when weeds are more than 6 inches tall. The use rate may need to be increased to achieve adequate weed control when nitrogen solutions are used as the carrier.

#### Spot Treatment and Wiper Applicators

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:

**Spot treatment**: the crop receiving spray in treated area will be killed. Avoid drift or spray outside target area for the same reason.

#### **Restrictions:**

#### Spot Treatment

--Do not treat more than 10 percent of the total field area to be harvested.

#### Wiper Applicator

- --Preharvest Interval: Do not apply within 40 days of harvest.
- --Do not use roller applicators.
- --Do not feed or graze treated sorghum fodder.
- --Do not feed or graze ensile treated vegetation.

#### **Hooded Sprayers**

This product may be used through hooded sprayers for weed control between the rows of grain sorghum. Only hooded sprayers that completely enclose the spray pattern may be used. See additional instructions for the use of hooded sprayers in the Application Equipment and Application Methods section of this label.

#### **Precautions:**

Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage.

#### **Restrictions:**

- Grain sorghum must be at least 12 inches tall measured without extending the leaves.
- Treat before grain sorghum sends tillers between the drill rows. If tillers are sprayed with this herbicide, the main plant may be damaged or destroyed.
- Do not graze or feed grain sorghum forage or fodder following applications of this product through hooded sprayers.
- Do not apply more than 1.5 pints of this product per acre per hooded sprayer application.
- Do not apply more than a total of 4.5 pints of this product per acre per year using hooded sprayer application.

#### Preharvest

This product may be applied prior to harvest of grain sorghum. Make applications of 1.5 quarts per acre\_at 30 percent grain moisture or less.

#### Precautions:

- Avoid preharvest application of this product to milo infected with charcoal rot as lodging can occur.
- Do not treat sorghum grown for seed as reduction in germination or vigor may occur.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 7 days of harvest.
- Do not apply more than 1.5 quarts of this product per acre.
- The use of this product for preharvest grain sorghum (milo) is not registered in California.

#### Postharvest

This product may be applied after harvest of grain sorghum. Higher rates may be required for control of large weeds that were growing in the crop at the time of harvest. Tank mixtures of this product with 2,4-D or dicamba may be used provided the tank mix product is labeled for postharvest application.

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

#### **Restrictions:**

- Preharvest Interval: Do not apply within 7 days of harvest or feeding of treated vegetation.
- Apply at least 30 days prior to planting any crop not listed on this label.

#### **Grass Seed or Sod Production**

Labeled Crops: Any grass (*Gramineae* family), except corn, sorghum, sugarcane, and those listed in the Cereal and Grain Crops section of the label

**Types of Applications:** Preplant, preemergence, at-planting, renovation, site preparation, removal of established stand, shielded sprayers, wiper applicators, spot treatments, creating rows in annual ryegrass.

Refer to the rate table in the Annual Weeds and Perennial Weeds sections for application rates of this product to specific weeds. This product controls specified annual and perennial grasses and broadleaf weeds when applied as directed.

# Preplant, Preemergence, At-Planting, Renovation, Removal of Established Stand and Site Preparation

Apply to existing vegetation for renovation of turf or forage grass areas grown for seed production, or to establish turfgrass grown for sod. This product can be used to destroy any remaining undesirable grass vegetation when production fields are converted to alternate species or crops. Applications must be made prior to the emergence of the crop to avoid crop injury. For maximum control of existing vegetation, delay planting to determine if any regrowth from escaped underground plant parts occurs. If existing vegetation is growing under mowed turfgrass management, apply after omitting at least one regular mowing as sufficient regrowth must be attained prior to application. Where repeat treatments are necessary, sufficient regrowth must be attained prior to application. For warm season turfgrasses, such as bermudagrass, summer or fall applications provide best control. Use broadcast application equipment to control sod remnants or any other unwanted vegetation after harvesting sod. Apply up to 3.75 quarts of this product per acre to totally remove an established stand of tough to kill grass species.

#### **Restrictions:**

- Do not disturb soil or underground plant parts before treatment.
- Delay tillage or renovation techniques, such as vertical mowing, coring or slicing, for 7 days after application to allow proper translocation into underground plant parts.
- If application rates total 2.25 quarts or less per acre, no waiting period between treatment and feeding or livestock grazing is required.
- If the application rate is more than 2.25 quarts per acre, remove domestic livestock before application and wait 8 weeks following application before grazing or harvesting.
- Crops listed on this label may be planted into the treated area at any time. For any crop not listed for treatment in this label, applications must be made at least 30 days prior to planting. Apply this product prior to the emergence of the crop to avoid crop injury.

#### Shielded Sprayers

Apply 1.5 to 2.25 quarts of this product as a broadcast spray in 10 to 20 gpa of water to control weeds in 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.

#### **Precautions:**

• Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage.

#### Wiper Applicators

Apply this product over the top of desirable grasses using a wiper applicator to control tall weeds.

#### Precautions:

 Droplets, mist, foam, or splatter of the herbicide solution settling onto desirable vegetation may result in discoloration, stunting or destruction.

#### Spot Treatments

Use a 1 percent solution using handheld spray equipment to control weeds in established vegetation prior to heading of grasses grown for seed. Handheld equipment may also be used for controlling sod remnants or other unwanted vegetation after sod is harvested.

#### **Restrictions:**

 The crop receiving the spray in the treated area will be killed. Do not spray or allow spray to drift outside of the target area in order to avoid unwanted crop destruction.

#### **Creating Rows in Annual Ryegrass**

Use 12 to 1.5 pints of this product per acre mixed with water. For best results, apply before ryegrass reaches 6 inches in height. Use the higher rate in the rate range when the ryegrass is more than 6 inches tall. 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.

#### **Restrictions:**

- Use low pressure nozzles or drop nozzles designed to target the application over a narrow band.
- To the extent permitted by law, grower assumes all responsibility for crop losses from misapplication.

### **Herbs and Spices**

Labeled Crops: Allspice, angelica, annatto (seed), balm, basil, black caraway, borage, burnet, camomile, caper buds, caraway, cardamom, cassia bark, cassia buds, catnip, celery seed, chervil (dried), Chinese chive, chive, cilantro (leaf and seed), cinnamon, clary, clove buds, coriander leaf (cilantro or Chinese parsley), coriander seed (cilantro), costmary, cumin, curry (leaf), dill (dillweed), dill (seed), epazote, fennel seed (common and Florence), fenugreek, grains of paradise, horehound, hyssop, juniper berry, lavender, lemongrass, lovage (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), spearmint, star anise, stevia leaves, sweet bay, tansy, tarragon, thyme, vanilla, white ginger flower, wintergreen, woodruff, wormwood

**Types of Applications:** Those listed in Crops section plus wiper application (peppermint and spearmint only), spot treatments (peppermint and spearmint only).

#### **Restrictions:**

- When applying this product prior to transplanting or direct seeding crops into plastic mulch, take care 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.
- Take care to insure that the washwater flushes off the plastic mulch and does not enter transplant holes.
- Applications made at emergence will result in injury or death to emerged seedlings.

# Wiper Application and Spot Treatments (Peppermint and Spearmint Only)

This product may be used as a spot treatment in spearmint and peppermint. It may also be applied as an over the top treatment using a wiper applicator to control tall weeds. See additional instructions on the use of wiper applicators in the Application Equipment and Application Methods section of the label.

#### **Restrictions:**

• Preharvest Interval: Do not apply within 7 days of harvest.

- Further applications may be made in the same area at 30-day intervals.
  Do not treat more than 10 percent of the total field area to be harvested with a spot application 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.
- For wiper application, droplets, mist, foam, or splatter of the herbicide solution onto desirable vegetation may result in discoloration, stunting, or destruction.

### **Miscellaneous Crops**

Labeled Crops: Aloe vera, asparagus, bamboo shoots, globe artichoke, okra, peanut (ground nut), pineapple, strawberry, sugar beet

Use directions for glyphosate tolerant sugar beet are in the Glyphosate Tolerant Crops section of this label.

**Types of Applications:** Those listed in Crops section plus spot treatment, site preparation, spot treatment (asparagus), postharvest (asparagus)

#### **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, apply before crop emergence to avoid severe crop injury.
- Apply before seed germination in coarse sandy soils to further minimize the risk of injury.
- In crops with vines, make hooded sprayer, shielded sprayer and wiper applicators applications to row middles prior to vine development to prevent severe crop injury or destruction
- See Application Equipment and Application Methods section of this label for additional information.

#### Spot Treatment and Site Preparation

This product may be applied for spot weed control or site preparation prior to planting or transplanting crops listed in this section.

#### **Restrictions:**

- When applying this product prior to transplanting or direct seeding crops into plastic mulch, take care 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.
- Take care to insure that the washwater flushes off the plastic mulch and does not enter transplant holes.
- Allow at least 21 days between residue removal and transplanting.
- Applications made at emergence will result in injury or death to emerged seedlings.
- Do not apply within one week before the first asparagus spears emerge.
   Do not feed or graze treated pincapple forage following application.
- Do not feed or graze treated pineapple forage following application.

# Spot Treatment (Asparagus)

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

#### **Restrictions:**

- Preharvest Interval: Do not apply within 5 days of harvest.
- Do not treat more than 10 percent of the total field area to be harvested.

### Postharvest (Asparagus)

This product may be applied after the last harvest and all spears have been removed. If spears are allowed to regrow, delay application until ferns have developed. Apply delayed treatments as a directed or shielded spray in order to avoid contact of the spray with ferns, stems or spears. See Application Equipment and Application Methods section of this label for additional information.

#### **Restrictions:**

- Direct contact of the spray with the asparagus may result in serious crop injury.
- Select and use types of spray equipment specified for postemergence postharvest applications.

#### Miscellaneous Tree Food Crops

Labeled Crops: Cactus (prickly pear, dragon fruit, fruit and pads), palm (heart, leaves), palm (oil)

 $\ensuremath{\textbf{Types}}$  of  $\ensuremath{\textbf{Applications:}}$  Those listed in Tree, Vine and Shrubs Crops section

#### **Non-Food Tree Crops**

Labeled Crops: Pine, poplar, eucalyptus, all other non-food tree crops Types of Applications: Those listed in Tree, Vine and Shrubs Crops section

#### **Restrictions:**

- Desirable plants may be protected from the spray solution by using shields or coverings of impermeable materials.
- Do not let spray, drift or mist of this product come into contact with foliage or green bark of established pine trees.

#### **Site Preparation**

Use this product for weed control prior to planting non-food tree crops.

# Restrictions:

• Take precautions to protect non-target plants during site preparation application.

#### Directed Spray, Spot Treatment, and Wiper Application

Use this product as a post-directed spray and spot treatment, or apply using a wiper applicator, around established poplar, eucalyptus, and all other non-food tree crops.

# Oilseeds

Labeled Crops: Borage, buffalo gourd (seed), canola, crambe, flax, jojoba, lesquerella, meadowfoam, mustard (seed), rape, safflower, sesame, sunflower

Use directions for glyphosate tolerant canola are in the Glyphosate Tolerant Crops section of this label.

**Types of Applications:** Those listed in Crops section plus preharvest (safflower and sunflower only)

#### **Restrictions:**

- Canola
  - --Do not apply more than a combined total of 1.5 quarts of this product per acre for all preemergence and shielded sprayer applications.
- Safflower
  - --Do not apply more than a combined total of 2.25 quarts of this product per acre for all preharvest, preemergence and hooded/shielded sprayer applications per year.
- Sunflower
  - --Do not apply more than a combined total of 1.5 pints of this product per acre for all preharvest, preplant, preemergence, and hooded/ shielded sprayer applications per year.
- For oilseed crops other than sunflowers, do not harvest or feed treated vegetation for eight weeks following application.
- For any crop not listed on this label, make applications at least 30 days prior to planting the next crop.

#### Preplant, Preemergence, and At-Planting

This product may be applied before, during or after planting oilseed crops. Make broadcast applications prior to emergence of the listed oilseed crops. Wiper applicators or hooded sprayers may be used between the rows once the crop is established.

**Tank Mixes:** For sunflowers, a tank mixture with pendimethalin may be applied before, during or after planting in conventional tillage systems, into a cover crop, established sod, or in previous crop residue.

# Restrictions:Sunflower

--Do not feed or graze sunflower forage following application of this product.

#### Postharvest

For postharvest applications, higher application rates may be required for control of large weeds that were growing in the crop at the time of harvest. Tank mixtures of this product with 2,4-D or dicamba may be used provided the product to be tank mixed is registered for use on this use site.

#### **Restrictions:**

- **Preharvest Interval:** Do not apply within 7 days of harvest or feeding treated vegetation.
- Apply at least 30 days prior to planting any crop not listed on this label.

#### **Selective Equipment**

Wiper applicators or hooded/shielded sprayers may be used between the rows once the crop is established. See the Selective Equipment part of the Application Equipment and Application Methods section for information on proper use and calibration of this equipment.

Hooded Sprayers (Sunflowers) (For Use in South Dakota Only): This product may be used through hooded sprayers for weed control between the rows of sunflowers. Only hooded sprayers that completely enclose the spray pattern may be used. Leave at least an 8 inch untreated strip over the drill row. For example, if the crop row width is 38 inches, the maximum width of the spray hood will be 30 inches. The maximum tractor speed is 5 mph and the maximum wind speed is 10 mph. Use low drift nozzles. For specific rates of application and instructions for control of various annual and perennial weeds, see the Weed Control tables.

Crop injury may occur when the foliage of treated weeds come 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 target weeds. Droplets, mist, foam or splatter of the herbicide solution that contact the crop will cause discoloration, stunting or destruction.

Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 14 days of harvest.
- Do not apply more than a total of 2.25 quarts per acre per year using hooded sprayer equipment.
- Do not apply more than 1.5 pints of this product per acre per
- application.
- Sunflowers must be at least 12 inches tall, measured without extending the leaves.

#### Preharvest (Safflower and Sunflower Only)

This product provides weed control when applied as a harvest aid to a physiologically mature crop prior to harvest of safflower or sunflower. For safflower, apply up to 2.25 quarts of this product per acre when the seed has lost its opaque character, approximately 20 to 30 days after the end of flowering of the secondary branches. For sunflower, apply up to 1.5 pints of this product per acre when the backsides of sunflower heads are yellow, bracts are turning brown, and seed moisture content is less than 35 percent.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 7 days of harvest or livestock feeding.
- Apply at least 30 days prior to planting any crop not listed on this label.

#### Pastures

**Types of Pasture:** Bahiagrass, bermudagrass, bluegrass, brome, fescue, guineagrass, kikuyugrass, orchardgrass, pangola grass, ryegrass, timothy, wheatgrass, (any grass species in the *Gramineae* family except corn, sorghum, sugarcane and those listed in Cereal or Grain Crops section of this label)

**Types of Applications:** Spot treatment, wiper application, preplant, preemergence, pasture renovation, postemergence weed control (broadcast applications)

Refer to the rate table in the Annual Weeds and Perennial Weeds sections for application rates of this product to specific weeds. This product controls specified annual and perennial grasses and broadleaf weeds when applied as directed.

#### Preplant, Preemergence and Pasture Renovation

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

#### **Restrictions:**

- If application rates total 2.25 quarts or less per acre, no waiting period between treatment and feeding or livestock grazing is required.
- If the rate is more than 2.25 quarts per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.
- Crops listed for treatment in this label may be planted into the treated area at any time; for other crops, wait 30 days between application and planting.

#### Spot Treatment and Wiper Application

This product may be applied as a spot treatment or over the top with wiper applicators in pastures to control tall weeds. Applications may be made in the same area at 30-day intervals.

#### **Restrictions:**

- For spot treatment and wiper applications using rates of 2.25 quarts or less per acre, the entire field or any portion of it may be treated.
- When spot treatments or wiper applications are made using rates more than 2.25 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.

#### Postemergence Weed Control (Broadcast Application)

Apply this product to pastures to suppress competitive growth and seed production of annual weeds and undesirable vegetation. Apply 9 to 12 fl oz of this product per acre for selective weed control in early spring before desirable perennial grasses break dormancy and initiate green growth. A higher rate in the rate range may be used to control tough to control weeds; however, if perennial grasses are no longer dormant, injury will occur. Apply a late fall application after desirable perennial grasses have reached dormancy.

#### **Restrictions:**

- If broadcast application is made when plants are not dormant, some stunting of perennial grasses will occur.
- Using a higher rate in the rate range will cause stand reduction.
- There is no required waiting period between application and grazing or harvesting for feed.
- Do not apply more than 2.25 quarts per acre per year onto pasture grasses except for renovation uses as described on this label.
- Wait 30 days after application before planting any crop not listed on this label if replanting is needed due to severe stand reduction.

# Coastal Bermudagrass Pastures (Not for Use in California)

Apply this product at 11 fl oz per acre to control annual bluegrass, cheat, crabgrass, henbit, seedling johnsongrass, little barley, oats, Italian ryegrass, field sandbur, sunflower, wheat, and wild mustard and more other winter annual grass and broadleaf weeds in established coastal bermudagrass pastures.

**Applications Prior to Spring Growth:** Apply this product in either late winter or early spring, but before new coastal bermudagrass growth begins in the spring. Otherwise, new growth of the bermudagrass can be damaged. Remove domestic livestock from the pasture before applying this product. Wait for 60 days after making this application before resuming grazing or harvesting the treated area.

**Applications Following First Cutting:** Apply this product after the first bermudagrass cutting when the bermudagrass has not yet begun to regrow. Otherwise, regrowth of the bermudagrass can be damaged. Remove domestic livestock from the pasture before applying this product. Wait for 28 days after making this application before resuming grazing or harvesting the treated area.

#### **Restrictions:**

- Do not make more than one application per year to any one field.
- Do not make a spring application prior to growth and an application following the first cutting on the field during the same year.

### Peanuts (See Miscellaneous Crops)

#### **Pome Fruit**

Labeled Crops: Apple, crabapple, loquat, mayhaw, pear (including Oriental pear), quince

**Types of Applications:** Those listed in Tree, Vine, and Shrub Crops section plus glyphosate-resistant horseweed

## Glyphosate-Resistant Horseweed

#### (Not for Use in California)

Use this product to control and manage glyphosate-resistant horseweed (marestail, *Conyza canadensis*) in all tree fruits listed in this section. Apply 1.5 quarts of this product per acre plus 2,4-D (18 fl oz of Dri-Clean per acre or 2 pints of Orchard Master CA per acre) before marestail is more than 6 inches in height. For best results, use a carrier volume of 15 gpa. **Restrictions:** 

#### • Preharvest Interval: Do not apply within 1 day of harvest.

# Raspberry

#### (Not for Use in California)

**Types of Applications:** Preplant (site preparation) broadcast spray, general weed control, middles (between rows of bushes), strips (within rows of bushes), selective equipment (shielded sprayer, wiper applicator), directed spray, spot treatment, perennial grass suppression, cut stump

Apply this product with boom equipment, CDA equipment, shielded sprayer, handheld and backpack wand, lance, orchard gun or with wiper applicator equipment, except as directed.

Apply 12 fl oz to 3.75 quarts of this product per acre according to the rate tables in the Annual Weeds and Perennial Weeds sections of this label. Use a higher rate in the rate range when weeds are stressed, growing in dense populations or are more than 12 inches tall.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 14 days of harvest.
- Do not transplant raspberries within 3 days of application.
- Do not apply more than 2 gallons of this product per acre per year.
  Do not apply herbicide spray to contact desirable vegetation, including green shoots and foliage.

### Safflower (See Oilseeds)

#### Soybean

Use directions for glyphosate tolerant soybean are in the Glyphosate Tolerant Crops section of this label.

**Types of Applications:** Those listed in Crops section plus spot treatment, preharvest, selective equipment, preplant (glyphosate-resistant horseweed), preplant/preemergence/at-planting (glyphosate-resistant *Amaranthus* spp.), preplant/preemergence/at-planting (glyphosate-resistant common and giant ragweed *Ambrosia* spp.), preplant/ preemergence/at-planting (glyphosate-resistant johnsongrass).

#### Preplant, Preemergence and At-Planting

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

**Tank Mixes:** Tank mix this product with 2,4-D, Banvel, or Clarity and apply prior to planting only. Tank mixes of this product with the following herbicide products may be applied prior to crop emergence. The product used must be labeled for application prior to planting or soybean emergence. Apply these tank mixes in 10 to 20 gpa of water.

Aim Assure II Authority Authority Assist Authority First Authority MTZ Authority XL Axiom Blanket Boundary Cadet Canopy Canopy EX Classic Cobra Command Command Xtra	Dual II Magnum FirstRate® Flexstar Frontier Fusion Gangster Gauntlet Intrro Lexone Linex Lorox/Linuron Lorox Plus Me-Too Lachlor Micro-Tech Optill Outlook Parrlay	Pursuit Pursuit Plus Python Reflex Resource Rhythm Scepter Select Select MAX Sencor Sharpen Sonic Spartan Squadron Steel Treflan Valor
Dawn	Phoenix	Valor XLT
Domain	Prowl	
Dual Magnum	Prowl H2O	

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

#### Spot Treatment

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

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

#### Preharvest

This product provides weed control when applied prior to harvest of soybeans after pod set and all the green color is lost.

Apply at rates given in the annual, perennial and woody brush tables. Avoid excessive seed shatter loss due to ground application equipment.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 7 days of harvest.
- Do not apply more than 3.75 quarts of this product per acre for preharvest applications.
- Do not apply more than 1.5 quarts of this product per acre by air.
- If more than 1.5 pints of this product is used, do not graze or harvest treated hay or fodder for livestock feed within 25 days of last preharvest application.

- If 1.5 pints of this product or less is used, the grazing restriction is reduced to 14 days after last preharvest application.
- Do not apply to soybeans grown for seed as a reduction in germination or vigor may occur.

#### Selective Equipment

This product may be applied through shielded applicators, hooded sprayers, wiper applicators or sponge bars in soybeans.

# Restrictions:

- Preharvest Interval: Do not apply within 7 days of application.
- See the Selective Equipment part of the Application Equipment and Application Methods section of this label for information on proper use and calibration of this equipment.

#### Preplant (Glyphosate-Resistant Horseweed) (Not for Use in California)

Apply this product in a preplant application to control and manage glyphosate-resistant horseweed (marestail, *Conyza canadensis*). Apply in 10 to 20 gpa of water for ground applications or in 3 to 15 gpa of water for aerial applications. For best results, control horseweed prior to planting. Use 1.5 pints of this product per acre in a tank mix with 2,4-D (0.5 lb active ingredient per acre) before horseweed is more than 6 inches in height.

# Preplant, Preemergence, and At-Planting (Glyphosate-Resistant *Amaranthus* spp.)

#### (Not for Use in California)

Tank mix this product or apply it sequentially with a herbicide that has a different mode of action to control a naturally occurring glyphosateresistant biotype of an *Amaranthus* species. To control emerged weeds, apply this product in a tank mix with a preemergence residual herbicide such as Sonic, alachlor (Intrro) or another residual herbicide to control *Amaranthus* spp. For preplant applications, add 2,4-D to the tank mix to help control emerged broadleaf weeds.

To control emerged weeds as a postemergence application, apply this product in a tank mix with lactofen (Cobra) or fomesafen (Flexstar) to control emerged *Amaranthus* spp. Appropriate cultural and mechanical control practices (e.g., crop rotation or tillage) may also be used. For best results, tillage or make a burndown application prior to planting.

#### Preplant, Preemergence, and At-Planting (Glyphosate-Resistant Common and Giant Ragweed *Ambrosia* spp.) (Not for Use in California)

Tank mix this product or apply it sequentially with a herbicide that has a different mode of action to control a naturally occurring glyphosateresistant biotype of common or giant ragweed (*Ambrosia* spp.). To control emerged weeds, apply this product in a tank mix with a preemergence residual herbicide such as FirstRate (cloransulam-methyl) where ALS resistance is not an issue. To help control emerged broadleaf weeds, add 2,4-D to the tank mix for a preplant application.

To control emerged ragweed species, apply this product in a tank mix with FirstRate (cloransulam-methyl), lactofen (Cobra), or fomesafen (Flexstar)

Appropriate cultural and mechanical control practices (e.g., crop rotation or tillage) may also be used. Not all herbicides are labeled for management of ragweed species in all states or for all sites and crops. When tank mixing this product with other herbicides, read each product's label and follow all precautions and limitations on the label. For best results, tillage or make a burndown application prior to planting.

# Preplant, Preemergence, and At-Planting (Glyphosate-Resistant Johnsongrass)

#### (Not for Use in California)

Tank mix this product with a herbicide that has a different mode of action labeled for preemergence and/or postemergence control of a naturally occurring glyphosate-resistant biotype of johnsongrass in combination with appropriate cultural weed control practices (e.g., crop rotation). Applying a herbicide with a different mode of action can be made either in a single tank mix application with this product or in sequential applications. For best results, apply a burndown application to control emerged weeds prior to planting or the emergence of soybean. Apply this product before, during or after planting but prior to crop emergence for burndown to control a broad spectrum of emerged weeds. For control or suppression of emerged rhizome johnsongrass, apply this product in a tank mix with a product containing alachlor, metolachlor, pendimethalin, or trifluralin. To suppress emerged johnsongrass, apply this product in a tank mix with SelectMAX (clethodim), Assure II (quizalofop), or Poast Plus (sethoxydim).

### **Stone Fruit**

Labeled Crops: Apricot, cherry (sweet, sour), nectarine, olive, peach, plum/prune (all), plumcot

**Types of Applications:** Those listed in Tree, Vine, and Shrub Crops section plus glyphosate-resistant horseweed

#### **Glyphosate-Resistant Horseweed** (Not for Use in California)

Use this product to control and manage glyphosate-resistant horseweed (marestail, *Conyza canadensis*) in all tree fruits listed in this section. Apply 1.5 guarts of this product per acre plus 2,4-D (18 fl oz of Dri-Clean per acre or 2 pints of Orchard Master CA per acre) before marestail is more than 6 inches in height. For best results, use a carrier volume of 15 gpa.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 17 days of harvest.
- Apply only as a directed spray to olive groves.
- Remove suckers and low hanging limbs at least 10 days prior to application.
- Avoid applications near trees with recent pruning wounds or other mechanical injury.
- Apply only near trees that have been planted in the orchard for two years or more.
- Extreme care must be taken to ensure no part of the peach tree is contacted.

#### Strawberry

### (Not for Use in California and New York State)

Apply up to 1.5 guarts of this product per acre to control annual and perennial weeds prior to emergence of strawberries. Apply at least three days before transplanting or planting.

#### **Restrictions:**

- Avoid contact of herbicide with foliage, green stems, exposed nonwoody roots or fruit of crops, desirable plants and trees, because severe injury or destruction may result.
- When applying this product prior to transplanting crops into plastic mulch, take care to remove spray residues of this product from the plastic prior to transplanting otherwise crop injury could occur. Removal of residues may be accomplished by application of 0.5 inch of water either by rainfall or sprinkler irrigation.
- Applications made at emergence will result in injury or death of emerged seedlings.

#### Sugarcane

Types of Applications: Those listed in Crops section plus spot treatment, sugarcane ripening

#### Preplant, Preemergence, and At-Planting

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

#### **Restrictions:**

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

#### Spot Treatment

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

#### **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 Treatment**

This product may be used as a replacement for tillage in fields that are lying fallow between sugarcane crops. This product may also be used to remove the last stubble of ratoon cane. For removal of last stubble of ratoon cane, apply 3 to 3.75 quarts of this product in 10 to 40 gpa of water to new growth having at least 7 new leaves. Allow 7 days or more after application before tillage. Ground or aerial application equipment may be used. Application of up to 2.25 quarts per acre may be made by aerial application in fallow sites where there is sufficient buffer to prevent injury to adjacent crops from drift. Tank mixes with 2,4-D and dicamba may be used provided the product to be tank mixed is labeled for use on sugarcane.

#### **Hooded Sprayers**

This product may be used through hooded sprayers for weed control between the rows of sugarcane. See additional instructions for using hooded sprayers in the Application Equipment and Application Methods section of the label.

#### **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.

#### Sugarcane Ripening

#### (Not for Use in California)

This product is a foliar-applied plant growth regulator that hastens ripening and increases the sucrose level in sugarcane. This is effective in both

low- and high-tonnage sugarcane. Following the directions in this label will hasten ripening and extent the period of high sucrose level in sugarcane. Improved trash burn can be expected as a result of leaf desiccation.

The top nodes of the treated cane stalk is where the sucrose increase is concentrated. Top at the base of the fourth leaf to maximize sugar recovery where topping is practiced at harvest.

Before applying this product for sugarcane ripening, consult your state sugarcane authority regarding the degree of anticipated sucrose response from the variety of sugarcane to be treated. Other than the following listed crops, do not plant subsequent crops in treated fields within 30 days after application: alfalfa or other forage legumes, beans (all types), corn (all types), cotton, melons (all types), pasture grasses, peanuts, potatoes (Irish or sweet), sorghum (milo), soybeans, squash (all types), wheat.

Application Rates and Application Timing: The following application rates and application timing must be followed according to the state in which sugarcane is grown. Use a higher rate in the rate range when treating sugarcane under adverse ripening conditions or when less responsive varieties are treated.

Florida: Apply 9 to 18 fl oz of this product per acre three to five weeks before the harvest of last ratoon cane only.

Hawaii: Apply 11 to 22.5 fl oz of this product per acre four to 10 weeks before harvest

Louisiana: Apply 8 to 18 fl oz of this product per acre three to seven weeks before the harvest of ratoon cane only.

Puerto Rico: Apply 9 fl oz of this product per acre three to five weeks before harvest of ratoon cane only.

Texas: Apply 9 to 18 fl oz of this product per acre three to five weeks before the harvest of ratoon cane only.

#### **Restrictions:**

- Applying this product may initiate development of shooting eyes. The sucrose content of sugarcane under conditions of good natural ripening may not increase.
- This product may produce a slight yellowing to a pronounced browning, drying of leaves, and a shortening of upper internodes within two to three weeks after applying this product.
- Spindle death may occur.
- Effectiveness may be reduced if rainfall occurs within six hours after application.
- For best results, do not apply to sugarcane grown for seed as a reduction in germination or vigor may occur.
- Do not feed or graze sugarcane forage after application.
- Do not apply for enhanced ripening to any other crop except sugarcane. Use of this product in any manner not specified on this label may result in injury or other unintended consequences to persons, animals, or crops.

#### Sunflowers (See Oilseeds)

#### **Tree Nuts**

Labeled Crops: Almond, beechnut, betelnut, Brazil nut, butternut, cashew, chestnut, chinquapin, coconut, filbert (hazelnut), hickory nut, macadamia, pecan, pine nut, pistachio, walnut (black, English)

Types of Applications: Those listed in Tree, Vine, and Shrub Crops section plus glyphosate-resistant horseweed

# **Glyphosate-Resistant Horseweed**

#### (Not for Use in California)

Use this product to control and manage glyphosate-resistant horseweed (marestail, *Conyza canadensis*). Apply 1.5 quarts of this product per acre plus 2,4-D (18 fl oz of Dri-Clean per acre or 2 pints of Orchard Master CA per acre) before marestail is more than 6 inches in height. For best results, use a carrier volume of 15 gpa.

### **Restrictions:**

- Tree Nuts
- -Preharvest Interval: Do not apply within 3 days of harvest. Coconut
- --Preharvest Interval: Do not apply within 14 days of harvest.

#### Tree, Vine and Shrub Crops

Types of Applications: Site weed control, middles (between rows of trees, vines or shrubs), strips (in row of trees, vines or shrubs), selective equipment (except kiwi), directed spray, spot treatment, perennial grass suppression, cut stump, preplant (site preparation), broadcast spray, glyphosate-resistant horseweed (grape only)

#### NOTE: This section gives general directions that apply to all tree, vine, and shrub crops. See the individual crop sections for instructions, preharvest intervals, precautions and restrictions for specific crops.

Apply with boom equipment, CDA, shielded sprayers, handheld and backpack wands, lances, orchard guns or with wiper applicator equipment except as directed. This product may be applied in middles, strips, and for weed control or perennial grass suppression in established tree fruit and tree nut groves, orchards, berries, and vineyards. This product may also be used for site preparation prior to planting or transplanting these crops. Apply at rates given in the annual and perennial weed and woody brush tables. Use a higher rate in the rate range when weeds are stressed, growing in dense populations, or are more than 12 inches tall. Repeat applications may be made up to a maximum of 8 quarts per acre per year.

#### **Restrictions:**

- Exercise extreme care to avoid contact of herbicide solution, spray, drift or mist with foliage or green bark of trunk, branches, suckers, fruit or other parts of trees, canes and vines. Contact of this product with other than matured brown bark can result in serious crop damage or destruction.
- Do not apply when recent pruning wounds or other mechanical injury have occurred.
- · Use only shielded or directed sprayers in crops with potential for contact with the crop. Ensure there is sufficient clearance.
- Use only selective equipment (directed spray, hooded sprayer, shielded sprayer, or wiper applicator) for application in strips (within rows of trees) to minimize the potential for overspray or drift of this product onto crops.
- Fully enclosed hooded or shielded sprayers, including top, sides, front, and back, must be used on berry crops. Use only wiper applicators or shielded applicators that prevent all contact of this product with the crop.

Do not apply within 3 days of transplanting crops.

#### Middles (Between Rows of Trees)

This product will control or suppress annual and perennial weeds and groundcovers 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 Mixes: 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. Use this mixture when weeds are stressed or growing in dense populations. Application of 12 fl oz to 1.5 pints of this product per acre plus 3 to 12 fl oz of Goal 2XL per acre will control annual weeds with a maximum height of 6 inches, including common groundsel, common lambsquarters, crabgrass, junglerice, redroot pigweed, London rocket, common ryegrass, shepherd's-purse, annual sowthistle, filaree (suppression), horseweed/marestail (Conyza canadensis), stinging nettle and common purslane (suppression). This tank mix also controls common cheeseweed (malva) or hairy fleabane with a maximum height or diameter of 3 inches.

This product may be applied between rows of trees in tank mixes with the following products. Refer to the individual product labels for specific crops, rates, geographic restrictions and precautionary statements.

Alion	Poast
Chateau	Princep Caliber 90
Devrinol 50-DF	Prowl
Direx 4L	Prowl H2O
Dri-Clean	Rely 200
Fusilade DX	Rely 280
Goal 2XL	Select Max
GoalTender	Simazine 4L
Karmex DF	Simazine 80W
Karmex II DF	Sim-Trol 4L
Matrix FNV	Solicam DF
Orchard Master CA	Treevix Powered by Kixor
Pindar <sup>®</sup> GT	Venue

#### Strips (in Rows of Trees)

This product may be applied in rows of tree or vine crops and may also be tank mixed with the following herbicide products. Refer to the individual product labels for specific crops, rates, geographic restrictions and precautionary statements.

Alion Chateau Devrinol 50-DF Direx 4L Dri-Clean Fusilade DX Goal 2XL GoalTender Karmex DF Karmex II DF Matrix FNV Orchard Master CA Pindar GT

Poast Princep Caliber 90 Prowl Prowl H2O Rely 200 Rely 280 Select Max Simazine 4L Simazine 80W Sim-Trol 4L Solicam DF Treevix Powered by Kixor Venue

#### **Perennial Grass Suppression**

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

For suppression of tall fescue, fine fescue, orchardgrass and quackgrass, apply 6 fl oz of this product in 10 to 20 gpa of water. For suppression of Kentucky bluegrass covers, apply 4.5 fl oz of this product per acre. Do not add ammonium sulfate.

For best results, mow cool season turfgrass covers in the spring to even their height and apply this product three to four days after mowing.

For suppression of vegetative growth and seedhead inhibition of bahiagrass for approximately 45 days, apply 4.5 fl oz of this product in 10 to 25 gpa of water. Apply one to two weeks after full green-up or after mowing to a uniform height of 3 to 4 inches. Apply prior to seedhead emergence.

For suppression up to 120 days, apply 4 fl oz of this product per acre, followed by an application of 3 to 4 fl oz per acre about 45 days later. Make no more than two applications per year.

For burndown of bermudagrass, apply 1.5 pints to 1.5 quarts of this product in 3 to 20 gpa of water. 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 5 to 12 fl oz of this product per acre east of the Rocky Mountains and 12 fl oz of this product per acre west of the Rocky Mountains. Apply in a total spray volume of 3 to 20 gpa no sooner than one to two 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, use rates of 5 to 8 fl oz per acre in shaded conditions or where a lesser degree of suppression is desired.

#### Cut Stump

Apply this product to freshly cut tree stumps during site preparation or site renovation prior to transplanting tree crops. This product controls regrowth of cut stumps and resprouts of many types of tree species.

Citrus Trees: Calamondin, chironja, citron, citrus hybrids, grapefruit, kumquat, lemon, lime, mandarin (tangerine), orange (all), pummelo, tangelo (ugli), tangor

Fruit Trees: Apple, apricot, cherry (sweet, sour), crabapple, loguat, mayhaw, nectarine, olive, peach, pear, plum/prune (all), quince

Nut Trees: Almond, beechnut, Brazil nut, butternut, cashew, chestnut, chinquapin, filbert (hazelnut), hickory nut, macadamia, pecan, pistachio, walnut (black, English)

Use suitable equipment to apply this product, ensuring coverage of the entire cambium. Cut trees or their resprouts close to the soil surface. Immediately after cutting, apply a 50 to 100 percent solution of this product to the freshly cut surface. Delaying application may result in reduced performance. For best results, apply during periods of active growth and full leaf expansion.

#### 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.
- · Some sprouts, stems, or trees may share the same root system. Adjacent trees having a similar age, height and spacing may signal shared roots. Whether grafted or shared, injury is likely to occur to non-treated stems/ trees when one or more trees sharing common roots are treated.

#### Selective Equipment (Except Kiwi)

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

#### **Glyphosate-Resistant Horseweed (Grape Only)** (Not for Use in California)

Use this product to control and manage glyphosate-resistant horseweed (marestail, Conyza canadensis). Apply 48 fl oz of this product per acre plus 2,4-D (18 fl oz of Dri-Clean per acre) before marestail is more than 6 inches in height. For best results, use a carrier volume of 15 gpa. A residual herbicide such as diuron may provide additional preemergence control.

#### **Tropical and Subtropical Crops**

Labeled Crops: Ambarella, atemoya, avocado, banana, barbados cherry (acerola), biriba, blimbe, breadfruit, cacao (cocoa) bean, canistel, carambola (starfruit), cherimoya, coffee, custard apple, dates, durian, feijoa, figs, governors plum, guava, ilama, imbe, imbu, jaboticaba, jackfruit, longan, lychee, mamey apple, mango, mangosteen, marmaladebox (genip), mountain papaya, papaya, noni (Indian mulberry), papaya, pawpaw, persimmon, plantain, pomegranate, pulasan, rambutan,

#### **Restrictions:**

• Do not apply these tank mixtures in Puerto Rico.

rose apple, sapodilla, sapote (black, mamey, white), Spanish lime, soursop, star apple, sugar apple, surinam cherry, tamarind, tea, ti (roots and leaves), wax jambu

**Types of Applications:** Those listed in Tree, Vine, and Shrub Crops section plus bananacide (banana only)

#### **Restrictions:**

- Banana, Coffee, Guava, Papaya, Plantain
- --**Preharvest Interval:** Do not apply within 1 day of harvest. --In coffee and banana, delay applications three months after transplanting to allow the new coffee or banana plant to become established.
- Other Tropical or Subtropical Tree Fruit

--Preharvest Interval: Do not apply within 14 days of harvest.

### Bananacide (Banana Only)

Use this product to destroy banana plants infected with the banana bunchy top virus as well as non-infected banana plants to establish disease free buffers around plantations. Remove all fruit from the plants within the treatment area prior to treatment. Inject 1/25 fl oz (0.75 mL) of this product concentrate per 2 to 3 inches of pseudostem diameter. Make the injection at least one foot above the ground, except for very small plants, which should be injected vertically into the top. Any subsequent regrowth must also be destroyed. Mechanically destroy all plants and mats (or units) adjacent (within a 4 foot radius) to a treated mat.

For control of the banana bunch top virus, it is critical that the grower follow a strict control program involving monitoring for diseased plants, spraying to control the aphid vector, and destruction of all infected mats (or units). An infected plant may not show symptoms of the banana bunchy top virus for up to 125 days; therefore, it is critical that the entire mat (or unit) containing the diseased plant be destroyed immediately.

#### **Restrictions:**

- Do not apply more than 0.5 fl oz (15 mL) of this product concentrate per mat (or unit).
- Remove all fruit from plants and mats (or units) prior to treatment.
  Do not harvest any fruit or plant materials from treated mats (or units)
- following injection.
- Do not allow livestock to consume treated plant materials.
- Following transplant of new banana plants into treated areas, allow plants to become established for three months before applying this product for general weed control.

### **Vegetable Crops**

**Types of Applications:** Chemical fallow, preplant fallow beds, preplant, preemergence, at-planting, prior to transplanting, hooded sprayers in row middles, shielded sprayers in row middles, wiper applicators in row middles, postharvest, directed applications (nonbearing ginseng), over the top wipers (rutabagas only)

#### **Restrictions:**

- When applying this product prior to transplanting crops into plastic mulch, take care 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 sprinkler system.
- Take care to insure that the washwater flushes off the plastic mulch and does not enter transplant holes. Applications made at emergence will result in injury or death to emerged seedlings.
- 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. Significant crop injury could result if transplanted seedlings come into contact with freshly sprayed weeds.
- When making preemergence and at-planting applications, applications must be made before crop emergence to avoid severe crop injury.
- Apply before seed germination in coarse sandy soils to further minimize the risk of injury.
- In crops with vines, hooded sprayer, shielded sprayer and wiper applications to row middles must be made prior to vine development otherwise severe injury or destruction may result.
- Unless otherwise specified in the label for this product, treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest.
- Postharvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop. See Application Equipment and Application Methods section of this label for additional information.

#### **Brassica Vegetables**

Labeled Crops: Broccoli, broccoli raab (rapini), Brussels sprout, cabbage, cauliflower, cavalo broccolo, Chinese broccoli (gai lon), Chinese cabbage (bok choy), Chinese cabbage (napa), Chinese mustard cabbage (gai choy), collards, kale, kohlrabi, mizuna, mustard greens, mustard spinach, rape greens

#### **Bulb Vegetables**

Labeled Crops: Garlic, great-headed garlic, leek, onion (dry bulb and green), shallot, welsh onion

#### **Cucurbit Vegetables and Fruits**

Labeled Crops: Chayote (fruit), Chinese waxgourd (Chinese preserving melon), citron melon, cucumber, edible gourd (includes Chinese okra, cucuzza, hechima, hyotan), gherkin, melons (all), *Momordica* spp (includes balsam apple, balsam pear, bittermelon, Chinese cucumber), muskmelon (includes cantaloupe, casaba, crenshaw melon, golden pershaw melon, honey ball melon, honeydew 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 acorn squash, butternut squash, calabaza, hubbard squash, spaghetti squash), watermelon

#### **Restrictions:**

 Allow at least three days between application and planting of cantaloupe, casaba melon, crenshaw melon, cucumber, gherkin, gourds, honey ball melon, honeydew melon, mango melon, melons (all), muskmelon, Persian melon, pumpkin, squash (summer, winter), and watermelon.

#### Leafy Vegetables

Labeled Crops: Amaranth (Chinese spinach), arugula (roquette), beet greens, cardoon, celery, celtuce, chaya, chervil, Chinese celery, corn salad, cress (garden and upland), dandelion, dock (sorrel), dokudami, edible-leaved chrysanthemum, endive (escarole), Florence fennel, garland chrysanthemum, gow kee, lettuce (head and leaf), New Zealand spinach, orach, parsley, purslane (garden and winter), radicchio (red chicory), rhubarb, spinach, Swiss chard, vine spinach, watercress (upland), water spinach

#### **Restrictions:**

 For watercress, do not apply within three days of seeding and during the period between seeding and emergence to minimize risk of injury.

#### **Fruiting Vegetables**

Labeled Crops: Eggplant, groundcherry (*Physalis* spp.), pepino, pepper (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper), tomatillo, tomato

#### **Restrictions:**

- For tomato and tomatillo grown on sandy soil, do not use hooded or shielded sprayer applications in row middles because of crop injury potential.
- For eggplant, groundcherry, pepper (all) and tomatillo, do not apply within three days before planting.

#### Legume Vegetables (Succulent or Dried)

Labeled Crops: Bean (*Lupinus* includes grain lupin, sweet lupin, white lupin, 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 longbean, cowpea, crowderpea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean), broad bean (fava), chickpea (garbanzo), guar, jackbean, lablab bean, lentil, pea (*Pisum* includes dwarf pea, edible-podded pea, English pea, field pea, grarden pea, green pea, snowpea, sugar snap pea), pigeon pea, soybean (immature seed), sword bean

**Types of Applications:** Those listed in Crops section plus preharvest (dry beans, peas, lentils and chickpeas only), spot treatment (dry beans, peas, lentils, and chickpeas only)

Spot Application (Dry Beans, Peas, Lentils, Chickpeas Only) (Not for Use in California): This product may be applied as a spot spray to control weeds, such as Canada thistle, quackgrass, mayweed (dog fennel), and milkweed. Apply up to 1.5 pints of this product per acre in dry beans, or apply up to 24.75 fl oz per acre in dry peas, lentils and chickpeas. Apply in 10 to 20 gpa of water through ground spray equipment or use a 2 percent solution in a handheld sprayer. For best results, apply at or beyond bud/heading stage of growth of target weeds. **Note:** The crop receiving the spray in the spot treated area will be killed.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 7 days of harvest.
- Make only one application per year. Do not combine a spot treatment with a preharvest spray on the same crop area.
- There is at least a 30-day plantback interval between treatment and replanting for any crop not listed in the label for this product.
- Do not feed treated vines and hay from these crops to livestock.
  Do not treat field (feed) peas or cowpeas since these are considered to
- be grown as livestock feed.
- Do not apply this product to dry beans in California and New York State.
- Do not spray or allow spray to drift outside of the target area in order to avoid unwanted crop destruction.

Spot Application (Dry Peas, Lentils, Chickpeas Only) (For Use in Idaho, Minnesota, Montana, Nebraska, North Dakota, Oregon, South Dakota and Washington Only): This product may be applied as a spot spray to control weeds such as Canada thistle, quackgrass, mayweed (dog fennel), and milkweed. Apply up to 1.5 pints per acre in 10 to 20 gpa of water through ground spray equipment or use a 2 percent solution in a handheld sprayer. For best results, apply at or beyond bud/heading stage or growth of target weeds. **Note:** The crop receiving the spray in the spot treated area will be killed.

#### **Restrictions:**

- **Preharvest Interval:** Do not apply within 14 days of harvest.
- Make only one application per year. Do not combine a spot treatment with a preharvest spray on the same crop area.
- There is at least a 30-day plantback interval between treatment and replanting for any crop not listed in the label for this product.
- Do not feed treated vines and hay from these crops to livestock.
- Do not treat field (feed) peas or cowpeas since these are considered to be grown as livestock feed.
- Do not spray or allow spray to drift outside of the target area in order to avoid unwanted crop destruction.

Preharvest (Dry Beans, Peas, Lentils and Chickpeas) (Not for Use in California): This product may be applied as a broadcast over the top spray to control labeled weeds prior to harvest of dry peas, lentils, or chickpeas. Apply up to 1.5 pints in dry beans, or up to 4.25 pints in dry peas, lentils and chickpeas. Apply in 3 to 20 gpa of water at the hard

#### **Restrictions:**

• Preharvest Interval: Do not apply within 7 days of harvest.

dough stage of the legume seed (30 percent grain moisture or less).

- Make only one preharvest application per year. Do not combine a preharvest spray with a spot treatment on the same crop area.
- There is at least a 30-day plantback interval between treatment and replanting for any crop not listed in the label for this product.
- Do not feed treated vines and hay from these crops to livestock.
- Do not apply preharvest to dry beans, peas, lentils, or chickpeas grown for seed as a reduction in germination or vigor may occur.
- Do not treat field (feed) peas or cowpeas since these are considered to be grown as livestock feed.
- Do not apply this product to dry beans in California and New York State.

Preharvest (Dry Peas, Lentils and Chickpeas) (For Use in Idaho, Minnesota, Montana, Nebraska, North Dakota, Oregon, South Dakota and Washington Only): This product may be applied as a broadcast over the top spray to control labeled weeds prior to harvest of dry peas, lentils, or chickpeas. Apply up to 1.5 pints in 3 to 20 gpa of water at the hard dough stage of the legume seed (30 percent grain moisture or less).

#### **Restrictions:**

- **Preharvest Interval:** Do not apply within 14 days of harvest.
- Make only one preharvest application per year. Do not combine a preharvest spray with a spot treatment on the same crop area.
- There is at least a 30-day plantback interval between treatment and replanting for any crop not listed in the label for this product.
- · Do not feed treated vines and hay from these crops to livestock.
- Do not apply preharvest to dry beans, peas, lentils, or chickpeas grown for seed as a reduction in germination or vigor may occur.
- Do not treat field (feed) peas or cowpeas since these are considered to be grown as livestock feed.

#### **Root and Tuber Vegetables**

Labeled Crops: Arracacha, arrowroot, beet (garden), black salsify, burdock, canna, carrot, cassava (bitter and sweet), celeriac, chayote (root), chervil (turnip-rooted), chicory, Chinese artichoke, chufa, dasheen (taro), galangal, ginger, ginseng, horseradish, Jerusalem artichoke, leren, kava (turnip-rooted), oriental radish, parsley (turnip-rooted), parsnip, potato, radish, rutabaga, salsify, skirret, Spanish salsify, sweet potato, tanier, true yam, turmeric, turnip, wasabi, yacon, yam bean

**Directed Application (Nonbearing Ginseng Only):** Apply to established stands of nonbearing ginseng only for general weed control. Applications may be made with boom equipment, CDA, shielded sprayers, handheld and backpack wands, lances, and orchard guns or with wiper applicator equipment.

#### **Restrictions:**

- Preharvest Interval: Do not apply within one year of harvest.
- Direct sprays so that there is no contact of this product with the ginseng plant.

Wiper Applicator (Rutabagas Only): Apply over the top for control of tall weeds.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 14 days of harvest.
- Droplets, mist, foam or splatter of the solution onto desirable vegetation may result in discoloration, stunting, or destruction.

### Vine Crops

Labeled Crops: Grapes (raisin, table, wine), hops, kiwi fruit, passion fruit Types of Applications: Those listed in Tree, Vine, and Shrub Crops section In the northeast and Great Lakes regions, make applications prior to the end of bloom stage of grapes to avoid injury, or make applications with shielded sprayers or wiper equipment.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 14 days of harvest.
- Do not use selective equipment in kiwi.
- Do not apply when green shoots, canes or foliage are in the spray zone.

# Glyphosate-Resistant Horseweed (Marestail, *Conyza canadensis*) (Grapes Only)

#### (Not for Use in California)

Use this product to control and manage glyphosate-resistant horseweed (marestail, *Conyza canadensis*). Apply 1.5 quarts of this product per acre plus 2,4-D (18 fl oz of Dri-Clean per acre) before marestail is more than 6 inches in height. For best results, use a carrier volume of 15 gpa. A residual herbicide such as diuron may provide additional preemergence control. Further local restrictions may apply.

### **Glyphosate Tolerant Crops**

The following instructions include all applications that can be made onto glyphosate tolerant crops during the complete cropping season. Do not combine these instructions with other instructions in the Crops section of this label made for crop varieties that do not contain the glyphosate tolerant genes.

# Use this product for postemergence application only on crop varieties designated as containing the glyphosate tolerant genes.

- Applying this product to crop varieties not designated as glyphosate tolerant will result in severe crop injury and yield loss. Avoid contact with foliage, green stems, or fruit of crops, or any desirable plants that do not contain the glyphosate tolerant genes since severe injury or destruction will result.
- Glyphosate tolerant crop varieties must be purchased from an authorized seed supplier. Crop safety and weed control performance is not warranted when this product is used in conjunction with "brown bag" or seed saved from previous year's crop production and replanted.
- The glyphosate tolerant designation indicates that the crop variety contains a patented gene that provides tolerance to glyphosate herbicides. Information on glyphosate tolerant crop varieties may be obtained from your seed supplier.

**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 glyphosate tolerant genes.

See Product Information and Application Directions sections of this label for essential use directions and restrictions for the application of this product.

When applied as specified in this label, this product controls the annual and perennial grasses and broadleaf weeds listed. Observe the maximum application rates and crop stage timings specified for individual glyphosate tolerant crops.

#### **Ground Broadcast Application**

Apply this product in 5 to 20 gpa of spray solution. Avoid spraying a fine mist by selecting the proper nozzle and spray pressure. For best results using when ground application equipment, use flat spray nozzles and check for even distribution of spray droplets.

#### **Aerial Application**

All treatments in this section can be made using aerial application equipment provided that the applicator follows all precautions and restrictions listed in this label. Apply this product in 3 to 15 gpa of water. Using appropriate buffer zones helps prevent injury to adjacent vegetation.

Attention: Avoid drift, Use extreme care when applying this product to prevent injury to desirable plants and crops that do not contain a glyphosate-tolerant gene.

#### Tank Mixes

Using other herbicides, insecticides, fungicides, micronutrients or foliar fertilizers in a tank mix with this product may result in reduced weed control or crop injury. For best results, do not apply this product as a postemergence (in-crop) application over the top of glyphosate tolerant crops unless other specified on this product label. Always read and follow all of the label directions and precautions for all of the products in the tank mix. Under certain conditions, at certain crop growth stages, and/or under other circumstances, some tank mix products have the potential to cause crop injury. Read the label for all tank mix partners prior to using them to determine the potential for crop injury. Predetermine the compatibility of all tank mix products in the carrier by mixing small proportional quantities of each before mixing them to use in an application. A tank mix of this product with other herbicides has the potential to cause incompatibility, antagonism, or a reduction in product efficacy. All possible tank mix partners have not been tested for compatibility or performance. See the Mixing Directions section of this label.

A nonionic surfactant may be added to the spray solution for application to glyphosate tolerant crops unless otherwise directed on this label. Adding certain surfactants to this product may result in some crop response, including leaf speckling or leaf necrosis due to the surfactant added to the spray mix. See the specific use directions for each crop in this label or in supplemental labeling for additional precautions or restrictions. See the Mixing Directions section of this label.

Ammonium sulfate may also be added to spray solutions of this product for application to glyphosate tolerant crops. See the Mixing Directions section of this label.

#### **Sprayer Preparation**

Thoroughly clean the spray tank and all lines and filters to eliminate potential contamination from other herbicides prior to mixing and applying this product. Follow the cleaning procedures specified on the label for the product(s) previously used.

**Note:** The following directions are based upon 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 burndown treatment of this product is required to control existing weeds prior to crop emergence. Some weeds, such as black nightshade, broadleaf signalgrass, sicklepod, Texas panicum, sandbur, annual morningglory, wooly 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. Apply the second application after some regrowth has occurred and at least 10 days after a previous application of this product.

The application rates on this label to control tough weeds, or those specified on supplemental labeling for this product, supersede rates in the Annual Weeds and Perennial Weeds sections of this label.

#### **Product Use Restrictions**

- Do not apply more than the maximum application rates specified on this label.
- Maximum application rates apply to the use of this product combined with the use of all other glyphosate-containing products, whether applied separately or in mixtures.
- Calculate the application rates (glyphosate acid equivalents) and ensure that the total use of this and other glyphosate-containing products does not exceed the specified maximum rate.

# Canola Hybrids with Roundup Ready<sup>®</sup> Gene Grown for Seed

(Not for Use in California)

See the Glyphosate Tolerant Crops section of this label for general precautionary instructions for use in glyphosate tolerant Crops.

Types of Applications: Preplant, preemergence, at-planting, postemergence

#### **Restrictions:**

- Do not combine an application on glyphosate tolerant canola grown for seed with an application for weed control in glyphosate tolerant canola using this product or any other glyphosate-containing product.
- Apply this product only on canola that contains a glyphosate tolerant gene. Severe crop injury and yield loss will result if this product is applied to canola that is not designated as glyphosate tolerant.

#### Maximum Allowable Application Rates

Application Type	Rate (pints/acre)
preplant preemergence at-planting	3
total all in-crop applications	1.5

#### Preplant, Preemergence, and At-Planting

Apply this product using aerial or ground application equipment before, during, or after planting canola. In no-till and stale seedbed systems, control existing weeds with a burndown treatment before canola emerges. Use 12 fl oz to 1.5 pints of this product per acre in a preplant burndown application.

#### Postemergence

Apply this product in ground broadcast equipment to control nonglyphosate-tolerant canola pollen parental line(s) in hybrid canola seed production fields containing both a glyphosate tolerant canola line(s) and a non-glyphosate tolerant line(s). Control the non-glyphosate-tolerant pollen parental line(s) by applying 12 fl oz to 1.5 pints of this product per acre after pollination is complete. Non-glyphosate-tolerant pollen parental line(s) may be controlled by sequential applications.

#### **Restrictions:**

- Do not apply more than a total of 1.5 pints per acre if using sequential applications.
- Do not make sequential applications less than 5 days apart.

# Canola (Spring Varieties) with Roundup Ready<sup>®</sup> Gene

See the Glyphosate Tolerant Crops section of this label for general precautionary instructions for use in glyphosate tolerate crops.

**Types of Applications:** Preplant, at-planting, preemergence, postemergence (in-crop), postemergence (in-crop) in hybrid seed production only

Glyphosate tolerant spring canola is defined as glyphosate tolerant canola varieties that are seeded in the spring, harvested in the fall, and do not enter a winter dormancy period.

#### **Maximum Allowable Application Rates**

Application Type	Rate (pints/acre)
preplant preemergence at-planting	3
total in-crop applications from emergence to 6-leaf	1.5

#### Preplant, Preemergence and At-Planting

Apply before, during, or after planting glyphosate tolerant spring canola.

#### Restrictions:

• Do not apply more than 1.5 quarts of this product per acre per season for all total of preplant, preemergence and at-planting applications.

#### Postemergence (In-Crop)

Apply this product as a postemergence (in-crop) application to glyphosate tolerant spring canola from emergence through the 6-leaf stage of development. Applications made during bolting or flowering of canola may result in crop injury or yield loss. To maximize yield potential, make applications early to eliminate competing weeds.

**Single Application:** Apply 12 to 18 fl oz 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 12 fl oz per acre are applied after the 4-leaf stage.

**Sequential Application:** Apply 12 fl oz per acre to 1- to 3-leaf canola followed by a sequential application at a minimum interval of 10 days, but not later than the 6-leaf stage. Sequential applications are required for early emerging annual weeds and perennial weeds, such as Canada thistle and quackgrass, or whenever more than one application is needed for adequate weed control.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 60 days of harvest.
- Do not apply more than two in-crop (over the top) broadcast applications from crop emergence through the 6-leaf stage of development.
- Do not apply more than 4.5 pints of this product per acre for all in-crop applications.

#### Postemergence (In-Crop) in Hybrid Seed Production Only

This application is for use only in hybrid canola seed production of spring and winter varieties. Do not apply this product on canola grown for food or feed.

Apply 12 fl oz to 1.5 pints of this product per acre from emergence until pollination begins. Application may also be made after pollination is complete, but avoid applications during active pollination. This will control non-glyphosate tolerant canola pollen parental line(s) in hybrid canola seed production fields containing both glyphosate tolerant canola line(s) and non-glyphosate tolerant line(s).

#### **Restrictions:**

- Do not apply more than 1.5 pints of this product per acre in sequential applications to control non-glyphosate tolerant pollen parental line(s).
- Do not make sequential applications less than 5 days apart.
- Do not apply more than a total of 1.5 pints of product per acre for all postemergence (in-crop) applications in hybrid canola seed production fields, including application for weed control and control of non-glyphosate tolerant canola.

# Canola (Winter Varieties) with Roundup Ready® Gene

See the Glyphosate Tolerant Crops section of this label for general precautionary instructions for use in glyphosate tolerant crops.

**Types of Applications:** Preplant, at-planting, preemergence, postemergence (in-crop)

Glyphosate tolerant winter canola is defined as glyphosate tolerant canola varieties that are seeded in the early fall, harvested the following spring or winter, and are intended to enter a cold period dormancy in the winter.

#### Maximum Allowable Application Rates

Application Type	Rate (quarts/acre)
preplant preemergence at-planting	1.5
total in-crop applications from emergence to canopy closure or prior to bolting in the spring	

#### Preplant, Preemergent and At-Planting

Apply before, during, or after planting glyphosate tolerant winter canola. **Restrictions:** 

• Do not apply more than 1.5 quarts of this product per acre per season for all total of preplant, preemergence and at-planting applications.

#### Postemergence (In-Crop)

Apply this product as a postemergence application to glyphosate tolerant winter canola from emergence to canopy closure in the fall and prior to bolting in the spring. Applications made during or after bolting may result in crop injury or yield loss. To maximize yield potential, make applications early to eliminate competing weeds.

A sequential application of this product may be necessary to control some weeds with multiple germination times, suppressed (stunted) weeds, or weeds that have overwintered. Make the second application after some regrowth has occurred and at least 60 days after the previous application of this product.

Single Application: Apply 18 fl oz to 1.5 pints per acre in the fall when weeds are small and actively growing. Use the higher rate in the rate range when weed densities are high, when weeds have overwintered, or when weeds become large and well established. Applying more than 18 fl oz per acre prior to the 6-leaf stage may result in reduced crop growth in the fall. Avoid overlapping applications that may result in temporary yellowing and growth reduction.

Sequential Application: Apply 12 to 1.5 pints per acre to 2-leaf or larger canola in the fall followed by a sequential application at the same rate at a minimum interval of 60 days. Make the sequential application before bolting in the spring. Sequential applications are required for early emerging annual weeds and winter emerging weeds such as downy brome, jointed goatgrass and ryegrass, and for weeds that have overwintered. This product controls or suppresses most perennial weeds; however, for some perennial weeds, sequential applications may be required to reduce competition with the crop.

#### Restrictions:

- Preharvest Interval: Do not apply within 60 days of harvest.
- Do not apply more than two in-crop (over the top) broadcast
- applications from crop emergence up to the onset of bolting. Do not apply more than 1.5 pints of this product per acre per season for
- all in-crop applications. Reduced crop growth in the fall may result if more than 18 fl oz per acre is applied prior to the 6-leaf stage.
- No waiting period is required between application and open grazing of livestock.

#### Corn Hybrids with Roundup<sup>®</sup> Ready 2 Technology or Glyphosate Tolerant (Not for Use in California)

Types of Applications: Preplant, at-planting, preemergence, postemergence (in-crop), spot treatment, preharvest, postharvest Using this product as an in-crop (over the top) application at the specified rates on corn other than corn hybrids tolerant to glyphosate may cause crop injury and reduced yields.

#### Maximum Allowable Application Rates

Application Type	Rate (per acre)
preplant preemergence at-planting	3.75 qt
total in-crop applications from emergence through 48-inch corn	2.25 qt (2.25 pt as single application)
preharvest after maximum kernel fill complete and crop physiologically mature until 7 days before harvest	1.5 pt
combined total per year for all applications	1.5 gal

#### Preplant, Preemergence, and At-Planting

Apply this product alone or in a tank mix before, during, or after planting. Tank Mixes: When applying this product in a tank mix, choose one of the product listed below as the tank mix partner. The specific product used must be labeled for application prior to emergence of corn. Read and follow all of the label directions for the tank mix product. Apply the tank mix in 10 to 20 gpa of water or in 10 to 60 gpa of nitrogen.

2,4-D acetochlor Epic Aim Frontier Aim EC FulTime alachlor atrazine Axiom Harness **Balance** Pro Banvel **Bicep Magnum** Bicep II Magnum Bicep Lite II Magnum Bullet Lariat Clarity Leadoff Define Linex Degree Lorox Degree Xtra Distinct metolachlor

Dual II Magnum Guardsman Guardsman MAX Harness Xtra Harness Xtra 5.6L Hornet WDG Keystone Keystone LA Marksman

Micro-Tech Outlook pendimethalin . Python Python II Radius Resolve Resource Sharpen simazine s-metolachlor Stalwart C Stalwart Xtra SureStart Surpass EC TopNotch TripleFLEX

#### **Restrictions:**

- Do not apply more than a total of 3.75 quarts per acre per season for all total of preplant, preemergence, and at-planting applications combined.
- Apply a postemergence application of this product for maximum weed control following the use of the preemergence residual products listed above.

#### Postemergence (In-Crop)

Apply this product alone or in a tank mix over the top of corn hybrids tolerant to glyphosate. Apply from emergence through V8 stage (8 leaves with collars) or until corn is 30 inches tall (free standing), whichever comes first. Use drop nozzles for optimum spray coverage and weed control when corn is 24 to 30 inches high. For corn 30 to 48 inches (free standing), apply with ground equipment only with drop nozzles aligned to avoid spraying into the whorls of the corn plants. Do not apply more than 2.25 pints of product per acre in a single in-crop application on corn up to 48 inches high. Do not apply more than 4.5 quarts of product per acre per growing season in sequential in-crop applications to corn from emergence through 48 inches high.

This product controls annual grasses and broadleaf weeds listed on the label when applied as directed. One or more applications of this product controls or suppresses many perennial grasses and broadleaf weeds. Make a postemergence application of 18 fl oz to 1.5 pints of this product per acre before weeds are more than 4 inches in height or before they become competitive with the crop. Make a sequential application of this product at 18 fl oz to 1.5 pints per acre before weeds are more than 4 inches in height if new flushes of weeds occur.

Tank Mixes: When applying this product in a tank mix, choose one of the product listed below as the tank mix partner. The specific product used must be labeled for application postemergence (in-crop) to corn. Read and follow all of the label directions for the tank mix product

Degree	Hornet WDG	
Degree Xtra	Impact	
Distinct	Marksman	
Equip	Micro-Tech	
Harness	Option	
Harness Xtra	Resolve	
Harness Xtra 5.6L	Resource	
	Status	
	TripleFLEX	
	Warrant	
	Degree Degree Xtra Distinct Equip Harness Harness Xtra	

Tank Mix Partner	Maximum Height of Corn at Application (Inches)
Bullet <sup>1</sup> Micro-Tech <sup>1</sup>	5
Degree Degree Xtra Harness Harness Xtra Harness Xtra 5.6L TripleFLEX Warrant	11
atrazine	12

<sup>1</sup>These products are not registered for use as a postemergence application in Texas.

#### **Restrictions:**

 Preharvest Interval: Do not apply within 50 days of corn forage or grain harvest.

 Do not make applications less than 10 days apart for in-crop weed control.

**Preharvest:** Apply this product at rates up to 1.5 pints per acre for annual and perennial weed control prior to harvest. Apply at 35 percent grain moisture or less, ensuring that maximum kernel fill is complete and the corn is physiologically mature (black layer formed).

#### **Restrictions:**

- Preharvest Interval: Do not apply within 7 days of harvest or feeding corn stover or grain.
- Do not make a preharvest application if the combined total of previously applied over the top or drop nozzle applications is more than 1.5 quarts of this product per acre.

**Postharvest:** Apply this product for weed control after harvesting the crop. A higher rate in the rate range may be required to control large weeds growing in the crop at the time of harvest. Tank mixes with 2,4-D or dicamba may be used.

#### Restrictions:

• **Preharvest Interval:** Do not apply within 7 days of harvest or feeding treated vegetation.

#### Cotton with Roundup Ready<sup>®</sup> Gene (Not for Use in Arizona)

See the Glyphosate Tolerant Crops section of this label for general precautionary instructions for use in glyphosate tolerant crops.

**Types of Applications:** Preplant, at-planting, preemergence, postemergence (in-crop), selective equipment (in-crop), preharvest, post-directed (glyphosate-resistant horseweed), postemergence (incrop) (glyphosate-resistant *Amaranthus* spp.), postemergence (in-crop) (glyphosate-resistant johnsongrass)

Do not use this product on glyphosate tolerant cotton in New York State.

#### **Maximum Allowable Application Rates**

Application Type	Rate (quart/acre)
preplant preemergence at-planting	3.75
maximum preharvest	1.5
total all in-crop applications from ground cracking to layby	2.75
combined total all in-crop applications from emergence through harvest	4.25
combined total for all applications	6

Preharvest Interval: Do not apply within 7 days before harvest.

#### Preplant, Preemergence and At-Planting

Apply this product before, during, or after planting glyphosate tolerant cotton.

**Tank Mixes:** Tank mix this product with 2,4-D or Clarity and apply it prior to planting only. The products listed below may be tank mixed with this product and applied prior to crop emergence. Ensure that the specific product used is labeled for application prior to crop emergence. Read and follow all label directions for all products in the tank mixture. Use according to the most restrictive precautionary statements for each product in the tank mixture.

Caparol	Meturon
Command	Parrlay
Cotoran	pendimethalin
Cotton Pro	Reflex
Dawn	Sharpen
Direx	Stalwart
Diuron	Staple
Dual Magnum	Valor
Dual II Magnum	Warrant
Karmex	Zorial

#### **Restrictions:**

• Do not apply more than 3.75 quarts per acre per season for all

combined total of preplant, preemergence, and at-planting applications. **Postemergence (In-Crop)** 

Apply up to 1.5 pints per acre per application over the top of glyphosate tolerant cotton (in-crop) from cracking until the 4-leaf (node) stage of development (until the fifth true leaf reaches the size of a quarter).

Tank Mixes: The products listed below may be tank mixed with this product and applied over the top of glyphosate tolerant cotton up to

the 4-leaf stage. Ensure that the specific product used is labeled for application prior to crop emergence. Read and follow all label directions for all products in the tank mixture. Use according to the most restrictive precautionary statements for each product in the tank mixture.

Assure II	Reflex
Dual Magnum <sup>2</sup>	Select
Envoke	Select MAX
Fusilade	Stalwart <sup>2</sup>
Parrlay	Staple <sup>1</sup>
Poast Plus	Warrant

<sup>1</sup>Applying Staple postemergence (in-crop) to glyphosate tolerant cotton may cause leaf yellowing and/or leaf crinkling.

<sup>2</sup>Applying Dual Magnum and Stalwart-over the top of glyphosate tolerant cotton may cause leaf injury in the form of necrotic spotting.

**Salvage Treatment:** Apply after the 4-leaf stage of development and only where weeds threaten to cause the loss of the crop. Apply 1.5 pints per acre either as an over the top application or as a post-directed treatment sprayed higher on the cotton plants and over the weeds. **Note:** A salvage treatment will result in significant boll loss, delayed maturity and/or yield loss. Do not apply more than one salvage treatment per growing season.

#### **Restrictions:**

- Do not make more than two over the top broadcast applications from crop emergence through the 4-leaf (node) stage of development.
- Sequential over the top or post-directed applications in-crop must be at least 10 days apart and cotton must have at least two nodes of incremental growth between applications.
- Over the top applications made after the 4-leaf (node) development stage may result in boll loss, delayed maturity and/or yield loss.
- Do not add additional surfactant or additives containing surfactant (other than those contained in any tank mix product) to this product for over the top application to glyphosate tolerant cotton.

#### Selective Equipment (In-Crop)

Apply this product using precision post-directed or hooded sprayers to glyphosate tolerant cotton through layby using up to 1.5 pints per acre per application. Use post-directed equipment that directs the spray to the base of the cotton plants. To avoid contact of the herbicide spray with leaves of the cotton plant to the maximum extent possible, maintain a low spray pressure (less than 30 lb psi) and place the nozzles in a low position. This directs a horizontal spray pattern under the leaves of the cotton plant as the row. For best results, apply while weeds are small and less than 3 inches in height.

**Tank Mixes:** The products listed below may be tank mixed with this product and applied in-crop using precision post-directed or hooded sprayers. Ensure that the specific product used is labeled for application postemergence (in-crop) to cotton. Read and follow all label directions for all products in the tank mixture. Use according to the most restrictive precautionary statements for each product in the tank mixture.

Aim	Layby Pro
Caparol	Parrlay
Cotoran	pendimethalin
Direx	Staple <sup>1</sup>
Envoke	Valor
4	 

<sup>1</sup>Applying Staple postemergence (in-crop) to glyphosate tolerant cotton may cause leaf yellowing and/or leaf crinkling.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 7 days of harvest.
- Do not make more than two applications from the 5-leaf stage through lavby.
- Sequential over the top or post-directed applications in-crop must be at least 10 days apart and cotton must have at least two nodes of incremental growth between applications.

#### Preharvest

This product may be applied for preharvest annual and perennial weed control after 20 percent of boll crack. Applying this product will not enhance the performance of harvest aids when applied to glyphosate tolerant cotton.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 7 days of harvest.
- Do not apply more than 1.5 quarts of this product per acre as a preharvest application.
- Do not apply this product preharvest to crops grown for seed as a reduction in germination or vigor may occur.
- Do not add additional surfactant or additives containing surfactant (other than those contained in any tank mix product) to this product for preharvest application to glyphosate tolerant cotton.
- Using this product according to label directions is expected to result in normal growth of glyphosate tolerant cotton. However, due to the sensitivity of cotton fruiting to various environmental conditions, agronomic practices, and other factors, it is impossible to eliminate

all risks associated with this product. In some cases, these factors can result in boll loss, delayed maturity and/or yield loss even when applications are made according to label directions.

#### Post-Directed (Glyphosate-Resistant Horseweed) (Not for Use in California)

Apply this product in a post-directed application to control and manage glyphosate-resistant horseweed (marestail, *Conyza canadensis*). Apply in 10 to 20 gpa of water for ground applications or in 3 to 15 gpa of water for aerial applications. Management of early season weed competition and the development of a crop height differential between cotton and horseweed occurs by a combination of preplant burndown and postemergence over the top and/or directed applications of this product. The development of a height differential is necessary to successfully make post-directed treatments. Make in-crop post-directed applications of MSMA (2 lb active ingredient per acre) tank mixed with diuron (0.5 to 0.75 lb active ingredient per acre) when the temperature is 80°F or hotter.

# Postemergence (In-Crop) (Glyphosate-Resistant Amaranthus spp.) (Not for Use in California)

Tank mix this product or apply it sequentially with a herbicide that has a different mode of action to control a naturally occurring glyphosateresistant biotype of an *Amaranthus* species. To control emerged weeds, apply this product preemergence in a tank mix with metolachlor prior to the 4-leaf stage for the control of *Amaranthus* spp. To control emerged weeds preemergence at layby, apply this product in a tank mix with a residual herbicide such as diuron (Direx) or flumioxazin (Valor) postdirected to control *Amaranthus* spp.

To control emerged weeds as a postemergence application, apply this product in a tank mix with MSMA and diuron (Direx) or flumioxazin (Valor) to control emerged *Amaranthus* spp. Appropriate cultural and mechanical control practices (e.g., crop rotation or tillage) may also be used. For best results, tillage or make a burndown application prior to planting.

# Postemergence (In-Crop) (Glyphosate-Resistant Johnsongrass) (Not for Use in California)

Tank mix this product with a herbicide that has a different mode of action labeled for preemergence and/or postemergence control of a naturally occurring glyphosate-resistant biotype of johnsongrass in combination with appropriate cultural weed control practices (e.g., crop rotation). Applying a herbicide with a different mode of action can be made either in a single tank mix application with this product or in sequential applications. To control emerged weeds, apply this product in a tank mix with SelectMAX (clethodim), Assure II (quizalofop) or Poast Plus (sethoxdim) for the suppression of emerged johnsongrass.

Attention: Using this product in accordance with label directions is expected to result in normal growth of glyphosate tolerant cotton. It is impossible to eliminate all risks associated with this product due to the sensitivity of cotton fruiting to various environmental conditions, agronomic practices and other factors, even when applications are made according to label directions. In some instances, these factors can result in boll loss, delayed maturity and/or yield loss.

#### Cotton with Roundup Ready<sup>®</sup> Gene or Glyphosate Tolerant (For Use in Arizona Only)

See the Glyphosate Tolerant Crops section of the product label for general precautionary instructions for use in glyphosate tolerant Crops.

Types of Applications: Preplant, at-planting, preemergence, over the top, selective equipment, preharvest

#### **Maximum Allowable Application Rates**

Application Time	Rate
Application Type	(quart/acre)
preplant	3.75
preemergence	
at-planting	
maximum preharvest	1.5
total all in-crop applications from ground cracking to layby	2.75
total in-crop over the top from ground cracking to 4-leaf stage	2.25
total in-crop applications using selective equipment through layby	1.5
combined total for all applications	6

#### **Restrictions:**

Preharvest Interval: Do not apply within 7 days before harvest.
Do not make more than two over the top broadcast applications from crop emergence through the 4-leaf (node) development stage.

- Do not make more than two post-directed applications from the 5-leaf stage through layby.
- There must be 10 days between sequential in-crop over the top or post-directed applications of this product. Cotton must also have at least two nodes of incremental growth between applications.
- Do not apply more than the maximum label rates of this product. Doing so will result in boll loss, delayed maturity and/or yield loss.
- The maximum use rates on this label apply to the rates of this product combined with the use of all other glyphosate-containing products, applied separately or as a tank mix. Calculate the application rates and ensure that the total use of this and other glyphosate-containing products does not exceed the specified maximum use rate.

#### Preplant, Preemergence, and At-Planting

Apply this product before, during, or after planting glyphosate tolerant cotton.

#### Over the Top

Apply up to 1.5 pints of this product per application using aerial or ground application equipment. Make this postemergence application to glyphosate tolerant cotton from the ground cracking stage until the 4-leaf (node) development stage (until the fifth true leaf reaches the size of a quarter).

#### **Restrictions:**

- Do not apply more than 1.5 pints of this product per acre in any single over the top broadcast application.
- Do not apply more than 2.25 quarts of this product per acre for combined over the top applications between ground cracking until the 4-leaf (node) stage.

#### Selective Equipment

Apply this product using precision post-directed or hooded sprayers to glyphosate tolerant cotton through layby using up to 1.5 pints per acre per application. Up to 1.5 quarts of this product per acre may be used in sequential in-crop applications using selective equipment. Use post-directed equipment that directs the spray to the base of the cotton plants. To avoid contact of the herbicide spray with leaves of the cotton plants. To avoid contact of the nozzles in a low spray pressure (less than 30 lb psi) and place the nozzles in a low position. This directs a horizontal spray pattern under the leaves of the cotton plant and onto the weeds in the row. For best results, apply while weeds are small and less than 3 inches in height.

#### **Restrictions:**

 Do not apply more than a total of 2.75 quarts of this product per acre as a combined in-crop over the top plus selective equipment applications

**Salvage Treatment:** Apply up to 2.25 pints of this product per acre from the ground cracking stage through layby when weeds threaten to cause the loss of the crop. Make the application either as an over the top or as a post-directed treatment sprayed higher on the cotton plants and over the weeds. **Note:** Crop tolerance of glyphosate tolerant cotton has not fully been tested at this application rate. A salvage treatment will result in significant boll loss, delayed maturity and/or yield loss. Do not apply more than two salvage treatments per growing season.

#### **Restrictions:**

 Do not apply more than a total of 2.75 quarts per acre of this product in a combined in-crop and over the top plus selective equipment applications.

#### Preharvest

This product may be applied for preharvest annual and perennial weed control as a broadcast application after 20 percent of boll crack. This product does not enhance the performance of harvest aids when applied to glyphosate tolerant cotton.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 7 days of harvest.
- Do not apply more than 1.5 quarts of this product using either aerial or ground application equipment.
- Do not apply this product preharvest to glyphosate tolerant cotton grown for seed.

Attention: Use this product as an over the top or directed application onto cotton that is designated as glyphosate tolerant. If cotton varieties not designated as glyphosate tolerant are sprayed with this product, severe injury or death will result. Avoid contact of herbicide with foliage, green stems, or fruit of crops, or any desirable plants and trees other than crops with a glyphosate tolerant genes as severe injury or destruction will result.

# Cotton with Roundup Ready<sup>®</sup> Flex Gene (Not for Use in Arizona)

The use directions in this section apply only to varieties marked as Roundup Ready Flex cotton. If this product is applied over the top of cotton other than Roundup Ready Flex cotton, crop injury and reduced yields will result. Do not combine the directions in this section with the directions in the section for Cotton with Roundup Ready Gene or with any other Roundup Ready cotton or Roundup Ready Flex cotton use directions on other glyphosate-containing products. If this product drifts onto adjacent fields of post 4-leaf (node) Roundup Ready cotton, extensive crop injury, including boll loss, delayed maturity and/or yield loss will occur.

**Types of Applications:** Preplant, at-planting, preemergence, postemergence (in-crop), preharvest, post-directed (glyphosate-resistant horseweed), postemergence (in-crop) (glyphosate-resistant johnsongrass)

#### **Maximum Allowable Application Rates**

Application Type	Rate (quart/acre)
preplant preemergence at-planting	3.75
total all in-crop applications from cracking to 60 percent open bolls	4.5
total all in-crop applications between layby and 60 percent open bolls	1.5
total all in-crop applications from 60 percent open bolls to 7 days prior to harvest	1.5
total all in-crop applications from emergence through harvest	4.25
combined total for all applications	6

#### Preplant, Preemergence and At-Planting

Apply this product before, during, or after planting Roundup Ready Flex cotton.

**Tank Mixes:** Prior to planting, tank mix with 2,4-D or Clarity only. The products listed below may be tank mixed with this product for application prior to crop emergence. Ensure that the specific product used is labeled for application prior to emergence of the crop. Read and follow all label directions for all products in the tank mixture. Use according to the most restrictive precautionary statements for each product in the tank mixture.

Caparol	Meturon
Command	Parrlay
Cotoran	pendimethalin
Cotton Pro	Reflex
Dawn	Sharpen
Direx	Stalwart
diuron	Staple
Dual Magnum	Valor
Dual II Magnum	Warrant
Karmex	Zorial

#### **Restrictions:**

 Do not apply more than 3.75 quarts per acre per season for all combined total of preplant, preemergence, and at-planting applications.

#### Postemergence (In-Crop)

Apply this product to Roundup Ready Flex cotton to control annual grasses and broadleaf weeds listed on this label. Eliminate competing weeds early to maximize yield potential. One or more applications of this product will control or suppress many perennial weeds. For best results, initially apply 1.5 pints per acre on 1- to 3-inch tall annual grass and broadleaf weeds. Apply this product at up to 2.25 pints per acre per application using ground application equipment. More thorough weed coverage may be achieved by using post-directed spray equipment.

**Tank Mixes:** The products listed below may be tank mixed with this product and applied postemergence (in-crop) over the top of Roundup Ready Flex cotton. Ensure that the specific product used is labeled for application prior to emergence of the crop. Read and follow all label directions for all products in the tank mixture. Use according to the most restrictive precautionary statements for each product in the tank mixture.

Assure II	Reflex
Dual Magnum <sup>2</sup>	Select MAX
Envoke	Stalwart <sup>2</sup>
Fusilade	Staple <sup>1</sup>
Paarlay	Warrant
Poast Plus	

<sup>1</sup>Staple may cause leaf yellowing and/or leaf crinkling when applied postemergence (in-crop) in Roundup Ready Flex cotton. <sup>2</sup>Dual Magnum and Stalwart applied over the top of Roundup Ready Flex cotton may cause leaf injury in the form of necrotic spotting.

The products listed below may be tank mixed with this product and applied postemergence (in-crop) using precision post-directed or hooded sprayers. Ensure that the specific product used is labeled for application prior to emergence of the crop. Read and follow all label directions for all products in the tank mixture. Use according to the most restrictive precautionary statements for each product in the tank mixture.

Aim	Layby-Po	
Caparol	Parrlay	
Cotoran	pendimethalin	
Direx	Staple <sup>1</sup>	
Envoke	Valor	
4		

<sup>1</sup>Staple may cause leaf yellowing and/or leaf crinkling when applied postemergence (in-crop) in Roundup Ready Flex cotton.

#### **Restrictions:**

- Do not apply more than 2.25 pints of this product per acre as a
- maximum single in-crop application rate using ground equipment.
  Do not apply more than 1.5 pints per acre as an in-crop application made alone or with the addition of other crop chemicals containing
- surfactants as a crop response including leaf speckling or leaf necrosis may occur.
- Do not apply more than 1.5 pints of this product per acre when applying by air.
- The maximum combined total application rate of this product between layby and 60 percent open bolls is 1.5 quarts per acre.
- The maximum combined total application rate of this product made from crop emergence to 60 percent open bolls is 4.5 quarts per acre.
- Do not add additional surfactant or additives containing surfactant to this product for over the top application to Roundup Ready Flex cotton.

#### Preharvest

Apply this product to Roundup Ready Flex cotton at 1.5 quarts per acre for annual and perennial weed control prior to harvest after 60 percent boll crack. When applied to Roundup Ready Flex cotton, this product does not enhance the performance of harvest aids.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 7 days of harvest.
- Do not add additional surfactant or additives containing surfactant to this product for preharvest application to Roundup Ready Flex cotton.
- Using this product according to label directions is expected to result in normal growth of Roundup Ready Flex cotton. However, due to the sensitivity of cotton fruiting to various environmental conditions, agronomic practices, and other factors, it is impossible to eliminate all risks associated with this product. In some cases, these factors can result in boll loss, delayed maturity and/or yield loss even when applications are made according to label directions.

# Post-Directed (Glyphosate-Resistant Horseweed) (Not for Use in California)

Apply this product in a post-directed application to control and manage glyphosate-resistant horseweed (marestail, *Conyza canadensis*). Apply in 10 to 20 gpa of water for ground applications or in 3 to 15 gpa of water for aerial applications. Management of early season weed competition and the development of a crop height differential between cotton and horseweed occurs by a combination of preplant burndown and postemergence over the top and/or directed applications of this product. The development of a height differential is necessary to successfully make post-directed treatments. Make in-crop post-directed applications of MSMA (2 lb active ingredient per acre) tank mixed with diuron (0.5 to 0.75 lb active ingredient per acre) when the temperature is 80°F or hotter.

# Postemergence (In-Crop) (Glyphosate-Resistant Amaranthus spp.) (Not for Use in California)

Tank mix this product or apply it sequentially with a herbicide that has a different mode of action to control a naturally occurring glyphosateresistant biotype of an *Amaranthus* species. To control emerged weeds, apply this product preemergence in a tank mix with metolachlor prior to the 4-leaf stage for the control of *Amaranthus* spp. To control emerged weeds preemergence at layby, apply this product in a tank mix with a residual herbicide such as diuron (Direx) or flumioxazin (Valor) postdirected to control *Amaranthus* spp.

To control emerged weeds as a postemergence application, apply this product in a tank mix with MSMA and diuron (Direx) or flumioxazin (Valor) to control emerged *Amaranthus* spp. Appropriate cultural and mechanical control practices (e.g., crop rotation or tillage) may also be used. For best results, tillage or make a burndown application prior to planting.

# Postemergence (In-Crop) (Glyphosate-Resistant Johnsongrass) (Not for Use in California)

Tank mix this product with a herbicide that has a different mode of action labeled for preemergence and/or postemergence control of a naturally occurring glyphosate-resistant biotype of johnsongrass in combination with appropriate cultural weed control practices (e.g., crop rotation). Applying a herbicide with a different mode of action can be made either in a single tank mix application with this product or in sequential applications. To control emerged weeds, apply this product in a tank mix with SelectMAX (clethodim), Assure II (quizalofop) or Poast Plus (sethoxdim) for the suppression of emerged johnsongrass.

Attention: Normal growth of Roundup Ready Flex cotton will result if this product is applied according to label directions. It is impossible to eliminate all risks associated with this product due to the sensitivity of cotton fruiting to various environmental conditions, agronomic practices and other factors even when applications are made in conformance with label specifications. These factors, in some cases, can result in boll loss, delayed maturity and/or yield loss.

#### Cotton with Roundup Ready<sup>®</sup> Flex Gene (For Use in Arizona Only)

See the Glyphosate Tolerant Crops section of the product label for general precautionary instructions for use in glyphosate tolerant crops.

The use directions in this section apply only to varieties marked as Roundup Ready Flex cotton. If this product is applied over the top of cotton other than Roundup Ready Flex cotton, crop injury and reduced yields will result. Do not combine the directions in this section with the directions in the section for Cotton with Roundup Ready Gene or with any other Roundup Ready cotton or Roundup Ready Flex cotton use directions on other glyphosate-containing products. If this product drifts onto adjacent fields of post 4-leaf (node) Roundup Ready cotton, extensive crop injury, including boll loss, delayed maturity and/or yield loss will occur.

**Types of Applications:** Preplant, at-planting, preemergence, postemergence, preharvest

#### Maximum Allowable Application Rates

Application Type	Rate (quart/acre)
preplant preemergence at-planting	3.75
total all in-crop applications from cracking to 60 percent open bolls	4.5
maximum allowed from 60 percent open bolls to 7 days prior to harvest	1.5
combined total for all applications	6

Calculate the combined rate used for all preplant, in-crop and preharvest applications to ensure that the total does not exceed the maximum rate per acre per year allowed.

#### Preplant, Preemergence, and At-Planting

Apply this product before, during, or after planting Roundup Ready Flex cotton.

#### Postemergence

Apply this product to Roundup Ready Flex cotton to control annual grasses and broadleaf weeds listed on this label. Eliminate competing weeds early to maximize yield potential. One or more applications of this product will control or suppress many perennial weeds. For best results, initially apply 1.5 pints per acre on 1- to 3-inch tall annual grass and broadleaf weeds. Apply this product at up to 1.5 quarts per acre per application using ground application equipment. More thorough weed coverage may be achieved by using post-directed spray equipment.

#### **Restrictions:**

- Do not apply more than 1.5 quarts of this product per acre as a maximum single in-crop application rate using ground equipment.
- Do not apply more than 1.5 pints per acre as an in-crop application made alone or with the addition of other crop chemicals containing surfactants as a crop response including leaf speckling or leaf necrosis may occur.
- Do not apply more than 2.25 pints of this product per acre when applying by air.
- The maximum combined total application rate of this product between layby and 60 percent open bolls is 1.5 quarts per acre.
- The maximum combined total application rate of this product made from crop emergence to 60 percent open bolls is 4.5 quarts per acre.
- Do not add additional surfactant or additives containing surfactant to this product for over the top application to Roundup Ready Flex cotton.

#### Preharvest

Apply this product to Roundup Ready Flex cotton at 1.5 quarts per acre for annual and perennial weed control prior to harvest after 60 percent boll crack. Make the application by aerial or ground spray equipment. When applied to Roundup Ready Flex cotton, this product does not enhance the performance of harvest aids.

### **Restrictions:**

- Preharvest Interval: Do not apply within 7 days of harvest.
- Do not add additional surfactant or additives containing surfactant to this product for preharvest application to Roundup Ready Flex cotton.

Attention: Normal growth of Roundup Ready Flex cotton will result if this product is applied according to label directions. It is impossible to eliminate all risks associated with this product due to the sensitivity of cotton fruiting to various environmental conditions, agronomic practices and other factors even when applications are made in conformance with label specifications. These factors, in some cases, can result in boll loss, delayed maturity and/or yield loss.

# Field Corn Hybrids with Roundup Ready<sup>®</sup> 2 Technology or Glyphosate Tolerant

See the Glyphosate Tolerant Crops section of this label for general precautionary instructions for use in glyphosate tolerant crops.

**Types of Applications:** Preplant, at-planting, preemergence, postemergence (in-crop), spot treatment, preharvest, postharvest, postemergence (in-crop) for tassel control tolerant to glyphosate only, in-crop (glyphosate-resistant horseweed), postemergence in-crop (glyphosate-resistant *Amaranthus* spp.), postemergence in-crop (glyphosate-resistant common and giant ragweed *Ambrosia* spp.), postemergence in-crop (glyphosate-resistant johnsongrass)

### Maximum Allowable Application Rates

Application Type	Rate (per acre)
preplant preemergence at-planting	3.75 qt
maximum single in-crop application up to 48-inch corn	1.13 qt
total in-crop applications from emergence through 48-inch corn	2.25 qt (2.25 pt as single application)
preharvest after maximum kernel fill complete and crop physiologically mature until 7 days before harvest	1.5 pt
combined total per year for all applications	1.5 gal

### Preplant, Preemergence and At-Planting

Apply this product alone or in a tank mix before, during or after planting. Make a postemergence (in-crop) application following the use of the preemergence residual products listed below for maximum weed control.

**Tank Mixes:** The products listed below may be tank mixed with this product. Apply these tank mixes in 10 to 20 gpa of water or 10 to 60 gpa of nitrogen solution. Ensure that the specific product used is labeled for application prior to emergence of field corn. Read and follow all label directions for all products in the tank mixture. Use according to the most restrictive precautionary statements for each product in the tank mixture.

### **Restrictions:**

- Do not apply more than 3.75 quarts per acre per season for all combined total of preplant, preemergence, and at-planting applications.
- Make applications of 2,4-D or dicamba at least 7 days before planting corn.

### Postemergence (In-Crop)

Apply this product alone or in a tank mix over the top of field corn hybrids tolerant to glyphosate from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 30 inches (free standing), whichever comes first. Use drop nozzles for optimum spray coverage and weed control

when corn height is 24 to 30 inches. For corn 30 to 48 inches (free standing), apply this product only using ground application equipment equipped with drop nozzles aligned to avoid spraying the whorls of the corn plants.

This product will control annual grasses and broadleaf weeds listed on this label when applied as directed. One or more applications of this product controls or suppresses many perennial grasses and broadleaf weeds. Apply 18 fl oz to 1.5 pints per acre before weeds exceed 4 inches in height, or before they become competitive with the crop. Apply 18 fl oz to 1.5 pints of this product per acre as a sequential application before weeds exceed 4 inches in height if new flushes of weeds occur.

**Tank Mixes:** The products listed below may be tank mixed with this product. Ensure that the specific product used is labeled for application postemergence (in-crop) to field corn. Read and follow all label directions for all products in the tank mixture. Use according to the most restrictive precautionary statements for each product in the tank mixture.

	-
2,4-D	Hornet WDG
Aim EC	Impact
Banvel	Laudis
Basis	Keystone
Basis Gold	Keystone LA
Bullet	Marksman
Callisto	Micro-Tech
Capreno	Option
Clarity	Resolve
Corvus	Resource
Degree	Shark
Degree Xtra	Status
Distinct	SureStart
Equip	Surpass EC
FulTime	TopNotch
Harness	TripleFLEX
Harness Xtra	Warrant
Harness Xtra 5.6L	

Tank Mix Partner	Maximum Height of Corn for Application (Inches)
Degree Degree Xtra FulTime Harness Xtra Harness Xtra 5.6L Keystone Keystone LA SureStart Surpass EC TopNotch	11
Bullet <sup>1</sup> Micro-Tech <sup>1</sup>	5
atrazine	12

atrazine

<sup>1</sup>Bullet and Micro-Tech are not registered for use as a postemergence application in Texas.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 50 days of forage or grain harvest.
- Minimum Treatment Interval: 10 days
- Using in-crop (over the top) rates specified in this label on corn other than field corn hybrids tolerant to glyphosate may cause crop injury and reduced yields.

#### Preharvest

Apply 1.5 pints of this product per acre for annual and perennial weed control prior to harvest at 35 percent or less grain moisture. Make sure that maximum kernel fill is complete and the corn is physiologically mature (black layer formed).

#### **Restrictions:**

- Preharvest Interval: Do not apply within 7 days of harvest or feeding corn stover or grain.
- If the combined total of previously applied over the top or drop nozzle applications exceeds 48 fl oz of this product per acre, do not make a preharvest application.

#### Postharvest

Apply this product for weed control after the crop is harvested. Higher rates may be required to control large weeds growing in the crop at the time of harvest. A tank mixture with 2,4-D or dicamba may be used. Ensure that the specific product used is labeled for application postharvest to field corn. Read and follow all label directions for all products in the tank mixture. Use according to the most restrictive precautionary statements for each product in the tank mixture.

#### **Restrictions:**

 Preharvest Interval: Do not apply within 7 days of harvest or feeding treated vegetation.

# Postemergence (In-Crop) for Tassel Control in Roundup Hybridization Systems (RHS) Only

This application is for use only in corn hybrid seed production using RHS. Do not apply this product on corn grown for food or feed.

The RHS designation indicates that the corn contains proprietary gene technology that allows for tassel-only susceptibility to this product. Severe crop injury and yield loss could occur if this product is used on corn hybrids or inbreds that are not designated as RHS or as corn containing Roundup Ready 2 Technology.

Apply 12 fl oz to 1.5 quarts of this product per acre as an over the top broadcast application for tassel control in RHS corn inbred recipient lines in seed production fields planted with corn containing Roundup Ready 2 Technology as the pollen donor at any growth stage, including growth stages later than V8. Multiple application may be made for tassel control. **Restrictions:** 

- Do not use corn fodder, forage, grain, or stover for food or feed.
- Do not allow corn fodder, forage, grain, or stover to be grazed when this product has been applied for tassel control.
- Do not process harvested corn grain or resulting seed for food or feed when this product has been applied for tassel control.

# In-Crop (Glyphosate-Resistant Horseweed)

#### (Not for Use in California)

Apply this product in a post-directed application to control and manage glyphosate-resistant horseweed (marestail, *Conyza canadensis*). Apply in 10 to 20 gpa of water for ground applications or in 3 to 15 gpa of water for aerial applications. Use 24 fl oz of this product per acre in a tank mix with 8 fl oz to 1 pint of Clarity per acre or 0.5 to 1 lb 2,4-D per acre between corn emergence and the 5-leaf state of growth, or when the corn is approximately 8 inches tall. Dicamba may also be included in a tank mix with this product.

# Postemergence (In-Crop) (Glyphosate-Resistant Amaranthus spp.) (Not for Use in California)

Tank mix this product or apply it sequentially with a herbicide that has a different mode of action to control a naturally occurring glyphosateresistant biotype of an *Amaranthus* species. To control emerged weeds, apply this product in a tank mix with a preemergence residual herbicide such as FulTime, Keystone, Keystone LA, SureStart, Surpass EC or TopNotch, or another residual herbicide to control *Amaranthus* spp.

To control emerged weeds as a postemergence application, apply this product in a tank mix with other herbicides such as 2,4-D or dicamba (Clarity, Banvel, or Distinct) and a residual herbicide such as FulTime, Keystone, Keystone LA, SureStart, Surpass EC, or TopNotch for continued control of *Amaranthus* spp. Appropriate cultural and mechanical control practices (e.g., crop rotation or tillage) may also be used. For best results, tillage or make a burndown application prior to planting.

#### Postemergence (In-Crop) (Glyphosate-Resistant Common and Giant Ragweed *Ambrosia* spp.) (Not for Use in California)

Tank mix this product or apply it sequentially with a herbicide that has a different mode of action to control a naturally occurring glyphosateresistant biotype of common or giant ragweed (*Ambrosia* spp.). To control emerged weeds, apply this product in a tank mix with a preemergence residual herbicide containing atrazine, such as FulTime, Keystone, or Keystone LA, or another residual herbicide labeled to control ragweed species.

To control emerged weeds as a postemergence application, apply this product in a tank mix with other herbicides such as 2,4-D or dicamba (Clarity, Banvel or Distinct) and a residual herbicide such as FulTime, Hornet WDG, Keystone, Keystone LA, SureStart, Surpass EC, or TopNotch for continued control of *Ambrosia* spp.

Appropriate cultural and mechanical control practices (e.g., crop rotation or tillage) may also be used. Not all herbicides are labeled for management of ragweed species in all states or for all sites and crops. When tank mixing this product with other herbicides, read each product's label and follow all precautions and limitations on the label. For best results, tillage or make a burndown application prior to planting.

# Postemergence (In-Crop) (Glyphosate-Resistant Johnsongrass) (Not for Use in California)

Tank mix this product with a herbicide that has a different mode of action labeled for preemergence and/or postemergence control of a naturally occurring glyphosate-resistant biotype of johnsongrass in combination with appropriate cultural weed control practices (e.g., crop rotation). Applying a herbicide with a different mode of action can be made either in a single tank mix application with this product or in sequential applications. To control emerged weeds, apply this product in a tank

mix with Accent (nicosulfuron), Equip (foramsulfuron and iodosulfuron) or Option (foramsulfuron) for additional weed control and suppression of emerged johnsongrass.

### Seed Production of Glyphosate-Tolerant Crops

The use directions in this section are for use only for seed production of glyphosate-tolerant crops. See the Glyphosate Tolerant Crops section of this label for general precautionary instructions for use in glyphosate tolerant crops. Do not combine these use directions with use directions for a crop on this label or the label on any other glyphosate-containing product unless otherwise directed on this label.

#### Seed Production of Rice Tolerant to Glyphosate

Use this product to control non-glyphosate tolerant rice in seed production fields of glyphosate-tolerant rice. Applying this product on rice that is not glyphosate tolerant will cause severe crop injury or death.

Apply up to 1.5 quarts of this product in 5 to 20 gpa of spray solution as a broadcast application. Apply anytime from emergence to harvest to control non-glyphosate tolerant plants. A repeat application up to 1.5 quarts per acre may be applied if additional control of non-glyphosate tolerant plants is needed.

#### **Restrictions:**

- Do not apply more than a total of 2.75 quarts of product per acre per season.
- Do not harvest glyphosate tolerant rice for use or processing as food or feed.
- Do not allow glyphosate tolerant rice to be grazed.

#### Seed Production of Wheat Tolerant to Glyphosate

Use this product to control non-glyphosate tolerant wheat in seed production fields of glyphosate tolerant wheat. Applying this product on wheat that is not glyphosate tolerant will cause severe crop injury or death.

Apply up to 1.5 pints of this product in 5 to 20 gpa of spray solution as a broadcast application. Apply anytime from emergence to harvest to control non-glyphosate tolerant plants. A repeat application up to 1.5 pints per acre may be applied if additional control of non-glyphosate tolerant plants is needed.

#### **Restrictions:**

- Do not apply more than a total of 1.5 quarts of product per acre per season.
- Do not harvest glyphosate tolerant wheat for use or processing as food or feed.
- Do not allow glyphosate tolerant wheat to be grazed.

# Soybean with Enlist E3, Roundup Ready<sup>®</sup>, or Roundup Ready<sup>®</sup> 2 Yield Genes, or Glyphosate Tolerant

See the Glyphosate Tolerant Crops section of this label for general precautionary instructions for use in glyphosate tolerant crops.

**Note:** Use of this product for in-crop application over glyphosate tolerant soybeans is not registered in California.

**Types of Applications:** Preplant, at-planting, preemergence, postemergence (in-crop), preharvest, postharvest, in-crop (glyphosate-resistant horseweed), postemergence (in-crop) (glyphosate-resistant johnsongrass)

#### **Maximum Allowable Application Rates**

Application Type	Rate (per acre)
preplant preemergence at-planting	3.75 qt
maximum preharvest	1.5 pt
total in-crop applications from cracking throughout flowering (R2 stage)	2.25 qt
combined total for all applications	1.5 gal

#### Preplant, Preemergence and At-Planting

This product may be applied before, during or after planting glyphosate tolerant soybeans.

**Tank Mixes:** Mix this product with 2,4-D, Banvel or Clarity and apply prior to planting only. The products listed below may be tank mixed with this product and applied prior to crop emergence. Ensure that the specific product used is labeled for application prior to emergence of the crop. Read and follow all label directions for all products in the tank mixture. Use according to the most restrictive precautionary statements for each product in the tank mixture.

Aim Assure II Authority Authority Assist Authority First Authority MTZ Authority XL Axiom Blanket Boundary Cadet Canopy Canopy EX Classic Cobra Command Command Xtra Dawn Domain **Dual Magnum** Dual II Magnum FirstRate Flexstar Frontier Fusion Gangster Gauntlet Intrro Lexone

Linex Linuron Lorox Lorox Plus Me-Too Lachlor Micro-Tech Optill Outlook Parrlay pendimethalin Phoenix Pursuit Pursuit Plus Python Reflex Resource Rhythm Scepter Select Select MAX Sencor Sharpen Sonic Spartan Squadron Steel Treflan Valor

#### **Restrictions:**

• Do not apply more than 3.75 quarts per acre per season for all combined total of preplant, preemergence and at-planting applications.

Valor XLT

#### Postemergence (In-Crop)

This product may be applied postemergence to glyphosate tolerant soybeans from the cracking (emergence) stage throughout flowering (R2 stage soybeans). Soybeans at the R2 stage ends when a pod 5 millimeters (3/16 inch) long appears at one of the four uppermost nodes on the main stem with a fully developed leaf (R3 stage). Refer to the rate table in the Annual Weeds section. Apply an initial application of 1.5 pints per acre on weeds 2 to 8 inches tall, generally occurring within two to five weeks after planting. Apply a higher rate of this product if the initial application is delayed and weeds are taller. Up to 1.5 quarts of this product per acre may be applied as a single, in-crop application for control of annual weeds and where dense weed populations exist.

Apply 1.5 pints to 1.5 quarts of this product per acre as a single or multiple application to control or suppress perennial weeds, such as bermudagrass, Canada thistle, common milkweed, field bindweed, hemp dogbane, horsenettle, marestail (horseweed), nutsedge, quackgrass, rhizome johnsongrass, redvine, trumpetcreeper, swamp smartweed and wirestem muhly. For best results, before applying this product, allow perennial weeds species to be at least 6 inches tall.

A sequential application of this product may be required to control late flushes of weeds under adverse growing conditions such as drought, hail, wind damage or when a soybean stand has delayed canopy closure (wide-row soybeans, poor stand, etc.). Sequential applications are required in southern states to control new flushes of weeds in glyphosate tolerant soybeans. Apply 1.5 pints of this product per acre to giant ragweed when the weed is 8 to 12 inches tall to increase control and attempt to avoid the need for a sequential application.

**Tank Mixes:** The products listed below may be tank mixed with this product and applied prior to postemergence (in-crop). Ensure that the specific product used is labeled for postemergence (in-crop) to the crop. Read and follow all label directions for all products in the tank mixture. Use according to the most restrictive precautionary statements for each product in the tank mixture. In some cases, these tank mix products will cause visual soybean injury.

Arrow Assure II Basagran Cadet Classic Cobra Extreme FirstRate Flexstar Fusilade DX Fusion Harmony GT XP Phoenix Poast Poast Plus Pursuit Pursuit Plus Raptor Reflex Resource Rhythm Select Select MAX Synchrony STS Targa Ultra Blazer Warrant

#### **Restrictions:**

- Do not apply more than 2.25 quarts per acre for the combined total application from crop emergence through harvest.
- The maximum rate for any single in-crop application is 1.5 quarts per acre.
  The maximum combined total of this product that can be applied during
- flowering (R2 stage soybeans) is 1.5 quarts per acre.

#### Preharvest

Apply up to 1.5 pints of this product per acre after soybean pods have set and lost all green color.

#### **Restrictions:**

- **Preharvest Interval:** Do not apply within 14 days of harvest of grain or feeding soybean grain, forage or hay.
- Avoid excessive seed shatter loss due to ground application equipment.
   Postharvest

A higher rate of this product may need to be applied to control large weeds growing in the crop at the time of harvest. This product may also be tank mixed with 2,4-D or dicamba. Ensure that the specific product used is labeled for postharvest application to the crop. Read and follow all label directions for all products in the tank mixture. Use according to the most restrictive precautionary statements for each product in the tank mixture.

#### **Restrictions:**

 For any crop not listed on this label, make applications at least 30 days prior to planting the next crop.

# In-Crop (Glyphosate-Resistant Horseweed)

### (Not for Use in California)

Apply this product as a salvage treatment to glyphosate-resistant horseweed (marestail, *Conyza canadensis*) that was not controlled by a preplant application. Apply in 10 to 20 gpa of water for ground applications or in 3 to 15 gpa of water for aerial applications. Horseweed must be 6 inches or less in height. Apply 1.5 pints of this product per acre in a tank mix with 0.3 oz of FirstRate per acre (FirstRate will not control ALS resistant horseweed). Apply between full emergence of the first trifoliate leaf and 50 percent flowering stage of soybeans.

# Postemergence (In-Crop) (Glyphosate-Resistant Johnsongrass) (Not for Use in California)

Tank mix this product with a herbicide that has a different mode of action labeled for preemergence and/or postemergence control of a naturally occurring glyphosate-resistant biotype of johnsongrass in combination with appropriate cultural weed control practices (e.g., crop rotation). Applying a herbicide with a different mode of action can be made either in a single tank mix application with this product or in sequential applications. To control emerged weeds, apply this product in a tank mix with SelectMAX (clethodim), Assure II (quizalofop) or Poast Plus (sethoxdim) for the suppression of emerged johnsongrass.

#### Sugar Beet with Roundup Ready<sup>®</sup> Gene

**Types of Applications:** Preplant, at-planting, preemergence, postemergence (in-crop)

See the Glyphosate Tolerant Crops section of this label for general precautionary instructions for use in glyphosate tolerant crops.

#### Maximum Allowable Application Rates

Application Type	Rate (per acre)
preplant preemergence at-planting	3.75 qt
total all applications made between 8-leaf stage and canopy closure	1.5 qt
total all applications made from emergence to 8-leaf stage	2 qt
combined total for all applications	1.5 gal

#### Preplant, Preemergence, and At-Planting

This product may be applied before, during or after planting glyphosate tolerant sugar beets.

Tank Mixes: Norton SC may be tank mixed with this product and applied prior to crop emergence. Ensure that the specific product used is labeled

for application prior to emergence of the crop. Read and follow all label directions for all products in the tank mixture. Use according to the most restrictive precautionary statements for each product in the tank mixture.

#### **Restrictions:**

- Do not apply more than 3.75 quarts per acre per season for all
- combined total of preplant, preemergence and at-planting applications.

# Postemergence (In-Crop)

This product may be applied postemergence to glyphosate tolerant sugar beets from emergence stage to 30 days before harvest. This product controls or suppresses most perennial weeds; however, some perennial weeds require repeat applications to eliminate crop competition throughout the growing season. Eliminate competing weeds early to maximize yield potential. Apply up to four sequential applications of this product with at least 10 days between applications.

#### **Restrictions:**

• Maximum Single Application Rate: Do not apply more than 1.125 lb ae per acre up to 8-leaf stage and 0.77 lb ae per acre between 8-leaf stage and canopy closure.

Tank Mixes: The products listed below may be tank mixed with this product and applied prior to postemergence (in-crop). Ensure that the specific product used is labeled for postemergence (in-crop) to the crop. Read and follow all label directions for all products in the tank mixture. Use according to the most restrictive precautionary statements for each product in the tank mixture. Tank mixes of this product with herbicides, insecticides or fungicides may result in crop injury or reduced weed control.

Assure II	Outlook
Betamix <sup>1</sup>	Progress <sup>1</sup>
Betanex <sup>1</sup>	Select
Dual Magnum	Stinger
Norton SC <sup>1</sup>	Upbeet

<sup>1</sup>Betamix, Betanex, Norton SC and Progress may cause significant injury to sugar beet. Refer to the labels of these products for crop injury precautions.

#### **Restrictions:**

- Preharvest Interval: Do not apply within 30 days of harvest.
- Do not apply more than 1.13 quarts per acre as a single application from crop emergence until the 8 leaf stage.
- Do not apply more than 1.5 pints per acre as a single application from the 8 leaf stage and canopy closure.
- Do not apply more than a total of 3.5 quarts per acre for the combined total application from crop emergence through harvest.

#### **Annual Weeds**

Water carrier volumes of 16 to 40 gpa for ground applications and 6 to 15 gpa for aerial applications are required when using the following rates to control the annual weeds listed in the table:

- Grass and annual broadleaf weeds less than 6 inches in height or circumference, or vines less than 3 inches in length – 1.5 pints per acre
- Grass and annual broadleaf weeds between 6 to 12 inches in height or circumference, or vines between 3 to 6 inches in length – 2.25 pints per acre
- Grass and annual broadleaf weeds more than 12 inches in height or circumference, or vines more than 6 inches in length – 1.5 quarts per acre

When water carrier volumes are 3 to 15 gpa for ground applications or 3 to 5 gpa for aerial applications, use the application rates specified for individual weeds in the table below.

Apply to actively growing annual weeds; these weeds are easiest to control when they are small. Higher application rates than those specified in the table below may be required for older, mature (hardened) and otherwise tough to control annual weed species regardless if they meet the size requirement. For tough to control annual weeds or heavy weed densities, apply up to 1.5 quarts per acre. Follow all precautions, restrictions, maximum allowed application rates, and crop stage timings specified in all use sites on this label.

Maximum size is the maximum plant height, length of runners for vines, or circumferences of rosette plants. Do not tank mix with soil residual herbicides when using these rates unless it is otherwise indicated to do so. Allow regrowth to occur before treating weeds that have been mowed, grazed or cut.

	Rate (fl oz/acre)						Rate (fl oz/acre)				
	12	18	24	30	36		12	18	24	30	36
Weed Species	Maxi	mum He	eight/Le	ngth (in	ches)	Weed Species	Max	imum He	eight/Le	ngth (in	ches)
ammannia, purple	3	6	12	-	18	horseweed/marestail (conyza	-	6	12	-	18
anoda, spurred	-	2	3	5	8	canadensis) <sup>6</sup>					
barley	18	18+	-	-	-	itchgrass	6	8	12	-	18
barnyardgrass	-	3	6	7	9	jimsonweed	-	-	12	-	18
bassia, fivehook	-	-	6	-	-	johnsongrass (seedling) <sup>6</sup>	6	12	18	-	24
beggarweed, Florida	-	5	8	-	-	junglerice	-	3	6	7	9
bittercress	12	20	-	-	-	knotweed	-	-	6	-	12
bluegrass, annual	10	-	-	-	-	kochia <sup>4, 6</sup>	-	3 - 6	12	-	-
bluegrass bulbous	6	-	-	-	-	lambsquarters	-	6	12	-	20
brome, downy <sup>1,2</sup>	6	12	-	-	-	little barley	6	12	-	-	-
brome, Japanese	6	12	24	-	-	London rocket	6	-	24	-	-
browntop panicum	6	8	12	-	24	mayweed	-	2	6	12	18
buckwheat, wild <sup>3</sup>	-	1	2	-	-	morningglory, annual ( <i>lpomoea</i>	-	-	3	-	6
burcucumber	-	6	12	-	18	spp.)	0	10	10		
buttercup	12	20	-	-	-	mustard, blue	6	12	18	-	-
Carolina geranium	-	-	4	-	9	mustard, tansy					
carpetweed	-	6	12	-	-	mustard, tumble					
cheat <sup>2</sup>	6	20	-	-	-	mustard, wild		A	6	<u> </u>	12
chervil	20	-	-	-	-	nightshade, black	-	4		-	
chickweed	-	12	18	-	-	nightshade, hairy	0				
cocklebur	12	18	24	-	36	oats	3	6	18	-	-
copperleaf, hophornbeam	-	2	4	-	6	pigweed, palmer <sup>6</sup>	-	12	18	24	-
copperleaf, Virginia						pigweed species <sup>6</sup>	-	12	18	24	-
coreopsis, plains	_	6	12	-	18	prickly lettuce	-	6	12	-	-
corn, volunteer (non-	6	12	20	-	-	purslane	-	-	3	-	6
glyphosate tolerant)	-					ragweed, common <sup>6</sup>	-	6	12	-	18
corn speedwell	12	-	-	-	-	ragweed, giant <sup>6</sup>					<u> </u>
crabgrass	3	6	12	-	-	red rice	-	-	4	-	-
crowfootgrass	-	-	6	-	12	Russian thistle <sup>5</sup>	-	6	12	-	-
cutleaf evening primrose	-	-	3	-	6	rye, volunteer/cereal <sup>2</sup>	6	18	18+	-	-
devilsclaw (unicorn plant)	-	3	6	-	-	ryegrass species <sup>6</sup>	-	-	6	-	12
dwarfdandelion	12	-	-	-	-	sandbur, field	6	12	-	-	-
eastern mannagrass	8	12	-	-	-	sandbur, longspine					<u> </u>
eclipta	-	4	8	12	-	shattercane	6	12	20	-	-
fall panicum	4	-	6	-	12	shepherd's-purse	6	12	-	-	-
falsedandelion	-	20	-	-	-	sicklepod	-	2	4	-	8
falseflax, smallseed	12	-	-	-	-	signalgrass, broadleaf	-	3	6	7	9
fiddleneck	-	6	12	-	-	smartweed, ladysthumb	-	-	6	-	9
field pennycress	6	12	-	-	-	smartweed, Pennsylvania					
filaree	-	-	6	-	12	sowthistle, annual	-	-	6	-	12
fleabane, annual	6	20	-	-	-	Spanishneedles					
fleabane, hairy (conyza	-	-	6	-	10	speedwell, purslane	12	-	-	-	-
bonariensis) <sup>6</sup>						sprangletop	6	12	20	-	-
fleabane, rough	3	6	12	-	-	spurge, prostrate	-	6	12	-	-
Florida pusley	-	-	4	-	6	spurge, spotted					
foxtail, Carolina	10	-	-	-	-	spurry, umbrella	6	-	-	-	-
foxtail (giant, bristly, yellow)	6	12	20	-	-	stinkgrass	-	12	-	-	-
foxtail, green	12	-	-	-		sunflower	12	18	-	-	-
goatgrass, jointed	6	12	-	-	-	swinecress	-	5	12	-	-
goosegrass	-	3	6	-	12	teaweed/prickly sida	-	2	4	-	6
grain sorghum (milo)	6	12	20	-	-	Texas panicum	6	8	12	-	24
groundcherry	-	3	6	-	9	thistle, Russian <sup>5</sup>	-	6	12	-	-
groundsel, common, cressleaf	-	6	10	-	-	velvetleaf	-	-	6	-	12
hemp sesbania	-	2	4	6	8	Virginia pepperweed	-	18	-	-	-
henbit	-	-	6	-	12	waterhemp <sup>6</sup>	-	-	6	-	12

		Rate (fl oz/acre)			
	12 18 24 30 3				36
Weed Species	Maxi	Maximum Height/Length (inches)			
wheat <sup>2</sup>	6	12	18	-	-
wheat (over-wintered)	-	6	12	-	18
wild oats	3	6	18	-	-
wild proso millet	-	6	12	-	18
witchgrass	-	12	-	-	-
woolly cupgrass	-	6	12	-	-
yellow rocket	-	12	20	-	-

 <sup>1</sup> For control of downy brome in no-till systems, use 12 fl oz per acre.
 <sup>2</sup> Performance is better if application is made before this weed reaches the boot stage of growth.

- <sup>3</sup> Use 12 fl oz of this product per acre to control wild buckwheat in the cotyledon to 2-leaf stage. Use 1.5 pints per acre to control wild buckwheat at the 2- to 4-leaf stage. For improved control of wild buckwheat more than 2 inches in size, use sequential treatments of
- 1.5 pints followed by 1.5 pints of this product per acre.
   <sup>4</sup> Do not treat kochia in the button stage.
- <sup>5</sup> Control of Russian thistle may vary based upon environmental conditions and spray coverage. Whenever possible, a tank mixture with 2,4-D as described below may improve control.
- <sup>6</sup> A glyphosate-resistant biotype has been identified for this weed. For additional information, refer to the Herbicide Resistance Management section of this label.

#### Tank Mixtures with 2,4-D, Dicamba or Tordon 22K

This product may be tank mixed with the products listed provided the product tank mixed is registered for use on this site. Tough weeds can be better controlled by tank mixing this product with 0.25 lb a.i. of dicamba, or 0.5 lb a.i. of 2,4-D, or 1 to 2 oz of Tordon 22K per acre. Combining these herbicides with the rate of this product specified in the rate table for annual weeds will control the following weeds with the maximum height or length indicated: 6 inches -- prickly lettuce, marestail/horseweed (*Conyza canadensis*), morningglory (*Ipomoea* spp.), kochia (dicamba only); wild buckwheat (Tordon 22K only); 12 inches -- cocklebur, lambsquarters, pigweed, Russian thistle (2,4-D only).

This product, applied at the rates specified in the rate table for annual weeds, controls the following weeds when they are a maximum height or length of 6 inches: common ragweed, giant ragweed, Pennsylvania

smartweed, and velvetleaf. Tank mix this product with 0.5 lb a.i. 2,4-D per acre for better control.

Refer to the specific product labels for crop rotation restrictions and precautionary statements of all products used in tank mixtures. Some crop injury may occur if dicamba or Tordon 22K is applied within 45 days of planting. Tordon 22K is not registered for use in the state of California.

Tank mixtures of this product with dicamba must not be applied by air in California.

#### Handheld or Backpack Equipment

To control the weeds listed in the Rate Table in the Annual Weeds section, apply a 0.4 percent solution of this product to weeds less than 6 inches in height or in runner length prior to seedheads forming in grass or prior to bud formation in broadleaf weeds. Apply a 0.7 percent solution to annual weeds more than 6 inches tall.

For best results on harder to control perennials, such as, bermudagrass, dock, field bindweed, hemp dogbane, milkweed and Canada thistle, use a 1.5 percent solution.

Use a 4 percent solution for annual and perennial weeds and a 4 to 7 percent solution for woody brush and trees when using an application method that results in less than complete coverage.

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 lb of atrazine per acre.

Application of 18 to 22 fl oz of this product plus 1 to 2 lb of atrazine per acre will control the following weeds: barnyardgrass (barnyardgrass requires 22 fl oz of this product for control), downy brome, green foxtail, lambsquarters, prickly lettuce, tansy mustard, pigweed, field sandbur, stinkgrass, Russian thistle, volunteer wheat, witchgrass and kochia (for kochia, add 4 fl oz of dicamba per acre for control).

#### **Perennial Weeds**

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 specified stages.

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

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

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

#### **Rate Table**

Weed Species	Rate (pt/acre)	Water Volume (gpa)	Handheld (% Solution)
alfalfa	1.5 - 3	3 - 10	1.5
	cutting in the fall. Allow alfalfa to regro 7 days after treatment, but before so		e prior to treatment. Follow
alligatorweed	6	3 - 20	1
Partial control. Apply when most of t	the plants are in bloom. Repeat applic	cations will be required to maintain co	ntrol.
anise (fennel)			1 - 1.5
Apply as a spray to wet treatment wh treated at the bud to full-bloom stage	hen most plants have reached the earl e of growth.	y bud stage of growth. Optimum resu	lts are obtained when plants are
bahiagrass	4.5 - 7.5	3 - 20	1.5
Apply when most plants have reache	d the early head stage.		
bentgrass	2.25	10 - 20	1.5
	ction areas. For ground applications of at least 3 inches of growth. Avoid tilla		
bermudagrass	4.5 - 7.5	3 - 20	1.5
	oduct per acre. For partial control, ap t may be necessary to maintain contr		mudagrass is actively growing and
bermudagrass, water (knotgrass)	1.5 - 2.25	5 - 10	1.5
Apply 2.25 pints of this product in 5 t tilling, flushing or flooding the field.	to 10 gpa of water. Apply when water	bermudagrass is 12 to 18 inches in le	ength. Allow 7 days or more before
Fall applications only: Apply 1.5 pin bermudagrass that is 12 to 18 inches	ts of this product in 5 to 10 gpa of wa s in length.	ter. Till fallow fields prior to application	on. Apply prior to frost on water
This was duct is not registered in C	alifarmia far usa an uratar harmudan	1000	

This product is not registered in California for use on water bermudagrass.

Weed Species	Rate (pt/acre)	Water Volume (gpa)	Handheld (% Solution)
bindweed, field	0.75 - 7.5	3 - 20	1.5
Do not treat when weeds are under c	frought stress as good soil moisture is	necessary for active growth.	
	is product per acre west of the Mississ For best results, apply in late summer o		
Also for control, apply 3 pints of this	product plus 0.5 lb a.i. of dicamba in 1	0 to 20 gpa of water. Do not apply by	y air.
equipment only. Apply following har	ural land, apply 1.5 to 3 pints of this provest or in fall fallow ground when the bine irrigation will promote active bindwe	ndweed is actively growing and the n	
	s product plus 0.5 lb a.i. of 2,4-D in 3 to llow and reduced tillage systems only. ength.		
depending upon local conditions. Fo	ints of this product per acre. The actual or suppression on irrigated land where a s reached a length of 12 inches or more	annual tillage is performed, apply 1.5	pints of this product in 3 to 10 gpa
bluegrass, Kentucky	1.5 - 3	3 - 40	1.5
Apply 3 pints of this product in 10 to control in pasture or hay crop renova have reached 4 to 12 inches in heigh	40 gpa of water when most plants hav tion, apply 1.5 to 2.25 pints of this prod t.	e reached boot to early seedhead sta duct in 3 to 10 gpa of water. Apply to	ge of development. For partial actively growing plants when mos
blueweed, Texas	4.5 - 7.5	3 - 40	1.5
Apply 6 to 7.5 pints of this product p are at or beyond full bloom. New lea before a killing frost.	er acre west of the Mississippi River ar f development indicates active growth.	nd 4.5 to 6 pints per acre east of the N For best results, apply in late summ	Aississippi River. Apply when plant er or fall. Apply fall treatments
brackenfern	4.5 - 6	3 - 40	1
Apply to fully expanded fronds which	n are at least 18 inches long.		L
bromegrass, smooth	1.5 - 3	3 - 40	1.5
Apply 3 pints of this product in 10 to	40 gpa of water when most plants hav tion, apply 1.5 to 2.25 pints of this prod t.		
bursage, woolly-leaf		3 - 20	1.5
	product plus 0.5 lb a.i. of dicamba per a sare producing new active growth whi		
canarygrass, reed	3 - 4.5	3 - 40	1.5
For best results, apply when most pla	ants have reached the boot to head sta	age of growth.	
cattail	4.5 - 7.5	3 - 40	1.5
Apply when most plants have reache	d the early head stage.		l
clover, red, white	4.5 - 7.5	3 - 20	1.5
For control, apply 12 to 24 fl oz of thi bud stage.	s product plus 0.5 to 1 lb a.i. of 2,4-D i	n 3 to 10 gpa of water. Apply when r	nost plants have reached the early
cogongrass	4.5 - 7.5	10 - 40	1.5
	3 inches tall in late summer or fall. Due eat treatments may be necessary to m		dense nature of vegetation
dallisgrass	4.5 - 7.5	3 - 20	1.5
Apply when most plants have reache	d the early head stage.		
dandelion dock, curly	4.5 - 7.5	3 - 40	1.5
Apply when most plants have reache	d the early bud stage of growth.		
Also for control, apply 12 fl oz of this	product plus 0.5 lb a.i. 2,4-D in 3 to 10	) gpa of water.	
dogbane, hemp	6	3 - 40	1.5
stage prior to treatment. For best res			<b>C</b>
aerial applications. Delay application	s product plus 0.5 lb a.i. of 2,4-D in 3 to ns until maximum emergence of dogba	ne has occurred.	
fescue (except tall)	4.5 - 7.5	3 - 20	1.5
Apply when most plants have reache	, ,		[
fescue, tall	1.5 - 4.5	3 - 40	1.5
Fall applications only: Apply 1.5 pints	ere when most plants have reached boo s of this product in 3 to 10 gpa of water 2 fl oz of this product per acre will imp	. Apply to fescue in the fall when pla	nts have 6 to 12 inches of new

Weed Species	Rate (pt/acre)	Water Volume (gpa)	Handheld (% Solution)
guineagrass	3 - 4.5	3 - 40	1
		Ensure thorough coverage when using Florida, 4.5 pints per acre is required	
horsenettle	4.5 - 7.5	3 - 20	1.5
Apply when most plants have reache	d the early bud stage.		
horseradish	6	3 - 40	1.5
Apply when most plants have reache	d the late bud to flower stage of grow	rth. For best results, apply in late sum	mer 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	4.5 - 7.5	3 - 20	1.5
Apply when most plants are in the ea	arly bud stage.		
johnsongrass	0.75 - 4.5	3 - 40	1
In annual cropping systems apply 1.5 product when applying in 10 to 40 gr in 10 to 40 gpa of water.	$\overline{5}$ to 3 pints of this product per acre. A particular of water. In noncrop or areas where	Apply 1.5 pints of this product in 3 to 1 e annual tillage (no-till) is not practiced	0 gpa of water. Use 3 pints of this I, apply 3 to 4.5 pints of this product
application before tillage. Do not tan	k mix with residual herbicides when u		,
at least three days after treatment be	fore tillage.	a of water before the plants reach a he this product when johnsongrass is 12 t	
should be uniform and complete.			
kikuyugrass	3 - 4.5	3 - 40	1.5
Spray when most kikuyugrass is at le	east 8 inches in height (3- or 4-leaf sta	ge of growth). Allow three days or mo	re after application before tillage.
knapweed	6	3 - 40	1.5
Apply when most plants have reache	d the late bud to flower stage of grow	th. For best results, apply in late sum	mer or fall.
lantana	-	-	1
Apply at or beyond the bloom stage	of growth. Use the higher application	rate for plants that have reached the v	woody stage of growth.
lespedeza	4.5 - 7.5	3 - 20	1.5
Apply when most plants have reache	d the early bud stage.	1	I
milkweed, common	4.5	3 - 40	1.5
,	d the late bud to flower stage of grow		
muhly, wirestem	1.5 - 3	3 - 40	1.5
Use 1.5 pints of this product in 3 to 1 noncrop areas. Spray when the wire	0 gpa of water. Use 3 pints of this proster muhly is 8 inches or more in heig	oduct when applying in 10 to 40 gpa o ght. Do not till between harvest and fa	of water or in pasture, sod, or
	ree days or more after application bef		
mullein, common	4.5 - 7.5	3 - 20	1.5
Apply when most plants are in the ea	arly bud stage.		
napiergrass	4.5 - 7.5	3 - 20	1.5
Apply when most plants are in the ea	arly head stage.		
nightshade, silverleaf	3	3 - 10	1.5
Apply when at least 60 percent of the	e plants have berries. Fall treatments	must be applied before a killing frost.	L
nutsedge, purple, yellow	0.75 - 4.5	3 - 40	1 - 1.5
plants. Treat when plants are in flow and may germinate following treatme	er or when new nutlets can be found a ent. Repeat treatments will be require	h for control of nutsedge plants and im at rhizome tips. Nutlets, which have no d for long-term control of ungerminate er will also provide control. Make app	ot germinated, will not be controlled d tubers.
plants are in the 3- to 5-leaf stage (le stage. Subsequent applications will For partial control of existing plants,	ss than 6 inches tall). Repeat this app be necessary for long-term control. apply 12 fl oz to 3 pints of this produc	plication, as necessary, when newly en	herging plants reach the 3- to 5-leaf plants have 3 to 5 leaves and most
are less than 6 inches tall. Repeat tre orchardgrass	eatments will be required to control su	bsequent emerging plants or regrowth	n of existing plants. 1.5
• • • • • • • • • • • • • • • • • • •		ve reached boot to early seedhead sta	-
control in pasture or hay crop renova have reached 4 to 12 inches in heigh	tion, apply 1.5 to 2.25 pints of this pro t.	oduct in 3 to 10 gpa of water. Apply to	actively growing plants when most
minimum of 12 inches tall for spring a		product in 3 to 10 gpa of water. Apply pplications. Allow at least three days t	following application before planting
pampasgrass			1 - 1.5
	d the boot stage of growth. Thorough	coverage is necessary for best control	l.
	4.5 - 7.5	coverage is necessary for best contro 3 - 20	l. 1.5

Weed Species	Rate (pt/acre)	Water Volume (gpa)	Handheld (% Solution)
phragmites	4.5 - 7.5	10 - 40	1 - 1.5
or after this stage may lead to reduce	reat during late summer or fall months ed control. Due to the dense nature of may be necessary to maintain control.	the vegetation, which may prevent g	jood spray coverage or uneven
poison hemlock			1 - 1.5
	th handheld equipment. Optimum res	ults are obtained when plants are trea	
growth. For best control, thorough c	overage is necessary.	-	-
pokeweed, common	1.5	3 - 40	1.5
Apply to actively growing plants up to			
quackgrass	1.5 - 4.5	3 - 40	1.5
gpa of water, apply 3 pints of this pro 8 inches in height. Do not till betwee application before tillage. In pastures	tures and sods followed by deep tillag oduct. Do not tank mix with residual he n harvest and fall applications or in fal s or sods, use a moldboard plow for be there deep tillage does not follow appl	erbicides when using the 1.5 pint rate I or spring prior to spring application est results.	e. Spray when quackgrass is 6 to . Allow three days or more after
the quackgrass is more than 8 inches			oddet in 10 to 40 gpa of water when
redvine	1.25 - 3	5 - 10	1.5
Apply specified rates in 5 to 10 gpa o	s product per acre at each of two appl of water. Apply in late September or ea tillage operation. Make applications a	arly October to plants that are at leas	
reed, giant			1.5
	cations are made in late summer to fal		Γ
yegrass, perennial	1.5 - 4.5	3 - 40	1
	to 3 pints of this product per acre. A pa of water. In noncrop or areas where		
For best results, apply when most pla nerbicides when using the 1.5 pint pa			1
smartweed, swamp	4.5 - 7.5	3 - 40	1.5
Apply when most plants have reache	, , ,		
	product plus 0.5 lb a.i. of 2,4-D in 3 to		I
sowthistle, perennial	3 - 4.5	3 - 40	1.5
	rond the bud stage of growth. After hat ette development prior to the applicati ation before tillage.		
spurge, leafy		3 - 10	1.5
For suppression, apply 12 fl oz of this reatment, apply when most of the pl	s product plus 0.5 lb a.i. 2,4-D in 3 to <sup>-</sup> ants are 12 inches tall.	10 gpa of water in the late summer or	fall. If mowing has occurred prior t
starthistle, yellow	3	10 - 40	1.5
	cations are made during the rosette, b	olting and early flower stages.	
sweet potato, wild			1.5
Thistle, artichoke			
	at are at or beyond the bloom stage o	<u> </u>	· ·
histle, Canada	3 - 4.5	3 - 40	1.5
weeks for initiation of active growth a frost. Allow three days or more after For suppression in the spring, apply regrowth to a minimum of 6 inches in	1.5 pints of this product, or 12 fl oz of diameter before treating. Application	pplication of this product. Fall treatm this product plus 0.5 lb a.i. 2,4-D, in 3 s can be made as long as leaves are	nents must be applied before a killing 3 to 10 gpa of water. Allow rosette
5 5 11	llow three days or more after application	0	
imothy	3 - 4.5	3 - 40	1.5
	ants have reached the boot to head sta		· -
torpedograss	6 - 7.5	3 - 40	1.5
all treatments must be applied befor			
trumpetcreeper	3	5 - 10	1.5
	tember or October to plants that are at at least one week before a killing frost		rowing 45 to 60 days since the last
vaseygrass velvetgrass	4.5 - 7.5	3 - 20	1.5
Apply when most plants are in the ea	rly head stage.		
wheatgrass, western	3 - 4.5	3 - 40	1.5

# Tank Mixtures for Improved Control of Bentgrass (*Agrostis* spp.) (Not for Use in California)

For improved control of bentgrass (*Agrostis* spp.), the following products may be tank mixed with this product: Envoy, Fusion, Fusilade II, Vantage. When tank mixing products, read and carefully observe label directions, precautionary statements and all information on the labels of each product in the mixture. Refer to each product label for the approved use sites.

Dry ammonium sulfate, at 1 to 2 percent by weight, may also be added to the spray solution. The equivalent rate of ammonium sulfate in a liquid formulation may also be used. Completely dissolve the ammonium sulfate in the spray tank before adding herbicides. Thoroughly rinse the spray system with clean water after use to reduce corrosion.

Broadcast Application: Apply 2 to 2.5 quarts of this product per acre plus
34 fl oz of Envoy per acre in 20 to 40 gpa of spray solution.

- 34 fl oz of Envoy per acre in 20 to 40 gpa of spray solution.
  1.5 pints of Fusilade II per acre in 20 to 40 gpa of spray solution.
- 1.5 pints of Fusilade II per acre in 20 to 40 gpa of spray solution
  3.75 pints of Vantage per acre in 20 to 40 gpa of spray solution.
- 9 fl oz of Fusion per acre in 20 to 40 gpa of spray solution.
- In the event of incomplete control, re-treatment may be necessary.

**Spot Treatment:** Mix 2 fl oz of this product with

- 1.3 fl oz of Envoy in 1 gallon of water and spray to wet.
- 0.75 fl oz of Fusilade II in 1 gallon of water and spray to wet.
- 3 fl oz of Vantage in 1 gallon of water and spray to wet.
- 0.25 fl oz of Fusion in 1 gallon of water and spray to wet.

Attention: Avoid drift. Use extreme care when applying this product to prevent injury to desirable plants and crops.

#### Woody Brush and Trees

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

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

Apply broadcast treatments in 3 to 40 gpa of water unless otherwise directed. Ensure thorough coverage when using handheld equipment. Symptoms may not appear prior to frost or senescence with fall treatments.

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

#### **Rate Table**

Weed Species	Rate (pt/acre)	Water Volume (gpa)	Handheld (% Solution)
alder	4.5 - 6	3 - 40	1
For control	•		
ash	3 - 7.5	3 - 40	1 - 1.5
For partial control			
aspen, quaking	3 - 4.5	3 - 40	1
For control	•		
bearmat (bearclover) beech	3 - 7.5	3 - 40	1 - 1.5
For partial control			
birch	3 - 4.5	3 - 40	1
For control			
blackberry	4.5 - 6	10 - 40	1
For control. Make applications after plants fall. Applications may also be made after le control blackberry by applying a 0.75 perce stems are green, apply 4.5 to 6 pints of this	eaf drop and until a killing frost or as ent solution of this product. For cont	long as stems are green. After berr	ies have set or dropped in late fall,
blackgum bracken	3 - 7.5	3 - 40	1 - 1.5
For control			
broom, French, Scotch	-	-	1 - 1.5
For control			
buckwheat, California	-	-	1 - 1.5
For partial control. Thorough coverage of f	oliage is necessary for best results.		
cascara	3 - 7.5	3 - 40	1 - 1.5
For partial control			
catsclaw	-	-	1
For partial control			
ceanothus	3 - 7.5	3 - 40	1 - 1.5
For partial control		·	
chamise	-	-	1
For control. Thorough coverage of foliage i	s necessary for best results.		
cherry, bitter, black, pin	3 - 4.5	3 - 40	1
For control		·	
coyote brush	-	-	1 - 1.5
For control. Apply when at least 50 percen	t of the new leaves are fully develop	ed.	
dogwood	3 - 7.5	3 - 40	1 - 1.5
For partial control			
elderberry	3 - 4.5	3 - 40	1
For control			

Weed Species	Rate (pt/acre)	Water Volume (gpa)	Handheld (% Solution)
elm	3 - 7.5	3 - 40	1 - 1.5
For partial control			
eucalyptus	-	-	1.5
For control of eucalyptus resprouts, apply wind plants.	hen resprouts are 6 to 12 feet tall.	Ensure complete coverage. Avoid a	pplication to drought-stressed
Florida holly (Brazilian peppertree) gorse	3 - 7.5	3 - 40	1 - 1.5
For partial control		11	
hasardia	-	-	1 - 1.5
For partial control. Thorough coverage of fo	liage is necessary for best results.	11	
hawthorn hazel	3 - 4.5	3 - 40	1
For control		11	
hickory	3 - 7.5	3 - 40	1 - 1.5
For partial control			
honeysuckle	3 - 6	3 - 40	1
For control			-
hornbeam, American	3 - 7.5	3 - 40	1 - 1.5
For partial control	- 110 - 110	<b>U</b>	
kudzu	6 - 7.5	3 - 40	1.5
For control. Repeat applications may be req		<b>0 10</b>	1.0
locust, black	<b>3 - 6</b>	3 - 40	1 - 1.5
For partial control	0-0	0 - TU	1 - 1.0
madrone resprouts	_		1.5
•		btained with spring/oarly summer tr	
For partial control. Apply to resprouts that a manzanita	<b>3 - 7.5</b>	<b>3 - 40</b>	<b>1 - 1.5</b>
	3 - 7.5	3 - 40	1 - 1.5
For partial control	3 - 6	3 - 40	1
maple, red		3 - 40	1
product per acre.	-	es are fully developed. For partial co	
product per acre. maple, sugar	-	-	ontrol, apply 3 to 6 pints of this 1
product per acre. maple, sugar For control. Apply when at least 50 percent	-		1
product per acre. maple, sugar For control. Apply when at least 50 percent monkey flower	- of the new leaves are fully develop -	-	
product per acre. maple, sugar For control. Apply when at least 50 percent monkey flower For partial control. Thorough coverage of fo	- of the new leaves are fully develop - liage is necessary for best results.		1 - 1.5
product per acre. maple, sugar For control. Apply when at least 50 percent monkey flower For partial control. Thorough coverage of fo oak, black, white	- of the new leaves are fully develop -		1
product per acre. maple, sugar For control. Apply when at least 50 percent monkey flower For partial control. Thorough coverage of fo oak, black, white For partial control	- of the new leaves are fully develop - liage is necessary for best results. 3 - 6	- ed. 	1 1 - 1.5 1 - 1.5
product per acre. maple, sugar For control. Apply when at least 50 percent monkey flower For partial control. Thorough coverage of fo oak, black, white For partial control oak, post	- of the new leaves are fully develop - liage is necessary for best results.		1 - 1.5
product per acre. maple, sugar For control. Apply when at least 50 percent monkey flower For partial control. Thorough coverage of fo oak, black, white For partial control oak, post For control	- of the new leaves are fully develop - liage is necessary for best results. 3 - 6	- ed. 	1 1 - 1.5 1 - 1.5 1
product per acre. maple, sugar For control. Apply when at least 50 percent monkey flower For partial control. Thorough coverage of fo oak, black, white For partial control oak, post For control oak, northern	- of the new leaves are fully develop - liage is necessary for best results. 3 - 6 4.5 - 6 -	- ed. 	1 1 - 1.5 1 - 1.5
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product per acre. maple, sugar For control. Apply when at least 50 percent monkey flower For partial control. Thorough coverage of fo oak, black, white For partial control oak, post For control oak, northern For control. Apply when at least 50 percent oak, southern red For control	- of the new leaves are fully develop - liage is necessary for best results. 3 - 6 4.5 - 6 - of the new pin leaves are fully deve 3 - 4.5	- ed. 	1 1 - 1.5 1 - 1.5 1 1
product per acre. maple, sugar For control. Apply when at least 50 percent monkey flower For partial control. Thorough coverage of fo oak, black, white For partial control oak, post For control oak, northern For control. Apply when at least 50 percent oak, southern red	- of the new leaves are fully develop - liage is necessary for best results. 3 - 6 4.5 - 6 - of the new pin leaves are fully deve	- ed. 	1 1 - 1.5 1 - 1.5 1 1
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Weed Species	Rate (pt/acre)	Water Volume (gpa)	Handheld (% Solution)
sage, black	-	-	1
For control. Thorough coverage of foliage is	necessary for best results.		
sage, white	3 - 7.5	3 - 40	1 - 1.5
For partial control			
sagebrush, California	-	-	1
For control. Thorough coverage of foliage is	necessary for best results.	1	
salmonberry	3 - 4.5	3 - 40	1
For control			
saltcedar	3 - 7.5	3 - 40	1 - 1.5
For control		-1	
sassafras sourwood	3 - 7.5	3 - 40	1 - 1.5
For partial control		-1	
sumac, poison, smooth, winged	3 - 6	3 - 40	1 - 1.5
For partial control			
sweetgum	3 - 4.5	3 - 40	1
For control		-1	
swordfern	3 - 7.5	3 - 40	1 - 1.5
For partial control			
tallowtree, Chinese	-	-	1
For control. Thorough coverage of foliage is	necessary for best results.	-1	
tan oak resprouts	-	-	1.5
For partial control. Apply to resprouts that ar	e less than 3 to 6 feet tall. Best r	esults are obtained with fall application	ins.
thimbleberry	3 – 4.5	3 - 40	1
For control			
tobacco, tree	-	-	1 - 1.5
For partial control			
trumpetcreeper	3 - 4.5	3 - 40	1
For control		_,	
vine maple	3 - 7.5	3 - 40	1 - 1.5
For partial control			
Virginia creeper	3 - 7.5	3 - 40	1 - 1.5
For control		· · · · ·	
waxmyrtle, southern	3 - 7.5	3 - 40	1 - 1.5
For partial control		-	
willow	4.5 - 6	3 - 40	1
For control		_,	

### Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. To the extent permitted by law, otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

#### Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT PERMITTED BY LAW, Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

#### Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. To the extent permitted by law, all such risks shall be assumed by buyer.

#### Limitation of Remedies

To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or

2. Replacement of amount of product used.

To the extent permitted by law, Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. To the extent permitted by law, in no case shall Dow AgroSciences be liable for consequential or incidental damages or losses. The terms of the Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or Limitation of Remedies in any manner.

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Roundup Ready<sup>®</sup> is a registered trademark of Monsanto Company

Produced for Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268

Label Code: D02-353-006 Replaced Label: D02-353-005 LOES Number: 010-02163

EPA accepted 03/06/19

- Revisions: 1. Update Mode of Action table per PR Notices 2017-1 and 2017-2
- 2. In Table of Contents and Headers: Added "or Glyphosate Tolerant to "Corn Hybrids with Roundup...", "Cotton with Roundup Ready...", "Field Corn Hybrids with Roundup...", "Soybean with Enlist E3...", and "Sweet Corn Hybrids..."
- 3. Revise statement in User Safety Recommendations to match current EPA guidelines.
- 4. Revise First Aid Statement to match current EPA guidelines.
- 5. Replaced 2<sup>nd</sup> and 3<sup>rd</sup> sentences of paragraph with heading, "Accord XRT II - Tank Mixing for use on any site listed on this label" with, "It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.'
- Remove statement, "Some of the materials that are chemical... selection chart." throughout label

- 7. Change "Chemical resistant gloves" to "waterproof gloves" throughout label
- 8. Revise statement under User Safety Recommendations to match current EPA requirements throughout label
- 9. Revise "should" to "must" or "will" as appropriate throughout the label.
- 10. As needed move precautionary statements to header "Product Precautions" or "Precautions" 11. Under "Alfalfa" "Restriction" revise statement to read, "Do not treat
- more than 10 percent...at one time" 12. Under "Canola Hybrids..." revise statement under "Postemergence"to
- read, "...of this product per acre after pollination is complete."
  13. Under "Canola (Spring Varieties)..." revise statement under "Postemergence" to read, "...until pollination begins. Applications may also be made after pollination is complete, but avoid applications during active pollination.
- 14. Update marketing text to read, "Avoid contact of this herbicide with foliage, green stems, exposed non-woody roots or fruit of crops (except crops tolerant to glyphosate), desireable plants and trees, because severe injury or destruction may result.
- 15. Within the Table of Contents:
  - a. Revise title to read, "Glyphosate Tolerant Crops" b. Revise title to read, "Soybean with Enlist E3, Roundup Ready<sup>®</sup> or Roundup Ready<sup>®</sup> 2 Yield Gene
  - c. Delete title reading, "Soybean with Roundup Ready® 2 Yield Gene
- 16. Resistance Management: Revised bullets regarding rotating to other crops to read, "Rotating to other glyphosate tolerant crops is one method for adding other herbicides into a continuous phyphosate tolerant system.
- 17. Mixing Directions: Revised statement under Nonionic Surfactant to read, "Do not use surfactant with this product for applications made over the top of glyphosate tolerant crops and Preharvest to cotton."
- 18. Under Crops revised in all crops the statement, "See Glyphosate Tolerant Crops section for use of this product in crops that contain the glyphosate tolerant gene."
- 19. Corrected spelling errors throughout the label