# Specimen Label

**GLYPHOSATE** 

**GROUP** 

**HERBICIDE** 





# **HERBICIDE**

TM®Trademarks of Corteva Agriscience and its affiliated companies

- A non-selective broad spectrum systemic herbicide for control of annual and perennial weeds and woody plants
- Conservation Reserve Program (CRP), rangeland and permanent grass pastures
- forest sites, conifer plantations
- railroads
- natural areas (open space) including: campgrounds, prairie management, trails and trailheads, wildlife openings and wildlife habitat and management areas
- including grazed areas on all of these listed sites

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

Active Ingredient:

glyphosate: N-(phosphonomethyl)glycine, dimethylamine salt ...... 50.2%

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 Eve Irritation • Prolonged Or Frequently Repeated Skin Contact May Cause Allergic Reactions In Some Individuals Avoid contact with 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.

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

#### **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 an end-use product. Corteva 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 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 larger than 5 gallons:

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**

Accord® XRT II herbicide is a broad spectrum, systemic, postemergence herbicide with no soil residual activity. It is intended for control of annual and perennial weeds and woody plants and brush. It is formulated as a water soluble liquid containing surfactant; no additional surfactant is needed.

Time to Symptoms: The active ingredient in this product moves through the plant from the point of foliage contact into the root system. Visible effects on most annual weeds occur within two to four days, but on most perennial weeds visible effects may not occur for seven days or more. Extremely cool or cloudy weather following treatment may slow activity of this product and delay development of visual symptoms. Visible effects are a gradual wilting and yellowing of the plant that advances to complete browning of above ground growth and deterioration of underground plant parts.

Stage of Weeds: Annual weeds are easiest to control when they are small. Best control of most perennial weeds is obtained when treatment is made

at late growth stages approaching maturity or when translocation is mostly down to the roots, i.e. autumn for perennial plants or woody plants.

**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.

**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.

**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.

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 glyphosate does not exceed the maximum allowed. Do not apply more than a total of 8 quarts (8 lb glyphosate acid) of this product per acre per year.

# **Herbicide Resistance Management**

Glyphosate, the active ingredient in this product, is a Group 9 herbicide (inhibitor of EPSP synthase enzyme). 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 to detect weed escapes or shifts in weed species.
- 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.
- 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 site 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 Corteva representative.

Appropriate testing is needed to determine if a weed is resistant to glyphosate. The following good agronomic practices can 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.
- To control weed escapes, including resistant biotypes, before they set seed, scout treated fields after applying this product.
- Thoroughly clean equipment before leaving any site known to contain resistant biotypes.

Because the presence of glyphosate resistance in weed populations is difficult to detect prior to use, Corteva 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.

# 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 according to the herbicide label directions for optimum control of ryegrass.

**Postemergence:** To control other emerged weeds, apply this product in a tank mix with another postemergence herbicide labeled for control of ryegrass. Apply according to the herbicide label directions for optimum control of ryegrass.

#### Attention

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

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

**Sensitive Areas:** The pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

#### **Mixing Directions**

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

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.

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.

#### Accord XRT II - 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.

Accord XRT II – Tank Mixing for use on any site listed on this label
This product does not provide residual weed control. For residual weed
control or to broaden the weed control spectrum, tank mix this product
with other herbicides. It is the pesticide user's responsibility to ensure
that all products are registered for the intended use. Read and follow the
applicable restrictions and limitations and directions for use on all product
labels involved in tank mixing. Users must follow the most restrictive
directions for use and precautionary statements of each product in the
tank mixture. A compatibility test may be done prior to using a product
that has not been tank mixed before with Accord XRT II in your program.
See testing procedure below.

The user is responsible for ensuring that the specific application being made is included on the label of the product used in the tank mix and is compatible with Accord XRT II, especially if using a generic product with active ingredients, such as 2,4-D, atrazine, dicamba, diuron, pendimethalin or other herbicide, is listed in the label.

Add the tank mix product to the tank as directed by the label. Maintain agitation and add the required amount of this product. Maintain good agitation at all times until the contents in the tank are sprayed. If the

mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying resumes. Keep the bypass line on or near the bottom of the tank to minimize foaming. The screen size in the nozzle or line strainers must be no finer than 50 mesh.

Tank Mix Compatibility Testing: Perform a jar test prior to mixing in a spray tank to ensure compatibility of Accord XRT II and other pesticides or carriers. Use a clear glass jar with lid and mix ingredients in the same order and proportions as will be used in the spray tank. The mixture is compatible if the materials mix readily when the jar is inverted several times. The mixture should remain stable after standing for 1/2 hour or, if separation occurs, should readily remix if agitated. An incompatible mixture is indicated by separation into distinct layers that do not readily remix when agitated and/or the presence of flakes, precipitates, gels, or heavy oily film in the jar. Use of an appropriate compatibility aid may resolve mix incompatibility. If the mixture is incompatible do not use that tank mix partner in tank mixtures.

**Note:** If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

To the extent consistent with applicable law, buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are not expressly specified in this labeling. Mixing this product with herbicides or other materials not specified on this label may result in reduced performance.

#### **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	
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.

#### **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.

# **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 Application in All States Except California (see below for California aerial application information).

Apply this product using aerial spray equipment only under conditions as specified within this label.

**Avoid drift.** Do not apply when winds are gusty or under any other condition which favors drift. Drift may cause damage to any vegetation contacted to which treatment is not intended. To prevent injury to adjacent desirable vegetation, maintain appropriate buffer zones.

Do not directly apply to any body of water.

Use the specified rates of this herbicide in 3 to 25 gpa of water unless otherwise specified on this label. Refer to the specific use directions of this label for volumes and application rates.

Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations that dispense spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure. A drift control additive may be used. When a drift control additive is used, carefully read and observe the precautionary statements and all other information specified on the additive label.

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

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. Prolonged exposure of this product to uncoated steel surfaces may result in corrosion and possible failure of the part. Landing gear 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 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 measurements 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.

# **Ground Application**

Apply the specified rates of this product in 3 to 40 gpa of water as a broadcast spray unless otherwise specified on this label. Increase the spray volume within the rate range as density of weeds increases to ensure complete coverage. In order not to spray a fine mist, carefully select proper nozzles. Use flat fan nozzles for best results with ground application equipment. Check spray pattern for uniform distribution of spray droplets.

#### **Handheld and Backpack Application**

Apply to foliage of vegetation to be controlled. Do not spray to the point of runoff for applications made on a spray to wet basis. Use coarse sprays only. For low volume directed spray applications, spray coverage should be uniform with at least 50 percent of the foliage contacted. For best results, cover the top one-half of the plant. To ensure adequate spray coverage, spray both sides of large or tall woody brush and trees, when foliage is thick and dense, or where there are multiple sprouts.

## **Selective Equipment**

This product may be diluted with water and applied through shielded applicators, hooded sprayers, wiper applicators or sponge bars to weeds listed on this label. Avoid contact of herbicide with desirable vegetation as serious injury or death is likely to occur.

Adjust application equipment used above desired vegetation so that the lowest spray stream or wiper contact is at least 2 inches above the desirable vegetation. Droplets, mist, foam, or splatter of the herbicide settling on desirable vegetation is likely to result in discoloration, stunting or destruction.

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

#### **Shielded and Hooded Applicators**

A shielded or hooded applicator directs the herbicide solution onto weeds while shielding desirable vegetation from the herbicide. A hooded sprayer is a shielded sprayer in which the spray pattern is totally enclosed, including the top, sides, front, and back. Use nozzles that provide uniform coverage within the treated area. Keep shields on these sprayers adjusted to protect desirable vegetation. Exercise extreme care to avoid contact of herbicide with desirable vegetation.

#### **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 application equipment used over the top of desirable vegetation so that the wiper contact point is at least 2 inches above the desirable vegetation. Better results are obtained when more of the weed is exposed to the herbicide solution. Weeds should be a minimum of 6 inches above the desirable vegetation. Adjust the applicator height to ensure adequate contact with weeds as weeds not contacted by the herbicide solution will not be affected. Poor contact may occur when weeds are growing in dense clumps, in severe weed infestations, or when weed height varies dramatically. If this occurs, repeat treatment may be necessary.

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.

#### Rope or Sponge Wick Applicators

Use 25 to 70 percent solutions of this product in water.

# Panel Applicators and Pressure Feed Systems

Solutions ranging from 25 to 100 percent of this product in water may be used.

This product controls the following weeds when applied as directed:

corn, volunteer sicklepod panicum, Texas Spanish needles rye, common starbur, bristly

shattercane

This product suppresses the following weeds when applied as directed:

beggarweed, Florida ragweed, common bermudagrass ragweed, giant dogbane, hemp smutgrass dogfennel sunflower guineagrass thistle, Canada iohnsongrass thistle, musk milkweed vaseygrass nightshade, silverleaf velvetleaf pigweed, redroot

# 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 and handheld CDA equipment, apply in 2 to 15 gpa of water.

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.

#### **Application Directions**

- Conservation Reserve Program (CRP), rangeland and permanent grass pastures
- forest sites, conifer plantations
- railroads
- natural areas (open space) including: campgrounds, prairie management, trails and trailheads, wildlife openings and wildlife habitat and management areas
- including grazed areas on all of these listed sites

This product may also be used in non-food crop sites, including: Christmas tree farms, plant nurseries, and sod or turfgrass seed farms.

Apply this product to control any weeds listed in the Weeds Controlled section of the label unless otherwise specified.

## **Cut Stump**

This product will control regrowth of cut stumps and resprouts of many types of woody brush and tree species, some of which are listed below. Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut trees or resprouts close to the soil surface. Apply a 50 percent solution with 50 percent water or 100 percent solution of this product to the freshly cut surface immediately after cutting. Delays in application may result in reduced performance. The cambium area next to the bark is the most vital area to wet but be sure to apply the herbicide solution to a complete ring of exposed cambium including when the bark may have torn down the side of the stump. For best results, make applications during periods of active growth and full leaf expansion.

alder reed, giant eucalyptus saltcedar madrone sweetgum oak tan oak pepper, Brazilian pine, Austrian

#### **Restrictions:**

- Do not make cut stump applications when the roots of desirable woody brush or trees may be grafted to the roots of the cut stump. Some sprouts, stems, or trees may share the same root system.
- Adjacent trees that are of a similar age, height and spacing may indicate shared roots.
- Injury is likely to occur to non-treated stems or trees when one tree or more that shares a common root is treated.

### **Forestry Management**

This product is for the control or partial control of woody brush, trees and herbaceous weeds in forestry. This product is also for use in preparing or establishing wildlife openings within these sites and maintaining logging roads.

#### See Tank Mixing section above for more information.

**Note:** For forestry site preparation, make sure the tank mix product is approved for use prior to planting the desired species. Observe planting interval restrictions.

**Note:** If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility. Site Preparation in forestry sites, use this product in site preparation prior to planting any tree species including Christmas trees, eucalyptus, hybrid tree cultivars, and establishing silvicultural nursery sites.

For optimum results, use 4 – 8 quarts of this product per acre. Use a higher rate in the rate range for control or partial control of woody brush, trees and hard to control perennial herbaceous weeds. For best results, apply to actively growing woody brush and trees after full leaf expansion and before fall color and leaf drop. Use increased rates within the rate range to control perennial herbaceous weeds. Use a lower rate in the rate range to control annual herbaceous weeds. Apply to foliage of actively growing annual herbaceous weeds any time after emergence.

#### **Restrictions:**

 Do not apply this product as an over the top broadcast spray for forestry conifer or hardwood release unless otherwise specified on this label.

# Conifer Release, Mid-Rotation Conifer Release, and Hardwood Release

Apply this product as a directed spray, with selective equipment, and as an individual plant treatment for woody and herbaceous weeds in conifer plantations and hardwood sites, Christmas tree plantations and silvicultural nurseries for conifer release or mid-rotation release applications around conifers and hardwoods.

Make applications using application techniques that prevent or minimize direct contact to the foliage of crop trees (including in stands of pine, other conifers, or hardwood). Avoid contact of spray drift, mist or drips with foliage, green bark or non-woody surface roots of desirable plant species. Use directed sprays and ground equipment with nozzles oriented to target only undesirable understory vegetation below the crop tree canopy.

# Mid-Rotation Conifer Release and Spot Treatments for Crop Tree Release and Timber Stand Improvement

Apply this product as a ground broadcast or directed spray application for mid-rotation release applications under the canopy of pines, other conifers and hardwoods. Make applications using application techniques that prevent or minimize direct contact to the foliage of crop trees (including in stands of pine, other conifers, or hardwoods). Use directed sprays and ground equipment with nozzles oriented to target only undesirable understory vegetation below the crop tree canopy. When making spot applications for woody and herbaceous weeds, do not allow spray to contact the foliage of desirable crop trees.

#### **Unimproved Rough Turf**

#### See Tank Mixing section above for more information.

**Note:** If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

# Spot Treatment, Trim and Edge, and Bareground (can be used on any site on this label)

This product may be on any industrial turfgrass listed on the label for spot treatment of unwanted vegetation, for trim and edge application around objects, and to eliminate unwanted weeds before a construction project begins or asphalt or other material is laid for a road. This product may be used prior to planting an area to turfgrass (sod or seed) to remove unwanted weeds growing in established shrub beds.

To maintain bareground, repeated applications of this product may be used.

This product provides control of emerged annual weeds and control or partial control of emerged perennial weeds, woody brush and trees when applied in a tank mix to bareground.

#### See Tank Mixing section above for more information.

**Note:** If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

To control or partially control the following perennial weeds, apply 1.5 to 3 pints of this product plus 2 to 4 oz of Oust XP per acre.

bahiagrass fescue, tall
bermudagrass johnsongrass
broomsedge poorjoe
dallisgrass quackgrass
dock, curly vaseygrass
dogfennel vervain, blue

# **Chemical Mowing**

This product suppresses perennial and annual grasses listed in this section to serve as a substitute for mowing.

**Perennials:** Apply this product at a rate of 6 fl oz per acre to suppress tall fescue, fine fescue, orchardgrass, quackgrass or reed canarygrass covers. Use 4.6 fl oz of this product per acre for suppression of Kentucky bluegrass. Apply treatments in 10 to 40 gpa. Use only in areas where some temporary injury or discoloration of perennial grasses can be tolerated.

**Annuals:** For growth suppression of annual ryegrass, wild barley and wild oats growing in coarse turfgrass on roadsides apply 3 to 3.75 fl oz of this product in 10 to 40 gpa. Apply when annual grasses are actively growing and before the seedheads are in the boot stage of development. Treatments may cause injury to the desired grasses.

**Dormant Bermudagrass and Bahiagrass:** This product may be used to control or partially control many winter annual weeds and tall fescue for effective release of dormant bermudagrass and bahiagrass. Treat only when turfgrass is dormant and prior to spring greenup.

Apply 6 fl oz to 1.5 quarts of this product per acre in 10 to 40 gpa of water. Use only in areas where bermudagrass or bahiagrass are desirable groundcovers and where some temporary injury or discoloration can be tolerated. For best control of winter annuals, apply when plants are less than 6 inches tall in an early growth stage, and after most of them have germinated. For best control of tall fescue, apply when the tall fescue is at or beyond the 4 to 6 leaf stage.

Treatments in excess of 12 fl oz of this product per acre may result in injury or delayed greenup in highly maintained areas, such as golf courses and lawns.

#### **Restrictions:**

Do not apply tank mixes of this product plus Oust XP in highly maintained turfgrass areas where grass selectively is desired.

Actively Growing Bermudagrass: This product may be used to control or partially control many annual and perennial weeds for effective release of actively growing bermudagrass. Injury of some bermudagrass could occur from applying this product, but the bermudagrass will recover under moist conditions after the effects of the product wear off. Use only in areas where some temporary injury or discoloration can be tolerated.

Apply 12 to 35 fl oz of this product in 10 to 40 gpa to control or partially control many annual and perennial weeds in order to effectively release actively growing bermudagrass. Use a lower rate in the rate range to control weeds less than 6 inches tall (or runner length). Use a higher rate in the rate range as weeds increase in size or as the flower or seed head forms. This product provides partial control of the following perennial species in actively growing bermudagrass.

bahiagrass johnsongrass bluestem, silver trumpetcreeper fescue, tall vaseygrass

#### **Restrictions:**

 Do not apply more than 12 fl oz of this product per acre in highly maintained turfgrass areas where grass selectively is desired.

**Tank Mixes:** Tank mix this product with Outrider or Oust XP for a broader weed control spectrum in actively growing bermudagrass. Apply the tank mixes only on well established bermudagrass where some temporary injury or discoloration can be tolerated.

Apply 6 fl oz to 1.5 pints of this product per acre with 0.75 to 1.33 oz of Outrider to control or partially control johnsongrass and other weeds listed on the Outrider label. Use the higher rate in the rate range of both products to control annual or perennial weeds more than 6 inches tall.

Apply 12 fl oz to 1.5 pints of this product per acre with 1 to 2 oz of Oust XP for enhanced control of weeds listed on the Oust XP label. Use the lower rate in the rate range to control annual weeds less than 6 inches tall (or runner length) listed on the labels. Use a higher rate in the rate range as annual weeds increase in size and as the flower or seed head forms. This tank mix provides partial control of the following perennial weeds in actively growing bermudagrass.

bahiagrass fescue, tall blackberry johnsongrass bluestem, silver poorjoe broomsedge raspberry dallisgrass trumpetcreeper dewberry vaseygrass vervain, blue dogfennel

#### **Restrictions:**

 Do not apply tank mixtures of this product plus Oust XP in highly maintained bermudagrass where grass selectively is desired.

**Actively Growing Bahiagrass:** To suppress vegetative growth and seed head inhibition of bahiagrass for approximately 45 days, apply 4.6 fl oz of this product in 10 to 40 gpa of water. Apply one to two weeks after full greenup or after mowing to a uniform height of 3 to 4 inches and prior to seed head emergence.

To suppress growth of bahiagrass up to 120 days, apply 3.5 fl oz of this product per acre and follow it with an application of 2 to 3.5 fl oz per acre approximately 45 days later. Do not make more than two growth suppression applications per year unless otherwise directed.

**Tank Mixes:** Tank mix this product with Outrider or Oust XP for a broader weed control spectrum in actively growing bahiagrass. Apply the tank mixes only on well established bahiagrass where some temporary injury or discoloration can be tolerated.

Apply 4.6 fl oz of this product per acre with 0.75 to 2 oz of Outrider per acre to control or partially control johnsongrass and other weeds listed

on the Outrider label. Use the higher rate in the rate range for Outrider to control annual and perennial weeds more than 6 inches tall.

Apply 4.6 fl oz of this product per acre with 0.25 oz of Oust XP per acre for enhanced control of weeds listed on the Oust XP label in actively growing bahiagrass one to two weeks following an initial spring mowing. Do not apply this tank mix more than once per year.

#### Turfgrass Renovation, Seed, or Sod Production

This product controls most existing vegetation prior to renovating turfgrass areas or establishing turfgrass grown for seed or sod. For maximum control of existing vegetation, delay planting or sodding to determine if any regrowth from escaped underground plant parts occurs. When repeat treatments are necessary, sufficient regrowth must be attained prior to application. For warm season turfgrass, such as bermudagrass, summer or fall applications provide the best control. Where existing vegetation is growing under mowed turfgrass management, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the spray.

Desirable turfgrass may be planted following the above procedures.

Handheld equipment may be used for spot treatment of unwanted vegetation growing in existing turfgrass. Use broadcast or handheld equipment to control sod remnants or other unwanted vegetation after sod is harvested.

#### **Restrictions:**

- Do not disturb soil or underground plant parts before treatment.
- Delay tillage or renovation techniques, such as vertical mowing, coring or slicing, for seven days after application to allow translocation into underground plant parts.

- If the application rate used is 2 quarts or less per acre, no waiting period is required between treatment and feeding or grazing livestock.
- If the application rate used is more than 2 quarts per acre, remove livestock before applying this product and wait 8 weeks after applying before resuming grazing or harvesting.

See Tank Mixing section above for more information.

# Natural Areas and Wildlife Habitat Management

See Tank Mixing section above for more information.

#### **Habitat Restoration and Management**

This product may be used to control exotic and other undesirable vegetation in habitat management and natural areas, including rangeland and wildlife refuges. Apply to allow recovery of native plant species, prior to planting desirable native species, and for similar broad spectrum vegetation control requirements. Apply spot treatments to selectively remove unwanted plants for habitat maintenance and enhancement.

#### 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 to allow translocation into underground plant parts.

#### **Hollow Stem Injection**

Apply this product through handheld injection devices that deliver the specified amount of this product into targeted hollow stem plants growing in any site listed on this label. To control the following hollow stem plants, follow the use directions below:

Targe	t Plants	
Common Name	Scientific Name	Use Directions
castorbean	Ricinus communis	Inject 4 mL of this product per plant into the lower portion of the main stem
hemlock, poison	Conium maculatum	Inject one leaf cane per plant, 10 to 12 inches above the root crown, with 5 mL of a 5 percent by volume solution of this product.
hogweed, giant	Hercleum mantegazzianum	Inject one leaf cane per plant 12 inches above the root crown with 5 mL of a 5 percent by volume solution of this product.
horsetail, field	Equisetum arvense	Inject one segment above the root crown with 0.5 mL of this product per stem using a low volume syringe capable of accurately delivering this amount of product.
knotweed, bohemian and other species	Polygonum bohemicum	Inject 5 mL of this product per stem between the second and third internode.
knotweed, giant	Polygonum sachalinense	
knotweed, Japanese	Polygonum cuspidatum	
reed, giant	Arundo donax	Inject 6 mL of this product per stem between the second and third internode.
thistle, Canada	Circisum arvense	Cut 8 to 9 of the tallest plants at bud stage in a clump with clippers. Use a cavity needle pushed into the stem center and then slowly removed as 0.5 mL of this product per stem is injected into the stem.

#### **Restrictions:**

 Do not apply more than a total of 2 gallons of this product per acre for all treatments combined. At 5 mL per stem, 2 gallons will treat approximately 1300 stems per acre.

# Injection and Frill (Woody Brush and Trees)

This product may be used to control woody brush and trees by injection or frill applications. Apply this product using suitable equipment that penetrates into the living tissue. Apply the equivalent of 1 mL (0.04 fl oz) of this product per each two to three inches of trunk diameter at breast height (DBH). This is best achieved by applying a 50 to 100 percent concentration of this product either to a continuous frill around the tree or as cuts evenly spaced around the tree below all branches. As tree diameter increases in size, better results are achieved by applying diluted material to a continuous frill or more closely spaced cuttings. Do not make any applications that allow runoff to occur from frilled or cut areas in species that exude sap freely. In species such as this, make the frill or cuts at an oblique angle to produce a cupping effect and use a 100 percent undiluted concentration of this product. For best results, apply during periods of active growth and after full leaf expansion. This product controls many species; some of these species are listed below.

Control oak poplar sweetgum sycamore Partial Control black gum dogwood hickory maple, red

# Non-Food Tree, Shrub, or Vine Production Sites (Not for Use in California)

**Types of Applications:** Site preparation, post-directed trim and edge, wiper application

This product may be used for general weed control prior to the planting of and around established any woody tree, shrub, or vine species, including arborvitae, azalea, boxwood, crabapple, eucalyptus, euonymus, fir, Douglas- fir, jojoba, hollies, lilac, magnolia, maple, oak, poplar, privet, pine, spruce, and yew, growing in plant nurseries, on Christmas tree farms, or on other non-food tree production sites.

Use this product to control weeds growing in and around greenhouses and shadehouses. During application, desirable vegetation must not be present. Air circulation fans must be turned off until after the application has dried.

Do not use this product as an over the top broadcast spray in Christmas trees unless otherwise directed. Take care to avoid contact of spray, drift, or mist with foliage or green bark of desirable ornamental species.

See Tank Mixing section above for more information.

#### **Site Preparation**

Use this product prior to planting any tree, shrub, or vine, including Christmas tree species, in a nursery or production setting.

## **Post-Directed Trim and Edge**

Use this product as a post-directed spray around or to trim and edge around trees, buildings, sidewalks, roads, potted plants, and other objects in a production setting. Protect desirable plants from the spray solution by using shields or coverings made of cardboard or other impermeable material.

#### Wiper Application

Use this product through wick or other suitable wiper applicators to control or partially control undesirable vegetation around established trees, shrubs, or vines. See Selective Equipment section of this label for further information about the proper use of wiper applicators.

### Poplar (Populus spp.) Production

Types of Applications: Preplant, in-crop, wiper applicator

#### Preplant

This product is for use prior to planting *Populus* species, including hybrid poplars and hybrid cottonwoods.

#### In-Crop

Use a 1.5 percent spray solution as a spray to wet application for the control of undesirable woody brush and trees. To control herbaceous weeds, use a 0.75 to 1.5 percent solution. Avoid contact of spray, drift, or mist with foliage, green bark or non-woody surface roots of poplar trees.

This product may be used through wick or other suitable applicators for control or partial control of grass and broadleaf weeds listed on the label.

For wick applicators, mix 2.75 quarts of this product with 2 gallons of water to make a 25 percent solution. For wiper systems that can handle thicker solutions, such as force fed systems, a solution containing 25 to 100 percent of this product may be used.

For best results, allow the herbicide solution to contact the maximum amount of leaf surface. As weed density increases, decrease equipment speed to allow sufficient herbicide to flow to wet all surfaces contacted. Weeds not contacted will be unaffected.

To avoid injury or death of desirable plants, prevent contact of herbicide with non-target vegetation, including foliage, green stems, exposed non-woody roots or fruit.

#### Railroads

All of the instructions in the Unimproved Rough Turf section applies to railroads.

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

#### See Tank Mixing section above for more information.

Note: If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

### **Brush Control**

Use this product to control woody brush and trees on railroad rights-ofway. Apply 3 quarts to 2 gallons of this product per acre as a broadcast spray, using boom-type or boomless nozzles. Applications up to 80 gpa of spray solution may be used. Apply a 3/4 to 1.5 percent solution of this product when using high volume spray to wet applications. Apply a 4 to 7 percent solution of this product when using low volume directed sprays for spot treatment.

### See Tank Mixing section above for more information.

Note: If tank mixing with Garlon® 3A herbicide, ensure that Garlon 3A is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

Note: If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

# **Pasture Management**

Types of Applications: Preplant, preemergence, pasture renovation, spot treatment, wiper applicator, selective weed control in dormant pastures

#### Preplant, Preemergence, Pasture Renovation

Apply this product to control weeds prior to planting or prior to the emergence of forage grasses. This product may also be applied postemergence to any pasture grass (other than food crops in the . Gramineae family), including bahiagrass, bermudagrass, bluegrass, brome, fescue, quineagrass, kikuyugrass, orchardgrass, pangola grass, ryegrass, timothy, and wheatgrass, to control these species prior to replanting.

#### Restrictions:

- If the application rate used is 2.25 quarts or less per acre, no waiting period is required between treatment and feeding or grazing livestock.
- If the application rate used is more than 2.25 quarts per acre, remove livestock before applying this product and wait 8 weeks after applying before resuming grazing or harvesting.

#### **Spot Treatment and Wiper Applicator**

To control tall weeds, apply this product in pastures as a spot treatment or over the top of desirable grasses using a wiper applicator. Repeat applications may be made in the same area every 30 days.

#### **Restrictions:**

- The entire pasture or any portion of it may be treated when using 2.25 quarts or less of this product per acre for spot treatments or wiper applications.
- No more than 10 percent of the total pasture may be treated at any one time when using more than 2.25 quarts of this product per acre for spot treatments or wiper applications.
- To achieve maximum performance, remove domestic livestock before application and wait 7 days after application before grazing livestock or harvesting for feed.

#### **Selective Weed Control in Dormant Pastures**

Apply this product to dormant 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 by broadcast application equipment. Apply in early spring before desirable perennial grasses break dormancy and initiate green growth, or in late fall after desirable perennial grasses have reached dormancy.

#### **Restrictions:**

- · If this product is applied when plants are not dormant, some stunting of perennial grasses will occur.
- Using a higher rate in the rate range could cause stand reduction. Do not apply more than a total of 2.25 quarts of this product per acre per year to pasture grasses except for renovation use.

There is no waiting period between application and grazing or harvesting.

# Rangelands

Apply 2.5 lb ai per acre to control or suppress many annual weeds growing in perennial cool and warm season grass rangelands, and pastures. Preventing weed seed production is critical to the successful control of annual grassy weeds invading these perennial grass sites. Eliminate most of the viable seeds with follow up applications in sequential years. Delay grazing of treated areas to encourage growth of desirable perennials. Allowing desirable perennials to flower and reseed in the treated area will encourage successful transition.

Bromus: Use this product to control or suppress downy brome (Bromus tectorum), Japanese brome (Bromus japonicus), soft chess (Bromus mollis), cheatgrass (Bromus secalinus), cereal rye and jointed goatgrass found in rangelands, and pastures. Apply 6 to 12 fl oz of this product per acre as a broadcast treatment.

For best results, coincide treatments with early seedhead emergence of the most mature plants. Delaying the application until this growth stage maximizes the emergence of other weedy grass flushes. Make applications to the same site each year until seed banks are depleted and the desirable perennial grasses become established on the site.

Medusahead: Apply 12 fl oz of this product per acre to control or suppress medusahead at the 3-leaf stage when plants are actively growing. Delaying applications beyond this stage results in reduced or unacceptable control. Repeat applications in subsequent years to eliminate the seedbank before reestablishing desirable perennial grasses. Apply in the fall or spring.

Apply by ground or air. Make aerial applications for these uses with fixed wing or helicopter equipment. For aerial applications, apply in 2 to 10 gpa of water. For ground applications, apply in 10 to 20 gpa of water.

#### **Spot Treatment Wiper Application**

Apply this product in rangeland, and pastures as a spot treatment or over the top of desirable grasses using wiper applicators to control tall weeds. Make repeat applications in the same area at 30-day intervals.

- The entire site or any portion of it may be treated when using 2.25 quarts or less of this product per acre for spot treatments or wiper applications.
- No more than 10 percent of the total site may be treated at any one time when using more than 2.25 quarts of this product per acre for spot treatments or wiper applications.
- To achieve maximum performance, remove domestic livestock before application and wait 7 days after application before grazing livestock or harvesting for feed.

#### Weeds

Use a higher rate in the rate range when weed growth is heavy, dense, or growing in an undisturbed (non-cultivated) area. The performance of this product may be reduced when applying to weeds heavily covered with dust. If weeds have been mowed, grazed, or cut, allow regrowth to occur before applying this product.

If a handheld sprayer is used to apply this product on a spray to wet technique, ensure that the spray coverage is uniform and complete,

and at least 50 percent of the foliage, or the top one-half of the plant, is sprayed. Spray both sides of large or tall weeds, thick or dense foliage, or multiple sprouts in order to ensure complete coverage.

After applying this product, if the soil must be tilled or the weeds mowed, wait 7 days before tilling, mowing, or removing residual vegetation to allow translocation of this product into underground plant parts.

Apply 1 to 1.75 gallons of this product per acre for enhanced results to control tough to control perennial weeds, woody brush and trees, plants growing under stressed conditions, or in areas of dense vegetation.

#### See Tank Mixing section above for more information.

**Note:** If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

#### **Annual Weeds**

Apply 1.5 pints of this product per acre if weeds are less than 6 inches in height or runner length. Use 1.25 to 3 quarts of this product per acre if weeds are more than 6 inches in height or runner length, or when weeds are growing under stressed conditions. Use a higher rate in the rate range for tough to control species regardless of the size of the weed at the time of application. Treat tough to control weeds early when they are relatively small.

Apply a 0.4 percent solution of this product as a spray to wet application to weeds less than 6 inches in height or runner length. Use a 0.7 to 1.5 percent solution for annual weeds more than 6 inches tall or for any weeds growing under stressed conditions. Use the higher concentration for tough to control species or for weeds more than 24 inches tall. Apply prior to seedhead formation in grass or bud formation in broadleaf weeds.

Use a 4 to 7 percent solution of this product for low volume directed spray applications.

#### **Rate Table**

**Weed Species** 

annoda, spurred barley barnyardgrass bassia, fivehook bittercress bluegrass, annual bluegrass, bulbous brome, downy brome, Japanese browntop panicum huttercup Carolina foxtail Carolina geranium castorbean cheatgrass cheeseweed (Malva parviflora) chervil chickweed cocklebur copperleaf, hophornbeam corn speedwell crabgrass dwarfdandelion eastern mannagrass eclipta fall panicum false dandelion falseflax, smallseed fiddleneck field pennycress filaree fleabane, annual fleabane, hairy (Conyza bonariensis) fleabane, rough Florida pusley foxtail goatgrass, jointed goosegrass grain sorghum (milo) groundsel, common hemp sesbania horseweed/marestail

(Conyza canadensis)

johnsongrass (seedling)

itchgrass

junglerice

knotweed

lambsquarters

kochia

little barley London rocket mayweed medusahead morningglory (Ipomoea spp.) mustard, blue mustard, tansy mustard, tumble mustard, wild nightshade, black oats pigweed plains/tickseed coreopsis prickly lettuce puncturevine purslane, common ragweed, common ragweed, giant red rice Russian thistle ryegrass sandbur, field shattercane shepherd's-purse sicklepod signalgrass, broadleaf smartweed, ladysthumb smartweed, Pennsylvania sowthistle, annual Spanish needles speedwell, purslane sprangletop spurge, annual spurge, prostrate spurge, spotted spurry, umbrella stinkgrass sunflower teaweed/prickly sida Texas panicum velvetleaf Virginia copperleaf Virginia pepperweed

wheat wild oats witchgrass woolly cupgrass yellow rocket

#### **Perennial Weeds**

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

When using spray to wet treatments with handheld equipment, ensure thorough coverage of the plant. For best results, use a 1.5 percent solution on harder to control perennials, such as bermudagrass, dock, field bindweed, hemp dogbane, milkweed and Canada thistle.

Use a 4 to 7 percent solution of this product in low volume directed spray applications.

#### **Rate Table**

Weed Species	Rate (pt/acre)	Handheld (% Solution)
alfalfa	1.5 - 3	1.5
partial control		
alligatorweed	6	1
partial control	·	
anise (fennel)	1.5 – 6.5	1 – 1.5
bahiagrass	4.5 - 7.5	1.5
beechgrass, European (Ammophila arenariai)		3.5
bentgrass	2.25	1.5
partial control		
bermudagrass	4.5 - 7.5	1.5
bermudagrass, water (knotgrass)	1.5	
bindweed, field	0.75 - 7.5	
bluegrass, Kentucky	3	
blueweed, Texas	4.5 - 7.5	
brackenfern	4.5 – 6	1
bromegrass, smooth	1.5 – 3	1.5
bursage, woolly-leaf		
canarygrass, reed	3 - 4.5	
cattail	4.5 - 7.5	
clover, red, white	1	
cogongrass		
dallisgrass	1	
dandelion	1	
dock, curly		
dogbane, hemp	6	_
fescue (except tall)	4.5 - 7.5	-
fescue, tall	1.5 - 4.5	_
German ivy	1.75 – 3.25	1 – 1.5
guineagrass	4.5	1
horsenettle	4.5 - 7.5	1.5
horseradish	6	
iceplant	1.75	1.5 – 2
Japanese knotweed	4.5	2
Jerusalem artichoke	4.5 - 7.5	1.5
johnsongrass	0.75 - 4.5	1
kikuyugrass	3 - 4.5	1.5
knapweed	6	
lantana	-	1
lespedeza	4.5 - 7.5	1.5
milkweed, common	4.5	1
muhly, wirestem	1.5 – 3	1
mullein, common	4.5 - 7.5	†
napiergrass	1	
nightshade, silverleaf	3	†
nutsedge, purple, yellow	0.75 - 4.5	1 – 1.5
orchardgrass	1.5 – 3	1.5
oriental bittersweet	4.5	1.5
pampasgrass	4.5 – 7.5	1 - 1.5
paragrass	4.5 - 7.5	1.5
paragrass	4.5 - 7.5	1.5

#### Rate Table (Cont.)

Weed Species	Rate (pt/acre)	Handheld (% Solution)
pepperweed, perennial	5.4	1.5
phragmites	4.5 - 7.5	1 – 1.5
partial control		
poison hemlock	1.5 – 5.4	1 – 1.5
quackgrass	1.5 - 4.5	1.5
redvine	1.25 – 3	
partial control		
reed, giant	6 – 7.5	1.5
ryegrass, perennial	1.5 - 4.5	1
smartweed, swamp	4.5 - 7.5	1.5
sowthistle, perennial	3 - 4.5	
spurge, leafy		
partial control		
starthistle, yellow	3	1.5
sweet potato, wild		
partial control		
thistle, artichoke	1.5 – 4.5	1 - 1.5
thistle, Canada	3 - 4.5	1.5
timothy	3 - 4.5	
torpedograss	6 - 7.5	
partial control		
trumpetcreeper	3	1.5
partial control		
vaseygrass	4.5 - 7.5	1.5
velvetgrass		
wheatgrass, western	3 - 4.5	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.
- 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 in the rate range for larger plants and/or dense areas of growth. On vines, use the higher rate in the rate range 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.

Use a 1.5 percent solution when applying this product using a spray to wet technique with a handheld sprayer on harder to control woody brush and trees.

Apply a 4 to 7 percent solution of this product for low volume directed spray applications.

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. Herbicidal symptoms might not appear prior to frost or senescence following a fall application.

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

#### See Tank Mixing section above for more information.

**Note:** If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

#### **Rate Table**

Weed Species	Rate (pt/acre)	Handheld Spray to Wet (% Solution)
alder	4.5 – 6	1
ash	3 - 7.5	1 – 1.5
partial control	0 7.0	1 1.0
aspen, quaking	3 - 4.5	1
bearmat (bearclover)	3 - 7.5	1 – 1.5
beech	- 0 7.0	1 1.0
partial control		
birch	3 – 4.5	1
blackberry	4.5 – 6	- '
blackgum	3 - 7.5	-
bracken	- 0 7.0	
	4 75 7 5	4 4 5
broom, French, Scotch	1.75- 7.5	1 - 1.5
buckwheat, California	1.75 - 6	
partial control	0.75	4 4 5
cascara	3 - 7.5	1 - 1.5
partial control	T	
catsclaw		1
partial control		
ceanothus	3 - 7.5	1 – 1.5
partial control	T	
chamise	1.75 – 7.5	1
partial control		
cherry, bitter, black, pin	3 - 4.5	1
coyote brush	4.5 - 6	1 - 1.5
deerweed	1.75 – 4.25	1
dogwood	3 - 7.5	1 – 1.5
partial control		
elderberry	3 - 4	1
elm	3 - 7.5	1 – 1.5
partial control		
eucalyptus		1.5
gorse	3 - 7.5	1 – 1.5
partial control		
hasardia	1.75 - 6	1 – 1.5
partial control		
hawthorn	3 - 4.5	1
hazel		
hickory	3 - 7.5	1 – 1.5
partial control		
honeysuckle	3 - 6	1
hornbeam, American	3 - 7.5	1 – 1.5
partial control		
kudzu	6 – 7.5	1.5
locust, black	3 - 6	1 – 1.5
partial control		
madrone resprouts		1.5
partial control		
manzanita	3 - 7.5	1 – 1.5
partial control		
maple, red	3 - 6	1
maple, sugar		1
	1	-

#### Rate Table (Cont.)

Weed Species	Rate (pt/acre)	Handheld Spray to Wet (% Solution)
monkey flower	1.75 - 6	1 – 1.5
partial control	1.70 0	1 1.5
oak, black, white	3 - 6	1 – 1.5
partial control	3-0	1 - 1.5
oak, northern, pin	1.75 - 6	1
oak, post	4.5 - 6	-
oak, scrub	1.75 - 6	_
oak, southern red	3 - 4.5	1
peppertree, Brazilian	3 - 7.5	1 – 1.5
(Florida holly)	3-7.5	1 - 1.5
for suppression		1
persimmon	3 - 7.5	1 – 1.5
partial control		T
pine	3 - 7.5	1 – 1.5
poison ivy/poison oak	6 - 7.5	1.5
poplar, yellow	3 - 7.5	1 – 1.5
partial control		
redbud, eastern	3 - 7.5	1 – 1.5
rose, multiflora	3	1
Russian olive	3 - 7.5	1 – 1.5
partial control		1
sage, black	1.75 - 6	1
sage, white	3 - 7.5	1 – 1.5
partial control		
sagebrush, California	3 - 6	1
salmonberry	3 – 4.5	
saltcedar	3 - 7.5	1 – 1.5
partial control		
sassafras	3 - 7.5	1 – 1.5
sourwood		
partial control		1 4 4 5
sumac, laurel, poison, smooth, sugarbush, winged	3 - 6	1 – 1.5
partial control		
sweetgum	3 - 4.5	1
swordfern	3 - 7.5	1 – 1.5
partial control		
tallowtree, Chinese		1
tan oak resprouts		1.5
partial control		
thimbleberry	3 - 4	1
control		
tobacco, tree	1.75 - 6	1 – 1.5
partial control		
toyon		1.5
trumpetcreeper	3 - 4.5	1 – 1.5
vine maple	3 - 7.5	
partial control		
Virginia creeper	3 - 7.5	1 – 1.5
waxmyrtle, southern		
partial control		
partial control willow	4.5 - 6	1

# **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**

Corteva Agriscience 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, CORTEVA AGRISCIENCE 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 Corteva Agriscience 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 Corteva Agriscience's election, one of the following:

- Refund of purchase price paid by buyer or user for product bought, or
   Replacement of amount of product used.
- To the extent permitted by law, Corteva Agriscience shall not be liable for losses or damages resulting from handling or use of this product unless Corteva Agriscience is promptly notified of such loss or damage in writing. To the extent permitted by law, in no case shall Corteva Agriscience 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 Corteva Agriscience or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or Limitation of Remedies in any manner.

<sup>TM®</sup>Trademarks of Corteva Agriscience and its affiliated companies EPA accepted 03/06/19

Produced for Corteva Agriscience LLC 9330 Zionsville Road Indianapolis, IN 46268

Label Code: CD02-351-021 Replaces Label: CD02-351-020

EPA accepted 03/06/19

#### **Revisions:**

- 1. Updated company name, address, and contact information for Corteva.
- 2. Remove from marketing text and Application Directions: airports, barrow ditches, communication transmission lines, electrical power and utility rights-of-way, fencerows, gravel pits, industrial sites, military lands, mining and drilling areas, mon-irrigation ditch banks, oil pads, ornamental sites, parking lots, petroleum tank farms, pipelines, roadsides, storage areas, storm water retention areas, substations, unimproved rough turf grasses, sod or turfgrass seed farms, vacant lots and other non-crop residential areas, parks, recreation areas, in and around seasonally dry wetlands.
- Update Trademark
- Removed Ornamental and other industrial sites from the Unimproved Rough Turf section.
- 5. Removed Glyphosate Resistant Horseweed section.
- 6. Removed ornamentals from the Non-Food Tree, Shrub, or Vine Production Sites section.
- 7. Removed the Parks, Recreational, and Residential Areas section.
- 8. Removed Industrial Sites and Ornamental Sites from Railroads section.
- 9. Removed grassy industrial sites from Rangeland section.
- Removed Roadsides section; Removed Turfgrass Seed and Sod Production section; Removed Utility Sites
- 11. Revised the Terms and Conditions for Use