



GLYPHOSATE GROUP 9 HERBICIDE



# Imitator® Plus

## Herbicide

Avoid herbicide contact with foliage, green stems, exposed non-woody roots or fruit of crops (except as specified for individual Roundup Ready® crops), desirable plants and trees because severe injury or destruction may result.

### ACTIVE INGREDIENT:

Glyphosate in the form of its isopropylamine salt* ..	41.0%
OTHER INGREDIENTS:.....	59.0%
TOTAL: .....	100.0%

\* Contains 480 grams per liter or 4 pounds per U.S. gallon of the active ingredient Glyphosate in the form of its isopropylamine salt. Equivalent to 356 grams per liter or 3 pounds per U.S. gallon of the acid, Glyphosate.

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

[See FIRST AID Below]

[See Side (Back) Panel for FIRST AID];

[See Page \_\_\_\_ for FIRST AID]

[See Container Labeling for (FIRST AID and)  
Complete Directions for Use]

[See (Attached) Booklet (Container Labeling) for  
Complete Directions for Use]

EPA Reg. No. 19713-526

Net Content:

EPA Est. No. 19713-TN-3

2.5 Gals. (9.46 L)

### FIRST AID

#### IF IN EYES:

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

#### IF INHALED:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth.
- Call a poison control center or doctor for further treatment advice.

#### IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious or convulsing person.

#### IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 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 call CHEMTREC at 800-424-9300 for emergency medical treatment information.

**Domestic animals:** This product is considered to be relatively non-toxic 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.

### PRECAUTIONARY STATEMENTS

#### Hazards To Humans And Domestic Animals

**CAUTION:** Harmful if absorbed through skin, if inhaled, or if swallowed. Causes moderate eye irritation. Avoid breathing of spray mist. Avoid contact with skin, eyes, and clothing.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Applicators and other handlers must wear:** Long-sleeved shirt and long pants, shoes plus socks, and chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils and viton ≥ 14 mils.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, 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 the 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:** 1) Wash hands thoroughly before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/ PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

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

Manufactured By:

**Drexel Chemical Company**

P.O. Box 13327, Memphis, TN 38113-0327

**SINCE 1972**

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526SP-0123\*

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## PHYSICAL AND CHEMICAL HAZARDS

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

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. 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 at the time of 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 (WPS), 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 (REI). The requirements in this box only apply to uses of this product that are covered by the WPS. Do not enter or allow worker entry into treated area during the REI of 4 hours.

PPE required for early entry to treated area that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil or water is: Coveralls, chemical-resistant gloves made of barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, natural rubber  $\geq$  14 mils, polyethylene, polyvinyl chloride (PVC)  $\geq$  14 mils and viton  $\geq$  14 mils, shoes plus socks and protective eyewear.

### NON-AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow others to enter treated area until sprays have dried.

## USE INFORMATION

READ ENTIRE LABEL BEFORE USING THIS PRODUCT.

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

- This product mixes readily with water to be applied as a foliar spray for the control or destruction of most herbaceous plants. It may be applied through most standard handheld or industrial or field-type sprayers after dilution and thorough mixing with water in accordance with label instructions.
- This product moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 2 to 4 days, but on most perennial weeds may not occur for 7 days or more. Extremely cool or cloudy weather following treatment may slow activity of this product and delay visible effects of control. Visible effects are a gradual wilting and yellowing of the plant which advances to complete browning of above-ground growth and deterioration of underground plant parts.
- Unless otherwise specified on this label, delay application until vegetation has emerged and reached the stages described for control of such vegetation under the "WEEDS CONTROLLED AND RATES" section of this label.
- Unemerged plants arising from unattached underground rhizomes or root stocks of perennials will not be affected by the herbicide and will continue to grow. For this reason, best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity.
- Always use the higher rate of this product per acre within the specified range when 1) weed growth is heavy or dense, or 2)

weeds are growing in an undisturbed (non-cultivated) area.

- Do not treat weeds under poor growing conditions such as drought stress, disease or insect damage, as reduced weed control may result. Reduced results may also occur when treating weeds heavily covered with dust.
- Reduced control may result when applications are made to annual and perennial weeds that have been mowed, grazed or cut and have not been allowed to regrow to the listed stage for treatment.
- Rainfall or irrigation occurring within 6 hours after application may reduce effectiveness. Heavy rainfall or irrigation within 2 hours after application may wash the chemical off the foliage and a repeat treatment may be required.
- This product does not provide residual weed control. Weeds germinating from seed after application will not be controlled. For subsequent residual weed control, follow a label-approved herbicide program. Read and carefully observe the precautionary statements and all other information appearing on the labels of all herbicides used.
- 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 listed in this labeling. Mixing this product with herbicides or other materials not listed on this label may result in reduced performance.
- For best results, spray coverage should be uniform and complete. Do not spray weed foliage to the point of runoff.

## Annual Maximum Use Rate

The maximum application or use rates stated throughout this label are given in units of volume (fl. ozs. or qts.) of this product per acre. However, the maximum allowed application rates apply to this product combined with the use of any and all other herbicides containing the active ingredient Glyphosate, whether applied separately or as tank-mixtures, on a 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, you must ensure that the total use of Glyphosate (lbs. acid equivalents) does not exceed the maximum allowed. The combined total of all treatments must not exceed 8 quarts of this product per acre per year. For applications in non-crop sites or in tree, vine, or shrub crops, the combined total of all treatments must not exceed 10.6 quarts of this product per acre per year. See the "INGREDIENTS" section of this label for necessary product information.

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

Do not allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended. The likelihood of injury occurring from the use of this product is greatest when winds are gusty or in excess of 5 mph, or when other conditions, including lesser wind velocities, will allow spray drift to occur. 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.

## WEED RESISTANCE MANAGEMENT

### GLYPHOSATE GROUP 9 HERBICIDE

For resistance management, this product is a Group 9 mode of action herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 9 mode of action herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed. To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of this product or other Group 9 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank-mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more

resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.

- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Drexel Chemical Company representatives at (901) 774-4370.

## MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS

APPLY THESE SPRAY SOLUTIONS IN PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING DESIRED VOLUMES. DO NOT APPLY WHEN WIND OR OTHER CONDITIONS FAVOR DRIFT. PROPERLY DIRECT HANDGUN APPLICATIONS TO AVOID SPRAYING DESIRABLE PLANTS. **Note:** REDUCED RESULTS MAY OCCUR IF WATER CONTAINING SOIL SUCH AS WATER FROM PONDS AND UNLINED DITCHES IS USED.

### MIXING

This product mixes readily with water. Mix spray solutions of this product as follows: Fill the mixing or spray tank with the required amount of water. Add the specified amount of this product (see the "DIRECTIONS FOR USE" and "WEEDS CONTROLLED AND RATES" sections of this label) near the end of the filling process and mix well. Remove hose from tank immediately after filling to avoid siphoning back into the carrier source. During mixing and application, foaming of the spray solution may occur. To prevent or minimize foam, avoid the use of mechanical agitators, terminate bypass and return lines at the bottom of the tank and, if needed, use an approved anti-foam or defoaming agent.

### TANK-MIXTURES

This product may be tank-mixed with the products listed, provided the product tank-mixed is registered for use on the listed site. 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 labeled tank-mixtures of this product with water carrier by mixing small proportional quantities in advance.

Mix labeled tank-mixtures of this product with water as follows:

1. Place a 20 to 35 mesh screen or wetting basket over filling port.
2. Through the screen, fill the spray tank one-half full of water and start agitation.
3. If a wettable powder is used, make a slurry with the water carrier and add it SLOWLY through the screen into the tank. Continue agitation.
4. If a flowable formulation is used, pre-mix one part flowable with one part water. Add diluted mixture SLOWLY through the screen

into the tank. Continue agitation.

5. If an emulsifiable concentrate formulation is used, pre-mix one part emulsifiable concentrate with two parts water. Add diluted mixture slowly through the screen into the tank. Continue agitation.
6. Continue filling the spray tank with water and add the required amount of this product near the end of the filling process.
7. Where non-ionic surfactant is used, add this to the spray tank before completing the filling process.
8. Add individual formulations to the spray tank as follows: wettable powder, flowable, emulsifiable concentrate, drift control additive, water-soluble liquid followed by surfactant.

Maintain good agitation at all times until the contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed. Keep bypass line on or near bottom of the tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50 mesh. Carefully select proper nozzle to avoid spraying a fine mist. For best results with conventional ground application equipment, use flat fan nozzles. Clean sprayer and parts immediately after using this product by thoroughly flushing with water.

### ADDITIVES

**Surfactants:** Non-ionic surfactants or wetting agents that are labeled for use with herbicides may be used. Do not reduce rates of this product when adding surfactant. When adding additional surfactant, follow manufacturer's rates and directions for use of the surfactant, or, use 0.5% surfactant concentration (2 qts. per 100 gals. of spray solution) when using surfactants that contain at least 70% active ingredient or a 1% surfactant concentration (4 qts. per 100 gals. of spray solution) for those surfactants containing less than 70% active ingredient. Read and carefully observe surfactant precautionary statements and other information appearing on the surfactant label.

**Ammonium Sulfate:** The addition of 1 to 2% dry Ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this product and this product plus 2,4-D, Dicamba or residual herbicide tank-mixtures on annual and perennial weeds. The improvement in performance may be apparent where environmental stress is a concern. Low quality Ammonium sulfate may contain material that will not readily dissolve, which could result in nozzle tip plugging. To determine quality, perform a jar test by adding one-third cup of Ammonium sulfate to 1 gallon of water and agitate for 1 minute. If undissolved sediment is observed, pre-dissolve the Ammonium sulfate in water and filter prior to addition to the spray tank. If Ammonium sulfate is added directly to the spray tank, add slowly with agitation. Adding too quickly may clog outlet line. Ensure that Ammonium sulfate is completely dissolved in the spray tank before adding herbicides or surfactant. Thoroughly rinse the spray system with clean water after use to reduce corrosion.

**Note:** The use of Ammonium sulfate as an additive does not preclude the need for additional surfactant. Do not use herbicide rates lower than what is specified in this label.

**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 instructions.

**Drift Control Additives:** Drift control additives may be used with all equipment types, except wiper applicators, sponge bars and Controlled Droplet Applicator (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. The use of drift control additives can affect spray coverage which may result in reduced performance.

### APPLICATION EQUIPMENT AND TECHNIQUES

Do not apply this product through any type of irrigation system. This product may be applied with the following application equipment:

**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 High-volume Spray Equipment** — Knapsack and backpack sprayers, pump-up pressure sprayers, handguns, handwands, mistblowers\*, lances and other handheld and motorized spray equipment used to direct the spray onto weed foliage.

*\*THIS PRODUCT IS NOT REGISTERED IN CA OR AZ FOR USE IN MISTBLOWERS.*



**Selective Equipment** — Shielded and hooded sprayers, wiper applicators and sponge bars. See the appropriate part of this section for specific instructions and rates of application.

**Injection Systems** — Aerial or ground injection sprayers.

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

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

## **AERIAL EQUIPMENT**

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

Apply the specified rates of this product in minimum 3 gallons of water per acre unless otherwise directed on this label. Unless otherwise specified, do not exceed 1 quart per acre. **Refer to the individual use area sections of this label for volumes, application rates, and further instructions.**

Avoid direct application to any body of water.

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

For aerial applications in California, refer to "AERIAL APPLICATION IN CALIFORNIA" section for specific instructions, restrictions and requirements.

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

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

## **AERIAL SPRAY DRIFT MANAGEMENT**

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops.

1. The distance of the outermost nozzles on the boom must not exceed three-fourths the length of the wingspan or rotor.
2. Nozzles must always point backward, parallel with the air stream and never be pointed downwards more than 45°. Observe more stringent regulations in states where applicable.

### **Importance of Droplet Size**

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

### **Controlling Droplet Size**

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

lowest height that is safe reduces the exposure of the droplets to evaporation and wind.

## **Swath Adjustment**

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Increase swath adjustment distance increase, with increasing drift potential (higher wind, smaller droplets, 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 below 2 mph due to variable wind direction and high inversion potential.

NOTE: Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect drift.

## **Temperature and Humidity**

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

## **Temperature Inversions**

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

## **Sensitive Areas**

Apply this product when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas). Avoid direct application to any body of water.

**\*Intended To Be Applied By Certified/Professional Applicators.**

## **AERIAL APPLICATION IN CALIFORNIA**

Avoid contact of herbicide with foliage, green stems, exposed non-woody roots or fruit of crops (except as specified for individual Roundup Ready® crops), desirable plants and trees, because severe injury or destruction may result.

See "USE INFORMATION" and "MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS" sections for essential product performance information.

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 disposing of equipment washwaters.

## **Aerial Equipment**

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, appropriate buffer zones must be maintained.

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:

1. Do not apply within 100 feet of all desirable vegetation or crop(s).
2. If wind up to 5 mph is blowing toward desirable vegetation or crop(s), do not apply within 500 feet of the desirable vegetation or crop(s).
3. Winds blowing from 5 to 10 mph toward desirable vegetation or crop(s) may require buffer zones in excess of 500 feet.
4. Do not apply when winds are in excess of 10 mph or when inversion conditions exist.
5. Apply by air only to non-residential areas.

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.

Drift control additives may be used. When a drift control additive is used, read and carefully observe the precautionary statements and all other information appearing on the additive label.

Ensure uniform application. To avoid streaking, uneven, or over-lapped 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 is most susceptible. The maintenance of an organic coating (paint) which meets aerospace specification MIL-C38413 may prevent corrosion.

### Crop Uses

Read and follow the specific labeling instructions for each crop.

Utilize allowable application rates and timing limitations that pertain to your specific cropping system and stage growth.

Aerial applications of this product are allowed in the following situations:

1. In fallow and reduced tillage systems prior to the emergence or transplanting of labeled crops.
2. In Alfalfa and Pasture renovation applications.
3. Over-the-top applications in Corn and Cotton with the Glyphosate-tolerant gene such as the Roundup Ready gene.
4. Pre-harvest in Alfalfa, Corn, Cotton, Wheat, Corn with Glyphosate-tolerant gene such as the Roundup Ready gene, and Cotton with the Roundup Ready gene.

Refer to the individual crop section on this label for specific application instructions for each crop.

Do not plant subsequent crops other than those listed in the label booklet for 30 days following application.

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

Use the specified rates of this product in 3 to 15 gallons of water per acre. When tank-mixing this product with 2,4-D for aerial applications, only 2,4-D amine formulations may be used. This tank-mixture may be used for fallow and reduced tillage systems and Alfalfa and pasture renovation applications only.

DO NOT EXCEED THE FOLLOWING MAXIMUM RATES WHEN MAKING AERIAL APPLICATIONS:

Crop	Maximum Rate per Acre
Corn, Glyphosate-Tolerant Corn, Wheat	1 qt.
Alfalfa, Cotton, Fallow, Glyphosate-Tolerant Cotton, Pastures, Reduced Tillage Systems	2 qts.

### AERIAL APPLICATIONS IN FRESNO COUNTY, CALIFORNIA ONLY

(Only from February 15 through March 31)

#### Applicable Area

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

#### Use Information For Aerial Applications in Fresno County

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 application of this product. Minimization of off-site movement is the responsibility of the grower, Pest Control Advisor, and aerial applicator.

#### Written Recommendations

A written recommendation MUST be submitted by or on behalf of the applicator to the Fresno County Agricultural Commissioner 24 hours prior to the application. This written recommendation MUST state the proximity of the surrounding crops, and that conditions of each manufacturer's applicable product label(s) and this label have been satisfied.

#### Aerial Applicator Training and Equipment

Aerial application of 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. Test and calibrate spray equipment at intervals sufficient to insure that proper rates of herbicides and adjuvants are being applied during commercial use. Applicator must document such calibrations and testing.

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 apply this product by air earlier than 30 minutes prior to sunrise and/or later than 30 minutes after sunset without prior permission from the Fresno County Agricultural Commissioner.

To report known or suspected misuse of this product, or for additional information on the proper aerial application of this product, call (901) 774-4370.

**Note:** For aerial application from April 1 through February 14, refer to "AERIAL APPLICATION IN CALIFORNIA" section of this label.

### GROUND BROADCAST EQUIPMENT

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

### CONTROLLED DROPLET APPLICATION (CDA)

The rate of this product applied per acre by vehicle-mounted 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 2 to 15 gallons of water per acre.

For the control of labeled annual weeds with handheld CDA units, apply a 20% solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 1.5 mph (1 qt. per acre). For the control of labeled perennial weeds, apply a 20 to 40% solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 0.75 mph (2 to 4 qts. 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.

### HANDHELD OR HIGH-VOLUME EQUIPMENT

Use coarse sprays only. 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. For control of annual weeds listed on this label, apply a 0.5% solution of this product to weeds less than 6 inches in height or runner length. Non-ionic surfactants or wetting agents labeled for use with herbicides may be added. Refer to "SURFACTANTS" under the "MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS" section of this label for additional use information. Apply prior to seedhead formation in grass or bud formation in broadleaf weeds. For annual weeds over 6 inches tall or unless otherwise specified, use a 1% solution.

On harder-to-control perennials such as Bermudagrass, Canada thistle, Dock, Field bindweed, Hemp dogbane and Milkweed, use a 2% solution for best results.

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

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

SPRAY SOLUTION						
Desired Volume	Amount of This Product					
	0.5%	1%	1.5%	2%	5%	10%
1 Gal.	0.66 fl. oz.	1.33 fl. ozs.	2 fl. ozs.	2.66 fl. ozs.	6.5 fl. ozs.	13 fl. ozs.
25 Gals.	1 pt.	1 qt.	1.5 qts.	2 qts.	5 qts.	10 qts.
100 Gals.	2 qts.	1 gal.	1.5 gals.	2 gals.	5 gals.	10 gals.
2 tbsps. = 1 fl. oz.						

### 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. Unless specified, do not mix this product with the concentrate of other products when using injection systems.

### SELECTIVE EQUIPMENT

This product may be applied through recirculating spray systems, shielded applicators, hooded sprayers, wiper applicators or sponge bars after dilution and thorough mixing with water to listed weeds

growing in any non-crop site specified on this label and only when specifically listed in cropping systems.

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

**AVOID CONTACT OF HERBICIDE WITH DESIRABLE VEGETATION.** Contact of the herbicide solution with desirable vegetation may result in damage or destruction. Adjust applicators so that the lowest spray stream or wiper contact point is at least 2 inches above the desirable vegetation. Droplets, mist, foam or splatter of the herbicide solution settling on desirable vegetation may result in discoloration, stunting or destruction.

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

### Recirculating Spray System:

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

### Shielded and Hooded Applicators:

When applied as directed under conditions described for shielded applicators, this product will control those weeds listed in "ANNUAL WEEDS" and "PERENNIAL WEEDS" under the "WEEDS CONTROLLED AND RATES" section of this label.

A hooded sprayer is a type of shielded applicator where the spray pattern is fully enclosed including top, sides, front and back, thereby shielding the crop from the spray solution. Keep shields on these sprayers adjusted to protect desirable vegetation. When applying to crops grown on raised beds, ensure that the hood is designed to completely enclose the spray solution. If necessary, extend the front and rear flaps of the hoods to reach the ground in deep furrows. **EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF HERBICIDE WITH DESIRABLE VEGETATION.**

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

Use hoods designed to minimize excessive dripping or runoff down the insides of the hoods. For best results, use a single, low pressure/ low drift flat-fan nozzle with an 80 to 95° spray angle positioned at the top center of the hood in a spray volume of 20 to 30 gallons per acre. These procedures will reduce the potential for crop injury:

- The spray hoods must be operated on the ground or skimming across the ground.
- Leave at least an 8 inch untreated strip over the drill row. For example, if the crop row width is 38 inches, the maximum width of the spray hood will be 30 inches.
- Maximum tractor speed: 5 mph to avoid bouncing of the spray hoods.
- Maximum wind speed: 10 mph.
- Use low-drift nozzles that provide uniform coverage within the treated area.

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

### Wiper Applicators:

When applied under the below conditions, this product controls and suppresses many weeds listed on this label including those listed below. Wiper applicators are devices that physically wipe appropriate amounts of this product directly onto the weed.

Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting desirable vegetation. Operate this equipment at ground speeds no greater than 5 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 2 applications are made in opposite directions. Avoid leakage or dripping onto desirable vegetation. Adjust height of applicator to ensure adequate contact with weeds. Keep wiping surfaces clean. Be aware that, on sloping ground, the herbicide solution may migrate causing dripping on the lower end and drying of the wicks on the upper end of a wiper applicator.

Do not use wiper equipment when weeds are wet.

Mix only the amount of solution to be used during a 1 day period, as reduced activity may result from use of leftover solutions. Clean wiper parts immediately after using this product by thoroughly flushing with water.

Do not add surfactant to the herbicide solution.

**For rope or sponge wick applicators** — Mix 4 quarts of this product in 2 gallons of water to prepare a 33% solution. Apply this solution to weeds listed in this section.

**For panel applicators and pressure feed systems** — Solutions ranging from 33 to 100% of this product in water may be used in panel wiper applicators.

When applied as directed, this product **CONTROLS** the following weeds:

Corn (Volunteer) Panicum (Texas) Sicklepod	Rye (Common) Shattercane Spanishneedles	Starbur, Bristly
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When applied as directed, this product **SUPPRESSES** the following weeds:

Beggarweed (Florida) Bermudagrass Dogbane (Hemp) Dogfennel Guineagrass Johnsongrass	Milkweed Nightshade (Silverleaf) Pigweed (Redroot) Ragweed (Common) Ragweed (Giant)	Smutgrass Sunflower Thistle (Canada) Thistle (Musk) Vaseygrass Velvetleaf
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## WEEDS CONTROLLED AND RATES

This herbicide controls many annual and perennial grasses and broadleaf weeds listed in the following sections.

### ANNUAL WEEDS

**Unless otherwise specified, use a minimum spray volume of 3 gallons per acre for ground and for aerial applications.**

Apply to actively growing annual weeds. Annual weeds are easiest to control when they are small. Older, mature (hardened) annual weed species may require higher rates even if they meet the size requirements. Do not tank-mix with soil residual herbicides when using these rates unless otherwise specified. For weeds that have been mowed, grazed or cut, allow regrowth to occur prior to treatment. This product may be used up to 48 fluid ounces (1.5 qts.) per acre where heavy weed densities exist.

Annual Weeds	Rate (Fl. Oz. / Ac.)				
	16	24	32	40	48
	Maximum Height/Length (Inches)				
Ammannia (Purple)	3	6	12	—	18
Anoda (Spurred)	—	2	3	5	8
Barley	18	18+	—	—	—
Barnyardgrass	—	3	6	7	9
Bassia (Fivehook)	—	—	6	—	—
Beggarweed (Florida)	—	5	8	—	—
Bittercress	12	20	—	—	—
Bluegrass (Annual)	10	—	—	—	—
Bluegrass (Bulbous)	6	—	—	—	—
Brome (Downy) <sup>1,2</sup>	6	12	—	—	—
Brome (Japanese)	6	12	24	—	—
Browntop (Panicum)	6	8	12	—	24
Buckwheat (Wild) <sup>3</sup>	—	1	2	—	—
Burcucumber	—	6	12	—	18
Buttercup	12	20	—	—	—
Carolina (Geranium)	—	—	4	—	9
Carpetweed	—	6	12	—	—
Cheat <sup>2</sup>	6	20	—	—	—
Chervil	20	—	—	—	—
Chickweed	—	12	18	—	—
Cocklebur	12	18	24	—	36
Copperleaf (Hophornbeam)	—	2	4	—	6
Copperleaf (Virginia)	—	2	4	—	6

(Continued)



(Cont.)					
Annual Weeds	Rate (Fl. Oz. / Ac.)				
	16	24	32	40	48
	Maximum Height/Length (Inches)				
Coreopsis (Plains)	—	6	12	—	18
Corn (Volunteer)	6	12	20	—	—
Corn speedwell	12	—	—	—	—
Crabgrass	3	6	12	—	—
Crowfootgrass	—	—	6	—	12
Cutleaf evening primrose	—	—	3	—	6
Devilsclaw (Unicorn plant)	—	3	6	—	—
Dwarf dandelion	12	—	—	—	—
Eastern manna grass	8	12	—	—	—
Eclipta	—	4	8	12	—
Fall panicum	4	—	6	—	12
False dandelion	—	20	—	—	—
Falseflax (Smallseed)	12	—	—	—	—
Fiddleneck	—	6	12	—	—
Field pennycress	6	12	—	—	—
Filaree	—	—	6	—	12
Fleabane (Annual)	6	20	—	—	—
Fleabane (Hairy) ( <i>Conyza bonariensis</i> )*	—	—	6	—	10
Fleabane (Rough)	3	6	12	—	—
Florida pusley	—	—	4	—	6
Foxtail (Bristly, Giant, Yellow)	6	12	20	—	—
Foxtail (Carolina)	10	—	—	—	—
Foxtail (Green)	12	—	—	—	—
Goatgrass (Jointed)	6	12	—	—	—
Goosegrass	—	3	6	—	12
Grain sorghum (Milo)	6	12	20	—	—
Groundcherry	—	3	6	—	9
Groundsel (Common)	—	6	10	—	—
Hemp (Sesbania)	—	2	4	6	8
Henbit	—	—	6	—	12
Horseweed/Marestail ( <i>Conyza canadensis</i> )*	—	6	12	—	18
Itchgrass	6	8	12	—	18
Jimsonweed	—	—	12	—	18
Johnsongrass (Seedling)*	6	12	18	—	24
Junglerice	—	3	6	7	9
Knotweed	—	—	6	—	12
Kochia**	—	3 to 6	12	—	—
Lambsquarters	—	6	12	—	20
Little barley	6	12	—	—	—
London rocket	6	—	24	—	—
Mayweed	—	2	6	12	18
Morningglory (Annual) ( <i>Ipomoea</i> spp.)	—	—	3	—	6
Mustard (Blue)	6	12	18	—	—
Mustard (Tansy)	6	12	18	—	—
Mustard (Tumble)	6	12	18	—	—
Mustard (Wild)	6	12	18	—	—
Nightshade (Black)	—	4	6	—	12
Nightshade (Hairy)	—	4	6	—	12
Oats	3	6	18	—	—
Pigweed*	—	12	18	24	—
Prickly lettuce	—	6	12	—	—
Purslane	—	—	3	—	6
Ragweed (Common)*	—	6	12	—	18
Ragweed (Giant)*	—	6	12	—	18
Red rice	—	—	4	—	—
Rye (Volunteer/Cereal) <sup>2</sup>	6	18	18+	—	—
Ryegrass*	—	—	6	—	12
Sandbur (Field)	6	12	—	—	—
Sandbur (Longspine)	6	12	—	—	—
Shattercane	6	12	20	—	—
Shepherdspurse	6	12	—	—	—
Sicklepod	—	2	4	—	8
Signalgrass (Broadleaf)	—	3	6	7	9
Smartweed (Lady's thumb)	—	—	6	—	9
Smartweed (Pennsylvania)	—	—	6	—	9
Sowthistle (Annual)	—	—	6	—	12
Spanishneedles	—	—	6	—	12
Speedwell (Purslane)	12	—	—	—	—
Sprangletop	6	12	20	—	—
Spurge (Prostrate)	—	6	12	—	—
Spurge (Spotted)	—	6	12	—	—
(Continued)					

(Cont.)					
Annual Weeds	Rate (Fl. Oz. / Ac.)				
	16	24	32	40	48
	Maximum Height/Length (Inches)				
Spurry (Umbrella)	6	—	—	—	—
Stinkweed	—	12	—	—	—
Sunflower	12	18	—	—	—
Swinecress	—	5	12	—	—
Teaweed/Prickly sida	—	2	4	—	6
Texas panicum	6	8	12	—	24
Thistle, Russian <sup>5</sup>	—	6	12	—	—
Velvetleaf	—	—	6	—	12
Virginia (Pepperweed)	—	18	—	—	—
Waterhemp	—	—	6	—	12
Wheat <sup>2</sup>	6	12	18	—	—
Wheat (Overwintered)	—	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> To control Downy brome in no-till systems, use 24 fl. ozs. of this product per acre. <sup>2</sup> Performance is better if application is made before this weed reaches the boot stage of growth. <sup>3</sup> To control Wild buckwheat in the cotyledon to 2 leaf stage, use 24 fl. ozs. of this product per acre. Use 32 fl. ozs. of this product per acre to control 2 to 4 leaf Wild buckwheat. For improved control of Wild buckwheat over 2 inches in size, use sequential treatments of 32 fl. ozs. followed by 32 fl. ozs. 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 on environmental conditions and spray coverage. Whenever possible, a tank-mixture with 2,4-D as described below may improve control. * A Glyphosate-resistant biotype has been confirmed. For additional information, refer to the "WEED RESISTANCE MANAGEMENT" section of this label. You may also visit the website, <a href="http://www.weedscience.org">www.weedscience.org</a> .					

#### Annual Weeds – Handheld or High-Volume Equipment

For control of annual weeds listed on this label, refer to the "HANDHELD OR HIGH VOLUME EQUIPMENT" section of this label for use directions.

#### Annual Weeds – In 10 to 40 Gallons of Water per Acre

Apply 1 to 2 quarts of this product per acre. Use 1 quart per acre if weeds are less than 6 inches tall, 1.5 quarts per acre if weeds are 6 to 12 inches tall and 2 quarts per acre if weeds are greater than 12 inches tall. These rates will provide control of Balsamapple\* plus the annual weeds listed under the "WEEDS CONTROLLED AND RATES" section of this label when water carrier volumes are 10 to 40 gallons per acre for ground applications. Older, mature (hardened) annual weed species may require higher rates even if they meet the size requirements.

\*Apply this product on Balsamapple with handheld equipment only.

#### Tank-Mixtures

#### Annual Weeds in Tank-mixtures with 2,4-D, Dicamba, or Picloram

This product at 12 to 16 fluid ounces plus 0.25 pound of Dicamba or 0.5 pound of 2,4-D or appropriate rate of Picloram per acre will control the following weeds:

Weeds (6 Inches Maximum Height or Length)	Weeds (12 Inches Maximum Height or Length)
Horseweed/Marestail	Cocklebur
Kochia*	Lambsquarters
Morningglory	Pigweed
Prickly lettuce	Thistle, Russian***
Wild buckwheat**	
* Controlled with Dicamba tank-mixture only. ** Controlled with Picloram tank-mixture only. *** Controlled with 2,4-D tank-mixture only.	

This product at 16 fluid ounces plus 0.5 pound of 2,4-D per acre will control the following weeds:

Weeds ( 6 Inches Maximum Height or Length)	
Ragweed (Common)	Smartweed (Pennsylvania)
Ragweed (Giant)	Velvetleaf

Refer to the specific product labels for crop rotation restrictions and precautionary statements for all products used in tank-mixtures. Some crop injury may occur if Dicamba or Picloram is applied within 45 days of planting.

DO NOT apply by air this product in tank-mixture with Dicamba in California.

### Annual Weeds – Tank-Mixtures with Atrazine for Fallow and Reduced Tillage Systems:

For use only in Colorado, Kansas, Nebraska, Oklahoma, Oregon, South Dakota, and Washington.

In Oregon and Washington, do not exceed 1 pound of Atrazine per acre. This product at 24 to 28 fluid ounces plus 1 to 2 pounds of Atrazine per acre will control the following weeds:

Barnyardgrass*	Lambsquarters	Thistle, Russian
Downy brome	Pigweed	Volunteer Wheat
Field sandbur	Prickly lettuce	Witchgrass
Green foxtail	Stinkgrass	
Kochia**	Tansy mustard	
* Requires 28 fl. ozs. of this product for control.		
** Add 0.125 lb. of Dicamba for control.		

### PERENNIAL WEEDS

Apply this product to actively growing perennial weeds. Best results are obtained when soil moisture is adequate for active weed growth. When using handheld or high volume application methods that result in less than complete coverage, use 5% solution of this product. When using handheld equipment for low volume directed spot treatments, use 5 to 10% solution of this product.

**Note:** If weeds have been mowed or tilled, do not treat until plants have resumed active growth and have reached the stages specified. Repeat treatments may be necessary to control weeds regenerating from underground parts or seed. Repeat treatments must be made prior to crop emergence.

The addition of 1 to 2% by weight dry Ammonium sulfate or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this product on perennial weeds. The improvement in the performance may be apparent where environmental stress is a concern. Refer to the "MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS" section of this label.

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

Perennial Weeds	Rate (Qts./Ac.)	Water (Gal./Ac.)	Handheld (% Solution)
Alfalfa	1 to 2	3 to 10	2
	Apply after the last hay cutting in the Fall. Allow Alfalfa to regrow to a height of 6 to 8 inches or more prior to treatment. Follow applications with deep tillage at least 7 days after treatment but before soil freeze-up.		
Alligatorweed	4	3 to 20	1.5
	For partial control, apply when most of the Alligatorweed is in bloom. Repeat applications will be required to maintain such control.		
Anise (Fennel)	—	—	1 to 2
	Apply as a spray-to-wet treatment. Optimum results are obtained when treatment is made at the bud to full-bloom stage of growth. Repeat applications may be needed in succeeding years to control plants arising from seeds.		
Bahigrass	3 to 5	3 to 20	2
	Apply when most Bahigrass have reached the early head stage.		

(Continued)

(Cont.)			
Perennial Weeds	Rate (Qts./Ac.)	Water (Gal./Ac.)	Handheld (% Solution)
Bentgrass*	1.5	10 to 20	2
	For suppression in grass seed production areas. For ground applications only. Ensure entire crown area has resumed growth prior to Fall applications. Bentgrass must have at least 3 inches of growth. Avoid tillage prior to treatment. For best results, till 7 to 10 days after application.		
Bermudagrass	3 to 5	3 to 20	2
	Apply 5 qts. of this product per acre for control. For partial control, apply 3 qts. per acre. Treat when Bermudagrass is actively growing and seedheads are present. Retreatment may be necessary to maintain control.		
Bermudagrass (Water) (Knotgrass)	1 to 1.5	5 to 10	2
	Apply when Knotgrass is 12 to 18 inches in length. Allow 7 or more days before tilling, flushing or flooding the field. <b>Fall applications only:</b> Apply 1 qt. of this product. Apply prior to frost on Knotgrass that is 12 to 18 inches in length.		
Bindweed (Field)	0.5 to 5	3 to 20	2
	Do not treat when Bindweed are under drought stress as good soil moisture is necessary for active growth. For control, apply 4 to 5 qts. of this product per acre West of the Mississippi River and 3 to 4 qts. East of the Mississippi River. Apply when weeds are at or beyond full bloom. For best results, apply in late Summer or Fall. Fall treatments must be applied before a killing frost. Also for control, apply 2 qts. of this product plus 0.5 lb. of Dicamba in 10 to 20 gals. of water per acre. Do not apply by air. For suppression on irrigated agricultural land, apply 1 to 2 qts. of this product plus 1 lb. of 2,4-D in 10 to 20 gals. of water per acre with ground equipment only. Make applications following harvest or in Fall fallow ground when Bindweed is actively growing and the majority of runners are 12 inches or more in length. The use of at least one irrigation will promote active Bindweed growth. Also, for suppression, apply 0.5 qt. (16 fl. ozs.) of this product plus 0.5 lb. of 2,4-D in 3 to 10 gals. of water per acre for ground applications and 3 to 5 gals. of water per acre for aerial applications. Apply by air in fallow and reduced tillage systems only. Delay applications until maximum emergence has occurred and when vines are between 6 to 18 inches in length. <b>California Only:</b> Apply 1 to 5 qts. of this product per acre. Actual rate needed for suppression or control will vary within this range depending on local conditions. For suppression on irrigated land where annual tillage is performed, apply 1 qt. of this product in 3 to 10 gals. of water per acre. Apply to Bindweed that has reached a length of 12 inches or greater. Allow maximum weed emergence and runner growth. Allow 3 or more days after application before tillage.		

(Continued)



(Cont.)			
Perennial Weeds	Rate (Qts./Ac.)	Water (Gal./Ac.)	Handheld (% Solution)
Bluegrass (Kentucky)	1 to 2	3 to 40	2
	Apply when weeds have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 1 to 1.5 qts. of this product plus 0.5 to 1% non-ionic surfactant by total spray volume in 3 to 10 gals. of water per acre. Apply when most have reached 4 to 12 inches in height. Allow 7 or more days after application before tillage.		
Blueweed (Texas)	3 to 5	3 to 40	2
	Apply 4 to 5 qts. of this product per acre West of the Mississippi River and 3 to 4 qts. per acre East of the Mississippi River. Apply when Blueweed are at or beyond full bloom. New leaf development indicates active growth. For best results, apply in late Summer or Fall. Fall treatments must be applied before a killing frost.		
Brackenfern	3 to 4	3 to 40	1 to 1.5
	Apply to fully expanded fronds that are at least 18 inches long.		
Bromegrass (Smooth)	1 to 2	3 to 40	2
	Apply 2 qts. of this product in 10 to 40 gals. of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 1 to 1.5 qts. of this product in 3 to 10 gals. of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height.		
Bursage (Woollyleaf)	—	3 to 20	2
	Apply 2 qts. of this product plus 0.5 lb. of Dicamba per acre for control. For partial control, apply 1 qt. of this product plus 0.5 lb. of Dicamba per acre. Apply when Bursage are producing new active growth which has been initiated by moisture for at least 2 weeks and when plants are at or beyond flowering.		
Canarygrass (Reed)	2 to 3	3 to 40	2
	For best results, apply when most of the Canarygrass have reached the boot-to-head stage of growth.		
Cattail	3 to 5	3 to 40	2
	Apply when most Cattail have reached the early head stage.		
Clover (Red, White)	3 to 5	3 to 20	2
	Apply when most Clover have reached the early bud stage. Also for control, apply 16 to 32 fl. ozs. of this product plus 0.5 to 1 lb. of 2,4-D in 3 to 10 gals. of water per acre.		
Cogongrass	3 to 5	10 to 40	2
	Apply when Cogongrass is at least 18 inches tall in late Summer or Fall. Due to uneven stages of growth and the dense nature of vegetation preventing good spray coverage, repeat treatments may be necessary to maintain control.		
Dallisgrass	3 to 5	3 to 20	2
	Apply when most plants have reached the early head stage.		
Dandelion	3 to 5	3 to 40	2
	Apply when most plants have reached the early bud stage of growth. Also for control, apply 0.5 qt. (16 fl. ozs.) of this product plus 0.5 lb. of 2,4-D in 3 to 10 gals. of water per acre.		
(Continued)			

(Cont.)			
Perennial Weeds	Rate (Qts./Ac.)	Water (Gal./Ac.)	Handheld (% Solution)
Dock (Curly)	3 to 5	3 to 40	2
	Apply when most plants have reached the early bud stage of growth. Also for control, apply 0.5 to 1 qt. (16 to 32 fl. ozs.) of this product plus 0.5 lb. of 2,4-D in 3 to 10 gals. of water per acre.		
Dogbane (Hemp)	4	3 to 40	2
	Apply when most plants have reached the late bud to flower stage of growth. Following crop harvest or mowing, allow weeds to regrow to a mature stage prior to treatment. For best results, apply in late Summer or Fall. For suppression, apply 0.5 qt. (16 fl. ozs.) of this product plus 0.5 lb. of 2,4-D in 3 to 10 gals. of water per acre for ground applications and 3 to 5 gals. of water per acre for aerial applications. Delay applications until maximum emergence of Dogbane has occurred.		
Fescue (Tall)	1 to 3	3 to 40	2
	Apply 3 qts. of this product per acre when most plants have reached boot-to-early seedhead stage of development. <b>Fall applications only:</b> Apply 1 qt. of this product in 3 to 10 gals. of water per acre. Apply to Fescue in the Fall when plants have 6 to 12 inches of new growth. A sequential application of 0.5 qt. (16 fl. ozs.) of this product per acre will improve long-term control and control seedlings germinating after Fall treatments or the following Spring.		
Fescue (except Tall)	3 to 5	3 to 20	2
	Apply when most plants have reached the early head stage.		
Guineagrass	2 to 3	3 to 40	1
	Apply when most plants have reached at least the 7 leaf stage of growth. Ensure thorough coverage when using handheld equipment. In Texas and ridge of Florida, use 2 qts. for control. In the Flatwoods region of Florida, 3 qts. is required for control.		
Horsenettle	3 to 5	3 to 20	2
	Apply when most plants have reached the early bud stage.		
Horseradish	4	3 to 40	2
	Apply when most plants have reached the late bud to flower stage of growth. For best results, apply in late Summer or Fall.		
Iceplant	2	—	1.5 to 2
	Iceplant should be at or beyond the early bud stage of growth. Thorough coverage is necessary for best control.		
Jerusalem artichoke	3 to 5	3 to 20	2
	Apply when most plants are in the early bud stage.		
(Continued)			

(Cont.)			
Perennial Weeds	Rate (Qts./Ac.)	Water (Gal./Ac.)	Handheld (% Solution)
Johnsongrass	0.5 to 3	3 to 40	1
	In annual cropping systems, apply 1 to 2 qts. of this product per acre. Apply 1 qt. of this product in 3 to 10 gals. of water per acre. Use 2 qts. of this product when applying 10 to 40 gals. of water per acre. In non-crop or areas where annual tillage (no-till) is not practiced, apply 2 to 3 qts. of this product in 10 to 40 gals. of water per acre. For best results, apply when most plants have reached the boot-to-head stage of growth or in the Fall prior to frost. Allow 7 or more days after application before tillage. Do not tank-mix with residual herbicides when using 1 qt. of this product per acre. For burndown of Johnsongrass, apply 0.5 qt. of this product in 3 to 10 gals. of water per acre before the plants reach a height of 12 inches. For this use, allow at least 3 days after treatment before tillage. For spot treatment (partial control or suppression), apply a 1% solution of this product when Johnsongrass is 12 to 18 inches in height. Coverage should be uniform and complete.		
Kikuyugrass	2 to 3	3 to 40	2
	Spray when most Kikuyugrass is at least 8 inches in height (3 or 4 leaf stage of growth). Allow 3 or more days after application before tillage.		
Knapweed	4	3 to 40	2
	Apply when most Knapweed have reached the late bud to flower stage of growth. For best results, apply in late Summer or Fall.		
Lantana	—	—	1 to 1.25
	Apply to actively growing Lantana at or beyond the bloom stage of growth. Use the higher application rate for Lantana that have reached the woody stage of growth.		
Lespedeza	3 to 5	3 to 20	2
	Apply when most Lespedeza have reached the early bud stage.		
Milkweed (Common)	3	3 to 40	2
	Apply when most Milkweed have reached the late bud to flower stage of growth.		
Muhly (Wirestem)	1 to 2	3 to 40	2
	Use 1 qt. of this product in 3 to 10 gals. of water per acre. Use 2 qts. of this product when applying 10 to 40 gals. of water per acre or in pasture, sod, or non-crop areas. Spray when the Wirestem muhly is 8 inches or more in height. Do not till between harvest and Fall applications or in the Fall or Spring prior to Spring applications. Allow 3 or more days after application before tillage.		
Mullein (Common)	3 to 5	3 to 20	2
	Apply when most Mullein are in the early bud stage.		
Napiergrass	3 to 5	3 to 20	2
	Apply when most Napiergrass are in the early head stage.		
Nightshade (Silverleaf)	2	3 to 10	2
	Apply when at least 60% of Nightshade has berries. Fall treatments must be applied before a killing frost.		
(Continued)			

(Cont.)			
Perennial Weeds	Rate (Qts./Ac.)	Water (Gal./Ac.)	Handheld (% Solution)
Nutsedge (Purple, Yellow)	0.5 to 3	3 to 40	1 to 2
	Apply 3 qts. of this product per acre or apply a 1 to 2% solution for control of Nutsedge plants and immature nutlets attached to treated plants. Treat when Nutsedge are in flower or when new nutlets can be found at rhizome tips. Nutlets that have not germinated will not be controlled and may germinate following treatment. Repeat treatments will be required for long-term control of ungerminated tubers. <b>Sequential applications:</b> 1 to 2 qts. of this product in 3 to 10 gals. of water per acre will also provide control. Make applications when a majority of the plants are in the 3 to 5 leaf stage (less than 6 inches tall). Repeat this application, as necessary, when newly emerging plants reach the 3 to 5 leaf stage. Subsequent applications will be necessary for long-term control. For partial control of existing plants, apply 1 pint to 2 qts. of this product in 3 to 40 gals. of water per acre. Treat when plants have 3 to 5 leaves and most are less than 6 inches tall. Repeat treatments will be required to control subsequent emerging plants or regrowth of existing plants.		
Orchardgrass	1 to 2	3 to 40	2
	Apply 2 qts. of this product in 10 to 40 gals. of water per acre when most Orchardgrass have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 1 to 1.5 qts. of this product in 3 to 10 gals. of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height. <b>Orchardgrass sods going to no-till Corn:</b> Apply 1 to 1.5 qts. of this product in 3 to 10 gals. of water per acre. Apply to Orchardgrass that is a minimum of 12 inches tall for Spring applications and 6 inches tall for Fall applications. Allow at least 3 days following application before planting. A sequential application of Atrazine will be necessary for optimum results.		
Pampasgrass	3 to 5	—	1.5 to 2
	Apply when Pampasgrass is at or beyond the boot stage of growth. Thorough coverage is necessary for best control.		
Paragrass	3 to 5	3 to 40	2
	Apply when most Paragrass are in the early head stage.		
Phragmites	3 to 5	10 to 40	1 to 2
	For partial control and for best results, treat during late Summer or Fall when Phragmites are actively growing and in full bloom. Treatment before or after this stage may lead to reduced control. Due to the dense nature of the vegetation, which may prevent good spray coverage or uneven stages of growth, repeat treatments may be necessary to maintain control. Visual control symptoms will be slow to develop.		
(Continued)			

<b>(Cont.)</b>			
<b>Perennial Weeds</b>	<b>Rate (Qts./Ac.)</b>	<b>Water (Gal./Ac.)</b>	<b>Handheld (% Solution)</b>
Poison hemlock	2 to 4	—	1 to 2
	Apply as a spray-to-wet treatment. Optimum results are obtained when Poison hemlock are treated at the bud to full-bloom stage of growth.		
Pokeweed (Common)	1	3 to 40	2
	Apply to actively growing Pokeweed up to 24 inches tall.		
Quackgrass	1 to 3	3 to 40	2
	In annual cropping systems, or in pastures and sods followed by deep tillage, apply 1 qt. of this product in 3 to 10 gals. of water per acre. For 10 to 40 gals. of water per acre, apply 2 qts. of this product. Do not tank-mix with residual herbicides when using 1 qt. of this product per acre. Spray when Quackgrass is 6 to 8 inches in height. Do not till between harvest and Fall applications or in Fall or Spring prior to Spring application. Allow 3 or more days after application before tillage. In pastures or sods, use a moldboard plow for best results.  In pastures, sods or non-crop areas where deep tillage does not follow application, apply 2 to 3 qts. of this product in 10 to 40 gals. of water per acre when the Quackgrass is more than 8 inches tall.		
Redvine	0.75 to 2	5 to 10	2
	For suppression, apply 0.75 qt. (24 fl. ozs.) of this product per acre at each of two applications 7 to 14 days apart or a single application of 2 qts. per acre. Apply labeled rates in 5 to 10 gals. of water per acre. Apply in late September or early October to Redvine that are at least 18 inches tall and have been growing 45 to 60 days since the last tillage operation. Make applications at least 1 week before a killing frost.		
Reed (Giant)	4 to 5	—	2
	Best results are obtained when applications are made in late Summer to Fall.		
Ryegrass (Perennial)	1 to 3	3 to 40	1
	In annual cropping systems, apply 1 to 2 qts. of this product per acre. Apply 1 qt. of this product in 3 to 10 gals. of water per acre. Use 2 qts. of this product when applying 10 to 40 gals. of water per acre. In non-crop or areas where annual tillage (no-till) is not practiced, apply 2 to 3 qts. of this product in 10 to 40 gals. of water per acre. For best results, apply when most plants have reached the boot-to-head stage of growth or in the Fall prior to frost. Do not tank-mix with residual herbicides when using 1 qt. of this product per acre.		
Smartweed (Swamp)	3 to 5	3 to 40	2
	Apply when most Smartweed have reached the early bud stage of growth. Also for control, apply 0.5 qt. (16 fl. ozs.) of this product plus 0.5 lb. of 2,4-D in 3 to 10 gals. of water per acre in the late Summer or Fall.		
Sowthistle (Perennial)	2 to 3	3 to 40	2
	Apply when most Sowthistle are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late Summer or Fall, allow at least 4 weeks for initiation of active growth and rosette development prior to the application of this product. Fall treatments must be applied before a killing frost. Allow 3 or more days after application before tillage.		
<b>(Continued)</b>			

(Cont.)			
Perennial Weeds	Rate (Qts./Ac.)	Water (Gal./Ac.)	Handheld (% Solution)
Spurge (Leafy)	—	3 to 10	2
	For suppression, apply 0.5 qt. (16 fl. ozs.) of this product plus 0.5 lb. of 2,4-D in 3 to 10 gals. of water per acre in the late Summer or Fall. If mowing has occurred prior to treatment, apply when most of the plants are 12 inches tall.		
Starthistle (Yellow)	2	10 to 40	2
	Best results are obtained when applications are made during periods of active growth including rosette, bolting and early flower stages.		
Sweet potato (Wild)	—	—	2
	For partial control, apply to Wild sweet potato at or beyond the bloom stage of growth. Repeat applications may be required.		
Thistle (Artichoke)	2 to 3	—	2
	For partial control, apply to Thistle at or beyond the bloom stage of growth. Repeat applications may be required.		
Thistle (Canada)	2 to 3	3 to 40	2
	Apply when most Canada thistles are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late Summer or Fall, allow at least 4 weeks for initiation of active growth and rosette development prior to the application of this product. Fall treatments must be applied before a killing frost. Allow 3 or more days after application before tillage. For suppression in the Spring, apply 1 qt. of this product, or 0.5 qt. (16 fl. ozs.) of this product plus 0.5 lb. of 2,4-D in 3 to 10 gals. of water per acre. Allow rosette regrowth to a minimum of 6 inches in diameter before treating. Applications can be made as long as leaves are still green and plants are actively growing at the time of application. Allow 3 or more days after application before tillage.		
Timothy	2 to 3	3 to 40	2
	For best results, apply when most Timothy have reached the boot-to-head stage of growth.		
Torpedograss	4 to 5	3 to 40	2
	For partial control, apply when most Torpedograss are at or beyond the seedhead stage of growth. Repeat applications will be required to maintain control. Fall treatments must be applied before frost.		
Trumpetcreeper	2 to 3	5 to 10	2
	For partial control, apply in late September or October to Trumpetcreeper that are at least 18 inches tall and have been growing 45 to 60 days since the last tillage operation. Apply at least 1 week before a killing frost.		
Vaseygrass	3 to 5	3 to 20	2
	Apply when most Vaseygrass are in the early head stage.		
Velvetgrass	3 to 5	3 to 20	2
	Apply when most Velvetgrass are in the early head stage.		
Wheatgrass (Western)	2 to 3	3 to 40	2
	For best results, apply when most Wheatgrass have reached the boot-to-head stage of growth.		
* For improved control of Bentgrass, apply this product at 2 to 4 qts. per acre broadcast in tank-mixture with Clethodim, Fluazifop-p-butyl, Fluazifop-p-butyl + Fenoxaprop-p-ethyl or Sethoxydim. For spot treatment, apply this product at the rate of 2.66 fl. ozs. in 1 gal. of water in tank-mixture with these herbicides and spray-to-wet. Refer to the label of the tank-mix product for use directions and precautions. Follow the most restrictive label.			



## WOODY BRUSH AND TREES

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

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

Unless otherwise directed, apply broadcast treatments in minimum 3 gallons of water per acre.

When using handheld equipment, ensure thorough coverage. Use 5 to 10% solution of this product when using handheld or high volume application methods that result in less than complete coverage.

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

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

Woody Brush/Tree Species	Rate (Qts./Ac.)	Handheld (% Solution)
Alder	3 to 4	1 to 1.5
Ash*	2 to 5	1 to 2
Aspen (Quaking)	2 to 3	1 to 1.5
Bearmat (Bearclover)*	2 to 5	1 to 2
Beech*	2 to 5	1 to 2
Birch	2 to 3	1 to 1.5
Blackberry	3 to 4	1 to 1.5
Apply after plants have reached full leaf maturity. Best results are obtained when applications are made in late Summer or Fall. Applications may also be made after leaf drop and until a killing frost or as long as stems are green. After berries have set or dropped in late Fall, Blackberry can be controlled by applying a 0.75% solution of this product. For control of Blackberries after leaf drop and until killing frost or as long as stems are green, apply 3 to 4 qts. of this product in 10 to 40 gals. of water per acre.		
Blackgum	2 to 5	1 to 2
Bracken	2 to 5	1 to 2
Broom (French, Scotch)	2 to 5	1.5 to 2
Buckwheat (California)*	2 to 4	1 to 2
For best results, thorough coverage of foliage is necessary.		
Cascara*	2 to 5	1 to 2
Catsclaw	—	1 to 1.5
Ceanothus*	2 to 5	1 to 2
Chamise*	2 to 5	1
Cherry (Bitter, Black, Pin)	2 to 3	1 to 1.5
Coyote brush	3 to 5	1.5 to 2
Apply when at least 50% of the new leaves are fully developed.		
Dogwood*	2 to 5	1 to 2
Dewberry	3 to 4	1 to 1.5
Elderberry	2 to 3	1 to 1.5
Elm*	2 to 5	1 to 2
Eucalyptus	—	2
For control of Eucalyptus resprouts, apply when resprouts are 6 to 12 feet tall. Ensure complete coverage. Avoid application to drought-stressed plants.		
Florida holly (Brazilian peppertree)*	2 to 5	1 to 2
Gorse*	2 to 5	1 to 2
Hasardia*	2 to 4	1 to 2
For best results, thorough coverage of foliage is necessary.		
Hawthorn	2 to 3	1 to 1.5
Hazel	2 to 3	1 to 1.5
Hickory*	2 to 5	1 to 2
Honeysuckle	3 to 4	1 to 1.5
Hornbeam (American)*	2 to 5	1 to 2
Kudzu	4 to 5	2
Repeat applications may be required to maintain control.		

(Continued)

(Cont.)		
Woody Brush/Tree Species	Rate (Qts./Ac.)	Handheld (% Solution)
Locust (Black)*	2 to 4	1 to 2
Madrone resprouts*	—	2
Apply to resprouts that are 3 to 6 feet tall. Best results are obtained with Spring/early Summer treatments.		
Manzanita*	2 to 5	1 to 2
Maple (Red)	2 to 4	1 to 1.5
Apply 1 to 1.5% solution when at least 50% of the new leaves are fully developed. For partial control, apply 2 to 4 qts. of this product per acre.		
Maple (Sugar)	—	1 to 1.5
Apply when at least 50% of the new leaves are fully developed.		
Monkey flower*	2 to 4	1 to 2
Thorough coverage of foliage is necessary for best results.		
Oak (Black, White)*	2 to 4	1 to 2
Oak (Post)	3 to 4	1 to 1.5
Oak (Northern)	—	1 to 1.5
Apply when at least 50% of the new leaves are fully developed.		
Oak (Southern, Red)	2 to 3	1 to 1.5
Persimmon*	2 to 5	1 to 2
Pine	2 to 5	1 to 2
Poison ivy / Poison oak	4 to 5	2
Repeat applications may be required to maintain control. Fall treatments must be applied before leaves lose green color.		
Poplar (Yellow)*	2 to 5	1 to 2
Raspberry	3 to 4	1 to 1.5
Redbud (Eastern)	2 to 5	1 to 2
Rose (Multiflora)	2	1
On Poplar, Redbud and Rose (Multiflora), apply prior to leaf deterioration by leaf-eating insects.		
Russian olive*	2 to 5	1 to 2
Sage (Black)	2 to 4	1
For best results, thorough coverage of foliage is necessary.		
Sage (White)*	2 to 5	1 to 2
Sage brush (California)	2 to 4	1
For best results, thorough coverage of foliage is necessary.		
Salmonberry	2 to 3	1 to 1.5
Saltcedar*	2 to 5	1 to 2
Sassafras*	2 to 5	1 to 2
Sourwood*	2 to 5	1 to 2
Sumac (Poison, Smooth, Winged)*	2 to 4	1 to 2
Sweetgum	2 to 3	1 to 1.5
Swordfern*	2 to 5	1 to 2
Tallowtree (Chinese)	—	1
For best results, thorough coverage of foliage is necessary.		
Tan oak resprouts*	—	2
Apply to resprouts that are less than 3 to 6 feet tall. Best results are obtained with Fall applications.		
Thimbleberry	2 to 3	1 to 1.5
Tobacco (Tree)*	2 to 4	1 to 2
Trumpet creeper	2 to 3	1 to 1.5
Vine maple*	2 to 5	1 to 2
Virginia creeper	2 to 5	1 to 2
Wax myrtle (Southern)*	2 to 5	1 to 2
Willow	3 to 4	1 to 1.5
* Partial control		

## USE DIRECTIONS FOR ANNUAL AND PERENNIAL CROPS

**NOTE: THIS SECTION GIVES DIRECTIONS THAT APPLY TO ALL LISTED CROPS BELOW. SEE THE INDIVIDUAL CROP CATEGORIES FOR SPECIFIC INSTRUCTIONS, PRE-HARVEST INTERVAL (PHI), AND ADDITIONAL PRECAUTIONS AND RESTRICTIONS.**

### TYPES OF APPLICATIONS:

Chemical Fallow, Pre-plant Fallow Beds, Pre-plant, Pre-emergence, At-Planting, Hooded Sprayers in Row Middles, Shielded Sprayers in Row Middles, Wiper Applications in Row Middles, and Post-harvest Treatments.

### USE INSTRUCTIONS:

Apply this product during fallow intervals preceding planting, prior to planting or transplanting, at-planting, or pre-emergent to annual and perennial crops listed in this label, except where specifically

limited. For any crop not listed in this label, applications must be made at least 30 days prior to planting. Unless otherwise specified, weed control applications may be made according to the rates listed for annual and perennial weeds and woody brush and trees in the *"WEEDS CONTROLLED AND RATES"* section of this label. Repeat applications may be made up to a maximum of 8 quarts per acre per year.

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

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

#### **USE PRECAUTIONS:**

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 pre-emergence and at-planting applications, applications must be made before crop emergence to avoid severe crop injury. Broadcast applications made at emergence will result in injury or death to emerged seedlings. Apply before seed germination in *Coarse sandy soils* to further minimize the risk of injury.

In crops where spot treatments are allowed, treat less or equal to 10% of the total field to be harvested. The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside the target area for the same reason.

#### **USE RESTRICTIONS:**

Unless otherwise specified in this product's labeling, treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest. Post-harvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop. See *"APPLICATION EQUIPMENT AND TECHNIQUES"* section of this label for additional information.

For broadcast post-emergent treatments, do not harvest or feed treated vegetation for 8 weeks following application, unless otherwise specified.

### **Cereal and Grain Crops**

**[Barley, Buckwheat, Millet (Pearl, Proso), Oats, Rice, Rye, Quinoa, Teff, Teosinte, Triticale, Wheat (All types), Wild Rice]**

USE RESTRICTIONS: Do not treat Rice fields or levees when field contains water/floodwater.

TYPES OF APPLICATIONS: Those listed above in *"USE DIRECTIONS FOR ANNUAL AND PERENNIAL CROPS"* plus the following: Red Rice Control Prior to Planting Rice, Spot Treatment (except Rice), Over-the-top Wiper Applications (Feed Barley and Wheat Only), Pre-harvest (Feed Barley and Wheat Only).

#### **Pre-plant, Pre-emergence, At-planting Applications:**

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

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

Apply 1.5 quarts of this product in 5 to 10 gallons of water per acre. Flush fields prior to application to obtain uniform germination and stand of Red rice. Make application when the majority of the Red rice plants are in the 2 leaf stage and no more than 4 inches tall. Red rice plants with less than 2 true leaves may be only partially controlled.

USE PRECAUTIONS: Avoid spraying during low humidity conditions, as reduced control may result.

USE RESTRICTIONS: Do not reflood treated fields for 8 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.

USE PRECAUTIONS: Treat less than or equal to 10% of the total field area to be harvested. The crop receiving spray in the treated area will be killed. Take care to avoid drift or spray outside target area.

USE RESTRICTIONS: Do not treat Rice fields or levees when the fields contain floodwater.

### **Over-the-top Wiper Applications (Feed Barley and Wheat Only):**

Wiper applications may be used in feed Barley and Wheat. 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 crop.

USE RESTRICTIONS: Allow at least 35 days between application and harvest. Do not use roller applicators.

### **Pre-harvest Applications (Feed Barley and Wheat 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% or less grain moisture). For feed Barley, apply after the hard-dough stage and when the grain contains 20% 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 gallons of water per acre. For aerial applications, apply this product in 3 to 10 gallons of water per acre.

USE PRECAUTIONS: Pre-harvest application to Wheat or Barley grown for seed may reduce in germination or vigor.

USE RESTRICTIONS: Do not apply more than 1 quart of this product per acre. Allow 7 days between application and harvest or grazing.

### **Post-harvest Applications:**

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

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

### **Non-selective Control of Annual Weeds in Small Grain**

#### **Cropping Systems (South Dakota Only):**

Refer to the *"WEEDS CONTROLLED AND RATES"* section of this label for rates and weeds controlled. Apply in 3 to 5 gallons of water per acre by ground and 2 to 3 gallons of water per acre for aerial applications.

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

Do not allow the herbicide solution to mist, drip, drift, or splash onto desirable vegetation since minute quantities of this herbicide 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 is greatest when winds are gusty or in excess of 5 mph or when other conditions, including lesser wind velocities, will allow spray drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) that are likely to drift. AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE. **Note:** To prevent injury to adjacent desirable vegetation, appropriate buffer zones must be maintained.

Adjust boom height on ground equipment to prevent streaked, overlapped or uneven applications. Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations that dispense spray as fine spray droplets. In aerial applications, do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure. Ensure uniform application. Use appropriate marking devices when applying herbicides by air. Avoid spraying when weeds are subject to moisture stress, when dust is on foliage, or when straw canopy covers the weeds.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residue 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 PART. LANDING GEAR IS MOST SUSCEPTIBLE. The maintenance of an organic coating (paint) which meets aerospace specification MIL-C-38413 may prevent corrosion.

### **Corn**

**[Field, Pop, Seed, Silage, Sweet]**

TYPES OF APPLICATIONS: Those listed in *"USE DIRECTIONS FOR ANNUAL AND PERENNIAL CROPS"* plus the following: Pre-harvest.

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

### Pre-plant, Pre-emergence, At-planting Applications:

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

### Tank-Mixtures:

Apply these tank-mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre. Individual tank-mix product must be registered for use on this site. When tank-mixing, do not exceed specified application rates and use only in accordance with the most restrictive instructions on the respective product labels.

2,4-D	Flufenacet	Metolachlor	Thifensulfuron
Acetochlor	Flumetsulam	Nicosulfuron	Topramezone
Alachlor	Glufofenate	Pendimethalin	Tembotrione
Atrazine	Imazethapyr	Prosulfuron	Thiencarbazone/ Isoxaflutole
Bromoxynil	Isoxaflutole	Pyroxasulfone	
Dicamba	Linuron	Rimsulfuron	
Diflufenzopyr	Mesotrione	Saflufenacil	
Dimethenamid-P	Metribuzin	Simazine	

For difficult-to-control annual weeds such as Barnyardgrass, Crabgrass, Fall panicum, Shattercane and broadleaf Signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 1 quart per acre in these tank-mixtures. For other labeled annual weeds, apply 0.75 to 1 quart of this product per acre when weeds are less than 6 inches tall, and 1 to 1.5 quarts when weeds are over 6 inches tall.

When using nitrogen solutions as the carrier, use rate may need to be increased for acceptable weed control.

USE RESTRICTIONS: Applications of 2,4-D or Dicamba must be made at least 7 days prior to planting Corn.

For Southern states, do not apply in nitrogen solutions to tough-to-control grasses such as Barnyardgrass, Fall panicum, Broadleaf signalgrass, Annual Ryegrass and any perennial weeds. The area covered includes from Route 50 South in Illinois and Indiana and the following states: 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 instruction for the use of hooded sprayers in the “*APPLICATION EQUIPMENT AND TECHNIQUES*” section of this label.

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

USE RESTRICTIONS: Do not apply more than 1 quart of this product per acre for each application and no more than 3 quarts per acre per year for hooded sprayer applications. Corn must be at least 12 inches tall, measured without extending leaves.

### Spot Treatment:

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

USE PRECAUTIONS: Treat less than or equal to 10% of the total field area to be harvested. The crop receiving spray in the treated area will be killed. Take care to avoid drift or spray outside target area.

### Pre-harvest Applications:

Make applications at 35% 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 3 quarts of this product per acre. For aerial applications, apply up to 2 quarts of this product per acre.

USE PRECAUTIONS: Pre-harvest application to Corn grown for seed may reduce germination or vigor.

USE RESTRICTIONS: Allow a minimum of 7 days between application and harvest.

### Post-harvest Applications:

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

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

## Cotton

TYPES OF APPLICATIONS: Those listed in “*USE DIRECTIONS FOR ANNUAL AND PERENNIAL CROPS*” plus the following: Selective equipment, Spot Treatment, Pre-harvest.

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

### Pre-plant, Pre-emergence, At-planting Applications:

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

TANK-MIXTURES: Apply these tank-mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre. Individual tank-mix product must be registered for use on this site. When tank-mixing, do not exceed specified application rates and use only in accordance with the most restrictive instructions on the respective product labels.

2,4-D	Diuron	Fomesafen	Prometryn
Clomazone	Flumioxazin	Metolachlor	Pyriithiobac
Dicamba	Fluometuron	Pendimethalin	Trifluralin

### Hooded Sprayer, Selective Equipment:

This product may be applied through hooded sprayers, shielded applicators or wiper applicators in Cotton.

USE RESTRICTIONS: Allow at least 7 days between application and harvest.

USE PRECAUTIONS: See the “*SELECTIVE EQUIPMENT*” section of this label for information on proper use and calibration of this equipment.

### Spot Treatment:

For spot treatments, apply this product prior to boll opening of Cotton.

USE PRECAUTIONS: Treat less than or equal to 10% of the total field area to be harvested. The crop receiving spray in the treated area will be killed. Take care to avoid drift or spray outside target area.

### Pre-harvest Applications:

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 WEEDS*”, “*PERENNIAL WEEDS*”, and “*WOODY BRUSH AND TREES*” sections of this label.

For Cotton regrowth inhibition, apply 0.5 to 2 quarts of this product per acre. Up to 2 quarts of this product may be applied using either aerial or ground spray equipment. 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-MIXTURES: This product may be tank-mixed with Tribufos, Thidiazuron + Diuron, or Ethepon to provide additional enhancement of Cotton leaf drop.

USE RESTRICTIONS: Allow a minimum of 7 days between application and harvest of Cotton. Pre-harvest application to Cotton grown for seed may reduce germination or vigor. THE USE OF ADDITIVES, OTHER THAN THOSE LISTED ON THIS LABEL, FOR PRE-HARVEST APPLICATION TO COTTON IS PROHIBITED.

## Fallow and Reduced Tillage Systems

### Fallow Systems

TYPES OF APPLICATIONS: Chemical Fallow, Pre-plant 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. 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. Tank-mixtures with 2,4-D and Dicamba may be used. Applications up to 2 quarts per acre may be made by aerial application in fallow sites where there is sufficient buffer to prevent injury due to drift onto adjacent crops.

USE PRECAUTIONS: Some crop injury may occur if Dicamba is applied within 45 days of planting.

USE RESTRICTIONS: For any crop not listed on this label, applications must be made at least 30 days prior to planting. Do not apply Dicamba tank-mixtures by air in California.

Refer to the specific product labels for crop rotation restrictions and precautionary statements of all products used in tank-mixtures.



### Pre-plant Applications on 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, applications must be made at least 30 days prior to planting. This product will control weeds listed in the "WEEDS CONTROLLED AND RATES" section of this label.

USE RESTRICTIONS: For any crop not listed on this label, applications must be made at least 30 days prior to planting. Do not apply Dicamba tank-mixtures by air in California.

Refer to the specific product labels for crop rotation restrictions and precautionary statements of all products used in tank-mixtures.

TANK-MIXTURES:

**12 fluid ounces of this product plus appropriate rate of Oxyfluorfen per acre will control the following weeds:**

Weeds (3 Inches Maximum Height or Length)	Weeds (6 Inches Maximum Height or Length)
Cheeseweed (Common) Chickweed Groundsel	London rocket Shepherdspurse

**16 fluid ounces of this product plus appropriate rate of Oxyfluorfen per acre will control the following weeds:**

Weeds (6 Inches Maximum Height or Length)	Weeds (12 Inches Maximum Height or Length)
Cheeseweed (Common) Groundsel Horseweed/Marestail ( <i>Conyza canadensis</i> )	Chickweed London rocket Shepherdspurse

When tank-mixing, do not exceed specified application rates and use only in accordance with the most restrictive instructions on the respective product labels.

### Reduced Tillage Systems

Use this product in reduced-tillage systems for control of annual weeds prior to emergence of crops listed in this label. Refer to the "WEEDS CONTROLLED AND RATES" section of this label for specific rates. See the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for instructions.

#### Tank-Mixtures of This Product:

plus Dicamba plus non-ionic surfactant  
plus 2,4-D plus non-ionic surfactant  
plus Oxyfluorfen plus non-ionic surfactant

USE RESTRICTIONS: DO NOT APPLY DICAMBA TANK-MIXTURES BY AIR IN CA.

This product may be tank-mixed with the products listed, provided the product tank-mixed is registered for use on the listed site. Applications of 2,4-D or Dicamba must be made at least 7 days prior to planting Corn.

The addition of Dicamba in a mixture with this product may provide short-term residual control of selected weed species. Some crop injury may occur if Dicamba is applied within 45 days of planting. Refer to the Dicamba and 2,4-D labels for cropping restrictions and other use instructions.

#### This Product Alone or in Tank-mixture with Oxyfluorfen

This product alone or in tank-mixtures with Oxyfluorfen plus 0.5 to 1% non-ionic surfactant by total spray volume will provide control of the weeds listed below. Make applications when weeds are actively growing or at their specified stages of growth. Avoid spraying when weeds are subject to moisture stress, when dust is on the foliage or when straw canopy covers the weeds. These tank-mixtures may be applied using ground or aerial spray equipment.

This Product* (12 Fl. Ozs./Ac.)	
Weed	Maximum Height or Length
Barnyardgrass, Bluegrass (Annual), Rye	6 inches
Barley	12 inches
Wheat	18 inches
This Product* (16 Fl. Ozs./Ac.)	
Weeds (Above) Plus:	
Chickweed, Groundsel, London rocket, Horseweed/Marestail ( <i>Conyza canadensis</i> ), Ryegrass (Annual), Shepherdspurse	6 inches
Crabgrass, Johnsongrass (Seedling), Lambsquarters, Oats (Wild), Pigweed (Redroot), Mustards	12 inches
This Product* (12 Fl. Ozs.) + Appropriate Rate of Oxyfluorfen** Per Ac.	
Weeds (Above) Plus:	
Cheeseweed (Common), Chickweed, Groundsel	3 inches
London rocket, Shepherdspurse	6 inches
This Product* (12 Fl. Ozs.) + Appropriate Rate of Oxyfluorfen** Per Ac.	
Weeds (Above) Plus:	
Cheeseweed (Common), Groundsel	6 inches
Chickweed, London rocket, Shepherdspurse	12 inches
* Use 32 fl. ozs. (1 qt.) of this product per acre where heavy weed densities exist.	
** Use the higher rate of Oxyfluorfen when weeds approach maximum stated height or stands are dense.	

### Ecofarming Systems

The Ecofarming System consists of the following rotation: Winter Wheat, Corn/Sorghum, Ecofallow.

Use the tank-mixtures below for control of emerged annual weeds before planting Corn or Sorghum in the Ecofarming System.

**This product at 16 to 20 fluid ounces per acre plus 2,4-D at 0.375 to 0.5 pound active ingredient per acre plus Atrazine at 0.75 to 1 pound active ingredient per acre plus Acetochlor at label specified rates per acre:** Apply this tank-mixture in 28-0-0 or 32-0-0 liquid fertilizer carrier at 20 to 30 gallons per acre. The liquid fertilizer may be diluted with water to achieve the desired carrier volume.

The following weeds, up to a maximum height of 4 inches, will be controlled:

Brome (Downy) Cheat Foxtail (Green)	Foxtail (Yellow) Kochia* Prickly lettuce	Pigweed (Redroot) Thistle, Russian Wheat (Volunteer)
* For improved control of Kochia, add Dicamba at 0.125 lb. a.i. per acre to the above tank-mixture.		

Risk of crop injury from 2,4-D or Dicamba can be reduced by applying this treatment 7 to 14 days before planting. Refer to the label booklet for Lasso herbicide for pre-emergence weed control achieved by this tank-mixture. Refer to the specific product labels for crop rotation restrictions and precautionary statements for all products used in these tank-mixtures. Follow the most restrictive label.

USE RESTRICTIONS: THE USE OF THIS PRODUCT IN ECOFARMING SYSTEMS ARE NOT REGISTERED FOR USE IN CALIFORNIA.

### Aid-To-Tillage

This product may be used in conjunction with tillage practices in fallow systems or pre-plant to labeled crops to control Downy brome, Cheat, Volunteer Wheat, Tansy mustard, and Foxtail. Apply 12 fluid ounces of this product in 3 to 10 gallons of water per acre 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 1 day after application before tillage.

USE PRECAUTIONS: Tank-mixtures with residual herbicides may result in reduced performance.

USE RESTRICTIONS: Allow at least 1 day after application before tillage.

## Grain Sorghum (Milo)

**TYPES OF APPLICATIONS:** Those listed in “*USE DIRECTIONS FOR ANNUAL AND PERENNIAL CROPS*” plus the following: Spot Treatment, Over-the-top, Wiper Applications, Pre-harvest.

### Pre-plant, Pre-emergence, At-planting Applications:

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

### Tank-Mixtures:

Apply these tank-mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre. Individual tank-mix product must be registered for use on this site.

Acetochlor Alachlor	Atrazine	Metolachlor	Propazine
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For difficult-to-control annual weeds such as Fall panicum, Barnyardgrass, Crabgrass, Shattercane and broadleaf Signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 1 quart per acre in these tank-mixtures. For other labeled annual weeds, apply 0.75 to 1 quart of this product per acre when weeds are less than 6 inches tall, and 1 to 1.5 quarts when weeds are over 6 inches tall. When using nitrogen solutions as the carrier, the use rate may need to be increased for acceptable weed control.

### Spot Treatment, Over-the-top Wiper Applications:

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.

**USE RESTRICTIONS:** For spot treatment, do not treat more than 10% of the total field area to be harvested. The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside target area for the same reason. For wiper applicators, allow at least 40 days between application and harvest. Do not use roller applicators. Do not feed or graze treated Milo fodder. Do not ensile treated vegetation.

### Hooded Sprayers:

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

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

**USE PRECAUTIONS:** Treat before Milo sends tillers between the drill rows. If such tillers are contacted with the spray solution, the main plant may be killed. Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage.

**USE RESTRICTIONS:** Do not graze or feed Milo forage or fodder following applications of this product through hooded sprayers. Do not apply more than 1 quart of this product per acre per application and no more than 3 quarts per acre per year for hooded sprayer applications. Milo must be at least 12 inches tall, measured without extending leaves.

### Pre-harvest Applications:

Make applications at 30% grain moisture or less.

**USE PRECAUTIONS:** Just like with other herbicides that causes sudden plant death, avoid pre-harvest applications of this product to Milo infected with charcoal rot as lodging can occur. Pre-harvest application to Sorghum grown for seed may reduce germination or vigor.

**USE RESTRICTIONS:** Do not apply more than 2 quarts of this product per acre. Allow a minimum of 7 days between application and harvest of Sorghum. The use of this product for pre-harvest Grain sorghum (Milo) is not registered in California.

### Post-harvest Applications:

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

This product may be applied to Grain sorghum (Milo) stubble following harvest to suppress or control regrowth. Apply 1 quart of this product per acre for control or 0.75 quart of this product per acre for suppression.

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

## Herbs and Spices

[Allspice, Angelica, Star anise, Annatto (Seed), Balm, Basil, Borage, Burnet, Camomile, Caper buds, Caraway, Black caraway, Cardamom, Cassia bark, Cassia buds, Catnip, Celery seed, Chervil (Dried), Chive, Chinese chive, Cinnamon, Clary, Clove buds, Coriander leaf (Cilantro or Chinese parsley), Coriander seed (Cilantro), Costmary, Culantro (Leaf), Culantro (Seed), Cumin, Curry (Leaf), Dill (Dillweed), Dill (Seed), Epazote, Fennel seed (Common and Florence), Fenugreek, Grains of paradise, Horehound, Hyssop, Juniper berry, Lavender, Lemongrass, Lovage (Leaf and Seed), Mace, Marigold, Marjoram (including Oregano), 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, Stevia leaves, Sweet bay, Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff, Wormwood]

**TYPES OF APPLICATIONS:** Those listed in “*USE DIRECTIONS FOR ANNUAL AND PERENNIAL CROPS*” plus the following: Over-the-Top Wiper Applications and Spot Treatments on Peppermint and Spearmint Only.

**USE PRECAUTIONS:** When applying this product prior to transplanting or direct-seeding crops into plastic mulch, care must be taken to remove residues of this product, which could cause crop injury, from the plastic prior to planting. Residues can be removed by a single one-half inch application of water, either by natural rainfall or by a sprinkler system. For some crops below, make applications 3 days before transplanting or planting.

### Over-the-top Wiper Applications, Spot Treatments (Peppermint and Spearmint Only):

Apply spot treatments on a spray-to-wet basis with handheld equipment such as backpack and knapsack sprayers, pump-up pressure sprayers, handguns, handwands or any other handheld or motorized spray equipment used to direct the spray solution to a limited area.

In wiper applications, the applicator must be adjusted so that the wiper contact point is at least 2 inches above the crop. Weeds need to be a minimum of 6 inches taller than the crop.

**USE PRECAUTIONS:** Further applications may be made in the same area at 30 day intervals. In wiper applications, contact of the herbicide solution with the crop may result in damage or destruction.

**USE RESTRICTIONS:** Allow at least 7 days between application and harvest. In spot treatment applications, no more than 10% of the total field area to be harvested can be treated at one time. The crop receiving spray in the treated area will be killed. Take care to avoid drift or spray outside the target area for this reason.

## Oil Seed Crops

[Buffalo gourd (Seed), Canola, Flax, Jojoba, Lesquerella, Meadowfoam, Mustard, Rape, Safflower, Sesame, Sunflower]

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

**TYPES OF APPLICATIONS:** Those listed in “*USE DIRECTIONS FOR ANNUAL AND PERENNIAL CROPS*” plus Pre-harvest (except Buffalo gourd).

**USE RESTRICTIONS:** On Canola, do not apply more than 2 quarts of this product per acre. On Sunflowers, do not apply more than 1 quart of this product per acre as a single pre-plant or pre-emergent application per year. Do not feed or graze Sunflower forage following application of this product.

### Pre-plant, Pre-emergence, At-planting Applications:

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

### **Tank-Mixtures:**

For Sunflowers, a tank-mixture with Pendimethalin may be applied before, during or after planting in conventional tillage systems, into a cover crop, established sod or in previous crop residue.

### **Pasture Grasses, Forage Legumes, and Rangelands**

#### **Alfalfa, Clover, and Other Forage Legumes – Alfalfa, Clover, Kenaf, Kudzu, Lespedeza, Leucaena, Lupin, Sainfoin, Trefoil, Velvet bean, Vetch (All types)**

TYPES OF APPLICATIONS: Pre-plant, Pre-emergence, At-planting, Spot Treatment (Alfalfa and Clover Only), Over-the-top Wiper Applications (Alfalfa and Clover Only), Renovation, Pre-harvest (Alfalfa Only).

#### **Pre-plant, Pre-emergence, At-planting Applications:**

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

USE RESTRICTIONS: If a single application is made at rates of 2 quarts per acre or less, no waiting period between treatment and feeding or grazing is required. If application rates greater than 2 quarts per acre are made, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

#### **Alfalfa and Clover Only**

##### **Spot Treatment, Over-the-top Wiper Applications:**

This product may be applied as a spot treatment in Alfalfa or Clover. 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. Applications may be made in the same area at 30 day intervals.

USE RESTRICTIONS: No more than 10% of the total field area can be treated at one time. Remove domestic livestock before application and wait 14 days after application before grazing livestock or harvesting. For spot treatment and wiper applications, apply in areas where the movement of domestic livestock can be controlled.

#### **Alfalfa Only**

##### **Pre-harvest Applications:**

This product may be used in declining Alfalfa stands or any stand of Alfalfa where crop destruction is acceptable. This application will severely injure or destroy the stand of Alfalfa. This product will control annual and perennial weeds, including Quackgrass when applied prior to the harvest of Alfalfa.

The treated crop and weeds can be harvested and fed to livestock after 36 hours. Allow a minimum of 36 hours between application and harvest. Applications may be made at any time of the year. Make only one application to an existing stand of Alfalfa per year. For control of Quackgrass, apply in the Spring, late Summer or Fall when Quackgrass is actively growing. Treatments for Quackgrass must be followed by deep tillage for complete control.

USE PRECAUTIONS: Pre-harvest application in Alfalfa grown for seed may reduce germination or vigor.

USE RESTRICTIONS: Do not apply more than 2 quarts of this product per acre as a pre-harvest treatment.

#### **Alfalfa (Dormant)**

This product will control or suppress many weeds including Cheatgrass, Downy brome, and Quackgrass in dormant Alfalfa. Apply 8 to 12 fluid ounces of this product per acre in the Spring to Alfalfa that is dormant after Spring temperatures have warmed enough to encourage resumption of weed growth, but prior to initiation of trifoliate leaf expansion of the Alfalfa. Applications made after expansion of the first trifoliate leaf of the Alfalfa will cause growth reduction and reduced crop yield. Do not use this product where a slight yield reduction in the first cutting of Alfalfa cannot be tolerated.

USE RESTRICTIONS: Do not use Ammonium sulfate when spraying dormant Alfalfa with this product. Do not make more than one application per year.

Allow 36 hours after application before grazing livestock or harvesting. Slight discoloration of the Alfalfa may occur, but the Alfalfa will regreen and regrow under moist soil conditions as effects of this product wear off.

#### **Alfalfa, Clover and Other Labeled Forage Legumes**

##### **Renovation:**

This product may be applied as a broadcast spray to renovate existing stands of Alfalfa, Clover, and other labeled forage legumes. Labeled crops may be planted into the treated area.

USE RESTRICTIONS: Remove domestic livestock before application. If application rates of 2 quarts per acre or less are used wait 36 hours after application before grazing or harvesting. If application rates greater than 2 quarts per acre are used, wait 8 weeks between applications and grazing or harvesting.

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

TYPES OF APPLICATIONS: Renovation (rotating out of CRP), Site Preparation, Post-emergence Weed Control in Dormant CRP Grasses, Over-the-top Wiper Applications.

#### **Renovation (Rotating out of CRP), Site Preparation:**

This product may be used to prepare CRP land for crop production. Refer to Federal, state or local use guides for CRP renovation instructions. For any crop not listed in the “*USE DIRECTIONS FOR ANNUAL AND PERENNIAL CROPS*” sections of the label, applications must be made at least 30 days prior to planting.

USE RESTRICTIONS: Do not apply more than 3 quarts (96 fl. ozs.) per acre per year onto CRP grasses.

#### **Post-emergence Weed Control in Dormant CRP Grasses, Over-the-top Wiper Applications:**

This product may be used to suppress competitive growth and seed production of undesirable vegetation in CRP acres. Such applications may be made with wiper application equipment or as a broadcast or spot treatment to dormant CRP grasses.

For selective applications with broadcast spray equipment, apply 12 to 16 fluid ounces of this product per acre in early Spring before desirable CRP grasses, such as crested and tall Wheatgrass, break dormancy and initiate green growth. Late Fall applications can be made after desirable perennial grasses have reached dormancy.

USE PRECAUTIONS: Some stunting of CRP perennial grasses will occur if broadcast applications are made when plants are not dormant.

USE RESTRICTIONS: Do not apply more than 3 quarts (96 fl. ozs.) per acre per year onto CRP grasses.

### **Grass or Turf grass Seed Production – Any Grass (*Gramineae* family) Except Corn, Sorghum, Sugarcane and those listed under “*CEREAL AND GRAIN CROPS*”**

TYPES OF APPLICATIONS: Pre-plant, Pre-emergence, Renovation, Site preparation, Shielded sprayers, Over-the-top Wiper Applications, Spot Treatments, Creating Rows in Annual Ryegrass, Tolerant Tall Fescue Selections.

#### **Pre-plant, Pre-emergence, Renovation, Site Preparation:**

This product may be applied before, during, or after planting, or for renovation of Turf or Forage grass areas grown for seed production. 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. Where repeat treatments are necessary, sufficient regrowth must be attained prior to application. For warm-season grasses such as Bermudagrass, Summer or Fall applications provide best control. 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.

USE RESTRICTIONS: If application rates total 3 quarts (96 fl. ozs.) per acre or less, no waiting period between treatment and feeding or livestock grazing is required. If the rate is greater than 3 quarts (96 fl. ozs.) per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

#### **Shielded Sprayers:**

Apply 1 to 3 quarts of this product as a broadcast spray in 10 to 20 gallons of water per acre to control weeds in the 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 or through the protective shields.

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

#### **Over-the-top Wiper Applications:**

USE PRECAUTIONS: Contact of the herbicide solution with desirable vegetation may result in damage or destruction. Adjust applicators so that the wiper contact point is at least 2 inches above the desirable vegetation. Weeds should be a minimum of 6 inches above the desirable vegetation. Better results may be obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. This may occur in dense



clumps, severe infestations, or when height of weeds varies so that not all weeds are contacted. In these instances, repeat treatments may be necessary. Better results may be obtained if 2 applications are made in opposite directions.

#### Spot Treatments:

Use 1 to 1.5% solution.

USE PRECAUTIONS: Apply this product prior to heading of grasses. The crop receiving the spray in the treated area will be killed. Take care to avoid drift or spray outside the target area for the same reason.

#### Creating Rows in Annual Ryegrass:

Use 16 to 32 fluid ounces of this product per acre. Use the higher rate when Ryegrass is greater than 6 inches tall. Best results are obtained when applications are made before Ryegrass reaches 6 inches in height. USE PRECAUTIONS: Set nozzle heights to allow the establishment of the desired row spacing while preventing spray droplets, spray fines, or drift to contact the Ryegrass plants not treated. Use low-pressure nozzles, or drop nozzles designed to target the application over a narrow band.

#### Selective Weed Control on Tolerant Tall and Fine Fescue Selections for Seed Production:

Refer to the "APPLICATION EQUIPMENT AND TECHNIQUES" and "WEEDS CONTROLLED AND RATES" sections of this label for application instructions and weeds controlled or suppressed. **Note:** The specified rate for this use will limit the level of control of certain weed species. Some discoloration and yellowing may occur at the higher application rates on these selections. Reduction in stand of these selections may also occur under stress conditions.

Apply at the rate of 4 to 16 fluid ounces of this product per acre as a post-emergence spray on tolerant Tall and Fine Fescue selections grown for seed production 6 weeks after germination.

Also apply to established crops after growth resumes in the Fall until onset of dormancy and in the Spring after dormancy break until 60 days prior to harvest. Avoid spray application during or within 2 weeks after periods when air temperatures fall below 25°F.

Remove domestic livestock from the seed production field prior to application. Wait 60 days after application before grazing or harvesting treated areas.

DO NOT make more than two applications per crop growth cycle to any one site. If two applications are required, only one Fall and one Spring application may be made during one 12 month cycle.

#### Pastures – Any Grass (*Gramineae* family including Bahiagrass, Bermudagrass, Bluegrass, Brome, Fescue, Guinea grass, Kikuyugrass, Orchardgrass, Pangola grass, Ryegrass, Timothy, Wheatgrass) Except Corn, Sorghum, Sugarcane and those listed under "CEREAL AND GRAIN CROPS"

TYPES OF APPLICATIONS: Spot Treatment, Over-the-top Wiper Applications, Pre-plant, Pre-emergence, Pasture Renovation.

#### Spot Treatment, Over-the-top Wiper Applications:

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

USE RESTRICTIONS: For spot treatments or wiper application methods using rates of 3 quarts (96 fl. ozs.) per acre or less, the entire field or any portion of it may be treated. When spot treatments or wiper application are made using rates above 3 quarts (96 fl. ozs.) per acre, no more than 10% 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.

#### Pre-plant, Pre-emergence, Pasture Renovation, Stand Removal:

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

USE RESTRICTIONS: If application rates total 3 quarts (96 fl. ozs.) per acre or less, no waiting period between treatment and feeding or livestock grazing is required. If the rate is greater than 3 quarts (96 fl. ozs.) per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

#### *Bromus* Species and Medusahead in Pastures:

Refer to the "RANGELANDS" section below for use directions.

## Bermudagrass Pastures

Apply this product at 16 fluid ounces per acre for control of weeds listed below and most other Winter annual grass and broadleaved weeds in Coastal Bermudagrass pastures prior to Spring growth or immediately after cutting.

USE RESTRICTIONS: Only one application per year may be made to any one field. A Spring application prior to growth and application following the first cutting may not be made on the field during the same year. If application rates total 3 quarts per acre or less, no waiting period between treatment and feeding or livestock grazing is required. If the rate is greater than 3 quarts per acre, remove domestic livestock and wait 8 weeks following application before grazing or harvesting.

Annual bluegrass	Johnsongrass	Sandbur (Field)
Cheat	(Seedlings)	Sunflower
Crabgrass	Little Barley	Wheat
Henbit	Oats	Wild mustard
	Ryegrass (Italian)	

#### Application Prior to Spring Growth:

Apply this product in the late Winter or early Spring but before new Coastal Bermudagrass growth begins in the Spring. Applications to new growth can damage the Bermudagrass.

#### Applications Following the First Cutting:

Apply this product after the first Bermudagrass cutting when Bermudagrass has not yet begun to regrow. Applications made after regrowth has begun can damage Bermudagrass.

## Rangelands

TYPES OF APPLICATIONS: Post-emergence.

USE RESTRICTIONS: Do not apply more than 3 quarts (96 fl. ozs.) per acre per year. Do not use Ammonium sulfate when spraying Rangeland grasses with this product.

#### Post-emergence Applications:

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

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.

Apply 12 to 16 fluid ounces of this product per acre to control or suppress many weeds, including *Bromus* species (such as Downy brome, Cheatgrass), Cereal Rye and Jointed goatgrass in Rangelands. Apply when most mature *Brome* plants are in early flower and before the plants, including seedheads turn color. Allowing for secondary weed flushes to occur in the Spring following rain events further depletes the seed reserve and encourages perennial grass conversion on weedy sites. Fall applications are possible where Spring moisture is usually limited and Fall germination allows for good weed growth.

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

Slight discoloration of the desirable grasses may occur, but they will regreen and regrow under moist soil conditions as effects of this product wear off.

## Turf Grass Sod Production

TYPES OF APPLICATIONS: Pre-plant, Pre-emergence, Renovation, Site Preparation, Spot Treatments.

#### Pre-plant, Pre-emergence, Renovation, Site Preparation:

This product controls most existing vegetation prior to renovating Turf grass areas or establishing Turf grass grown for sod. Broadcast or handheld equipment may be used to control sod remnants or other unwanted vegetation after sod is harvested.

For maximum control of existing vegetation, delay planting or sodding to determine if any regrowth from escaped underground plant parts occurs. Where repeat treatments are necessary, sufficient regrowth must be attained prior to application. For warm-season grasses such as Bermudagrass, Summer or Fall applications provide the best control. Where existing vegetation is growing under mowed

Turf grass management, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the spray. Desirable Turf grasses may be planted following the above procedures.

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 translocation into underground plant parts.

**USE RESTRICTIONS:** If application rates total 3 quarts (96 fl. ozs.) per acre or less, no waiting period between treatment and livestock feeding or grazing is required. If the rate is greater than 3 quarts (96 fl. ozs.) per acre, remove domestic livestock before application and wait 8 weeks after application before grazing treated Turf grass.

#### Spot Treatments:

Handheld equipment may be used for spot treatment of unwanted vegetation growing in existing Turf grass.

**USE RESTRICTIONS:** If application rates total 3 quarts (96 fl. ozs.) per acre or less, no waiting period between treatment and livestock feeding or grazing is required. If the rate is greater than 3 quarts (96 fl. ozs.) per acre, remove domestic livestock before application and wait 8 weeks after application before grazing treated Turf grass.

#### Soybeans

**TYPES OF APPLICATIONS:** Those listed in “*USE DIRECTIONS FOR ANNUAL AND PERENNIAL CROPS*” plus the following: Spot treatment, Pre-harvest, Selective equipment.

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

#### Pre-plant, Pre-emergence, At-planting Applications:

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

#### Tank-Mixtures:

Apply these tank-mixtures in 10 to 20 gallons of water per acre. When tank-mixing, do not exceed specified application rates and use only in accordance with the most restrictive instructions on the respective product labels.

Acifluorfen	Flufenacet	Metolachlor
Bentazon	Flumetsulam	Metribuzin
Carfentrazone	Flumioxazin	Pendimethalin
Clethodim	Fomesafen	Pyroxasulfone
Chloransulam	Fluazifop	Quizalofop
Chlorimuron	Imazethapyr	Saflufenacil
Clomazone	Imazaquin	Sethoxydim
Dimethenamid	Lactofen	Sulfentrazone
Fenoxaprop	Linuron	Thifensulfuron

This product may be tank-mixed with 2,4-D or 2,4-DB. See the 2,4-D or 2,4-DB label for intervals between application and planting.

For difficult-to-control annual weeds such as Barnyardgrass, Crabgrass, Fall panicum, Shattercane and broadleaved Signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 1 quart per acre in these tank-mixtures. For other labeled annual weeds, apply 0.75 to 1 quart of this product per acre when weeds are less than 6 inches tall, and 1 to 1.5 quarts when weeds are over 6 inches tall.

#### Spot Treatment:

For spot treatments, apply this product prior to initial pod set in Soybeans.

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

#### Pre-harvest Applications:

This product provides weed control when applied prior to harvest of Soybeans. Apply using either aerial or ground spray equipment after pods have set and lost all green color at rates given in the “*WEEDS CONTROLLED AND RATES*” section for “*ANNUAL WEEDS*”, “*PERENNIAL WEEDS*”, and “*WOODY BRUSH AND TREES*”. Avoid excessive seed shatter loss due to ground application equipment.

**USE PRECAUTION:** Pre-harvest application to Soybeans grown for seed may reduce germination or vigor.

**USE RESTRICTIONS:** Do not apply more than 5 quarts of this product per acre for pre-harvest applications. Do not apply more than 2 quarts of this product per acre by air. Allow a minimum of 7 days between application and harvest of Soybeans. Do not graze or harvest treated hay or fodder for livestock feed within 25 days of last

pre-harvest application. **Note:** If the application rate is 1 quart per acre or lower, the grazing restriction is reduced to 14 days after last pre-harvest application.

#### Selective Equipment:

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

**USE PRECAUTIONS:** See “*SELECTIVE EQUIPMENT*” under “*APPLICATION EQUIPMENT AND TECHNIQUES*” section of this label for information on proper use and calibration of this equipment.

**USE RESTRICTIONS:** Allow at least 7 days between application and harvest.

#### Sugarcane

**TYPES OF APPLICATIONS:** Those listed in “*USE DIRECTIONS FOR ANNUAL AND PERENNIAL CROPS*”.

#### Pre-plant, Pre-emergence, At-planting Applications:

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

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

#### Spot Treatment:

For control of volunteer or diseased Sugarcane, make a 1% solution of this product in water and spray-to-wet the foliage of vegetation to be controlled. Volunteer or diseased Sugarcane must have at least 7 new leaves.

**USE PRECAUTIONS:** Avoid spray contact with healthy cane plants as severe damage or destruction may result.

**USE RESTRICTIONS:** Do not feed or graze treated Sugarcane foliage following application.

#### Fallow Treatments:

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

#### Hooded Sprayers:

This product may be used through hooded sprayers for weed control between the rows of Sugarcane. See the “*APPLICATION EQUIPMENT AND TECHNIQUES*” section of this label for additional use instructions.

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.

#### Tree, Vine, and Shrub Crops

THIS SECTION GIVES DIRECTIONS THAT APPLY TO ALL LISTED TREE, VINE, AND SHRUB CROPS LISTED BELOW. SEE THE INDIVIDUAL CROP CATEGORIES FOR SPECIFIC INSTRUCTIONS, PRE-HARVEST INTERVALS, PRECAUTIONS AND RESTRICTIONS.

**TYPES OF APPLICATIONS:** Pre-plant (site preparation) Broadcast sprays, Site weed control, Middles (between rows of trees, vines or bushes), Strips (within rows of trees, vines or bushes), Selective equipment (shielded sprayers, wiper treatments), Directed sprays, Spot treatments, Perennial grass suppression, Cut stump.

Except as directed, applications may be made with boom equipment, CDA equipment, shielded sprayers, handheld and high-volume wands, lances, orchard guns or with wiper applicator equipment.

**USE INSTRUCTIONS:** This product may be applied in middles (between rows of trees or vines), strips (within rows of trees or vines), and for weed control or perennial grass suppression in established fruit trees and nut groves, orchards, berries, and vineyards. It may also be used for site preparation prior to planting or transplanting these crops.

Apply 0.5 to 5 quarts per acre according to the “*ANNUAL WEEDS*” and “*PERENNIAL WEEDS*” table under “*WEEDS CONTROLLED AND RATES*” section of this label. Utilize rates at the higher end of the specified rate range when weeds are stressed, growing in dense populations or are greater than 12 inches tall. Repeat applications may be made up to a maximum of 10.6 quarts per acre per year.

The maximum use rates stated throughout this product’s labeling apply to this product combined with the use of all other herbicides containing Glyphosate or Sulfosate as active ingredient, whether

applied as mixtures or separately. Calculate the application rates and ensure that the total use of this and other Glyphosate or Sulfosate containing products does not exceed stated maximum use rate.

Use shielded or directed sprayers in crops with potential for crop contact and where there is sufficient clearance.

For applications in strips (within rows of trees), only selective equipment (directed sprays, hooded sprayers, shielded applicators, or wipers) is to be used to minimize the potential for leakage or drift of herbicide sprays onto crop. For Berry crops, enclose fully (top, sides, front and back included) hooded or shielded sprayers. Wipers or shielded applicators capable of preventing all contact with the crop may be used.

**USE PRECAUTIONS:** Extreme care must be exercised 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. Avoid application when recent pruning wounds or other mechanical injury has occurred. Contact of this product with other than matured brown bark can result in serious crop damage or destruction.

See "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for additional directions and precautions.

**USE RESTRICTIONS:** Allow a minimum of 3 days between application and transplanting.

#### **Middles (Between Rows of Trees, Vines or Bushes):**

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

**TANK-MIXTURES:** A tank-mixture of this product with Oxyfluorfen may be used for annual weeds in middles between rows of Citrus crops, fruit trees, tree nuts and vine crops. Use this mixture when weeds are stressed or growing in dense populations.

**16 to 32 fluid ounces of this product plus appropriate rate of Oxyfluorfen per acre will control annual weeds with a maximum height or diameter of 6 inches including the following:**

Crabgrass	Lambsquarters	Ryegrass (Common)
Common groundsel	(Common)	Shepherdspurse
Filaree (suppression)	London rocket	Sowthistle (Annual)
Horseweed/Marestail	Pigweed (Redroot)	Stinging nettle
( <i>Coryza canadensis</i> )	Purslane (Common)	
Junglerice	(suppression)	

**16 to 32 fluid ounces of this product plus appropriate rate of Oxyfluorfen per acre will control the following weeds with maximum height or diameter of 3 inches:**

Cheeseweed (Common)	Hairy fleabane ( <i>Coryza bonariensis</i> )
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#### **Strips (In Rows of Trees, Vines or Bushes):**

**TANK-MIXTURES:** This product may be applied in rows of tree or vine crops in tank-mixtures with the following products:

Bromacil	Norflurazon	Pendimethalin
Diuron	Oryzalin	Simazine
Napropamide	Oxyfluorfen	

Do not apply these tank-mixtures in Puerto Rico.

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

#### **Perennial Grass Suppression:**

This product will suppress perennial grasses such as Bahiagrass, Bermudagrass, Tall fescue, Orchardgrass, Kentucky bluegrass, and Quackgrass that are grown as ground covers in tree and vine crops.

**For suppression of Tall fescue, Fine fescue, Orchardgrass, and Quackgrass:** Apply 8 fluid ounces of this product in 10 to 20 gallons of water per acre.

**For suppression of Kentucky bluegrass covers:** Apply 6 fluid ounces of this product per acre. Do not add Ammonium sulfate. For best results, mow cool season grass covers in the Spring to even their height and apply this product 3 to 4 days after mowing.

**For suppression of vegetative growth and seedhead inhibition of Bahiagrass for approximately 45 days:** Apply 6 fluid ounces of this product in 10 to 25 gallons of water per acre. Apply 1 to 2 weeks after full green-up or after mowing to a uniform height of 3 to 4 inches. This application must be made prior to seedhead emergence. For suppression up to 120 days, apply 4 fluid ounces of this product per acre, followed by an application of 2 to 4 fluid ounces per acre about 45 days later. Make no more than 2 applications per year.

**For burndown of Bermudagrass:** Apply 32 to 64 fluid ounces of this product in 3 to 20 gallons of water per acre. Use this treatment only if reduction of the Bermudagrass stand can be tolerated. When burndown is required prior to harvest, allow at least 21 days to ensure sufficient time for burndown to occur.

**For suppression of Bermudagrass:** Apply 6 to 16 fluid ounces of this product per acre East of the Rocky Mountains and 16 fluid ounces of this product per acre West of the Rocky Mountains. Apply in a total spray volume of 3 to 20 gallons per acre, no sooner than 1 to 2 weeks after full green-up. If the Bermudagrass is mowed prior to application, maintain a minimum of 3 inches in height. Sequential applications may be made when regrowth occurs and Bermudagrass injury and stand reduction can be tolerated. East of the Rocky Mountains, use rates of 6 to 10 fluid ounces of this product per acre in shaded conditions or where a lesser degree of suppression is desired.

#### **Cut Stump (Tree Crops):**

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

**Citrus Trees** – Calamondin, Chironja, Citron, Citrus hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin (Tangerine), Orange (All), Pummelo, Tangelo, Tangor.

**Fruit Trees** – Apple, Apricot, Cherry (Sour, Sweet), Crabapple, Loquat, 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).

Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut trees or resprouts close to the soil surface. Apply a 50 to 100% solution of this product to the freshly cut surface immediately after cutting. Delays in application may result in reduced performance. For best results, apply during periods of active growth and full leaf expansion.

**USE PRECAUTIONS:** AVOID MAKING 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.

**Berry Crops** — Aronia berry, Bayberry, Bearberry, Bilberry, Blackberry (including Andean blackberry, Arctic blackberry, Bingleberry, Black satin berry, Boysenberry, Brombeere, California blackberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, Common blackberry, Coryberry, Darrowberry, Dewberry, Dirksen thornless berry, Evergreen blackberry, Himalayaberry, Hullberry, Lavacaberry, Loganberry, Lowberry, Lucretiaberry, Mammoth blackberry, Marionberry, Mora, Nectarberry, Northern dewberry, Olallieberry, Oregon evergreen berry, Phenomenalberry, Rangeberry, Ravenberry, Rossberry, Shawnee blackberry, Southern dewberry, Tayberry, Youngberry, Zarzamora), Blueberry, Buffaloberry, Che, Chilean guava, Chokerberry, Cloudberry, Cranberry, Currant, Elderberry, European barberry, Gooseberry, Huckleberry, Jostaberry, Juneberry, Lingonberry, Partridgeberry, Phalsa, Pincherry, Raspberry (Black, Red, Wild), Riberry, Salal, Schisandra berry, Serviceberry

**TYPES OF APPLICATIONS:** Those listed in "TREE, VINE AND SHRUB CROPS" section plus Spot Treatment in Cranberry Production and Post-Harvest Treatments in Cranberry Production.

**USE PRECAUTIONS:** To avoid damage, herbicide sprays must not be allowed to contact desirable vegetation, including green shoots, canes, or foliage.



USE RESTRICTIONS: Allow a minimum of 30 days between last application and harvest in Cranberries. Allow a minimum of 14 days between last application and harvest in other berry crops. Do not make directed sprays within the Cranberry bush areas prior to berry harvest.

#### Spot Treatments for Cranberry Production:

Spot treatments may be used to control weeds growing in dry ditches (interior and perimeter) of Cranberry production areas. Handheld sprayers or other appropriate application equipment listed under "APPLICATION EQUIPMENT AND TECHNIQUES" in this label may be used. Use nozzles that emit medium to large-sized droplets to minimize drift in order to avoid crop injury.

Drop water level to remove standing water in ditches prior to application. In handheld sprayers, use 1 to 2% solution of this product. Spray to wet vegetation, not to runoff.

USE PRECAUTIONS: For treatments after draw down of water in dry ditches, allow 2 or more days after treatment before reintroduction of water to achieve maximum weed control. Apply this product within 1 day after draw down to ensure application to actively growing weeds.

USE RESTRICTIONS: Allow a minimum of 30 days between last application and harvest of Cranberries.

Do not apply this material through the irrigation system. Do not make applications by air. Do not apply directly to water.

#### Post-harvest Treatments in Cranberry Production:

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 TECHNIQUES" in this label may be used. If using handheld sprayers, use a 0.5 to 1% solution of this product. Spray to wet vegetation, not to runoff. If using handheld boom sprayers, apply 2 to 4 quarts of this product per acre.

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.

USE RESTRICTIONS: Make applications only after Cranberries have been harvested. Allow a minimum of 6 months after last application and next harvest of Cranberries. Do not apply this product through the irrigation system. Do not make applications by air. Do not apply directly to water. Do not treat more than 10% of the total bog.

#### Citrus – 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 SHRUB CROPS" section.

USE INSTRUCTIONS IN FLORIDA AND TEXAS:

For burndown or control of the weeds listed below, apply the labeled rates of this product in 3 to 30 gallons of water per acre. Where weed foliage is dense, use 10 to 30 gallons of water per acre.

**For Goatweed:** Apply 2 to 3 quarts of this product per acre. Apply in 20 to 30 gallons of water per acre when plants are actively growing. Use 2 quarts per acre when plants are less than 8 inches tall and 3 quarts per acre when plants are greater than 8 inches tall. If Goatweed is greater than 8 inches tall, the addition of Bromacil (e.g., Krovar I) or Diuron may improve control. Refer to the individual product labels for specific crops, rates, geographic restrictions and precautionary statements. Follow the most restrictive label.

#### For Perennial Weeds:

Weed Species	Rate of This Product Per Ac.			
	1 Qt.	2 Qts.	3 Qts.	5 Qts.
Bermudagrass	B	—	PC	C
Guineagrass:	—	B	C	C
Florida Flatwoods	B	C	C	C
Florida Ridge & Texas	B	C	C	C
Paragrass	B	C	C	C
Torpedograss	S	—	PC	C
B = Burndown; C = Control; PC = Partial Control; S = Suppression				

USE RESTRICTIONS: Allow a minimum of 1 day between last application and harvest in Citrus crops. For Citron groves, apply as directed sprays only.

#### Miscellaneous Tree Food Crops – Cactus (Fruit, Pads), Palm (Heart, Leaves), Palm (Oil)

TYPES OF APPLICATIONS: Those listed in "TREE, VINE AND SHRUB CROPS" section.

USE DIRECTIONS AND RESTRICTIONS: Those listed in "TREE, VINE AND SHRUB CROPS" section.

#### Non-Food Tree Crops – Pine, Poplar, Eucalyptus, Christmas Trees, Other Non-Food Tree Crops

TYPES OF APPLICATIONS: Those listed in "TREE, VINE AND SHRUB CROPS" section.

#### Directed Sprays, Spot Treatment, Wiper Applications:

This product may be used as a post-directed spray and spot treatment around established Pine, Poplar, Eucalyptus, Christmas trees and other non-food tree crops.

USE PRECAUTIONS: Care must be exercised to avoid contact of spray, drift or mist with foliage or green bark of established Christmas trees and other Pine trees. Desirable plants may be protected from the spray solution by using shields or coverings made of cardboard or other impermeable material.

USE RESTRICTIONS: THIS PRODUCT IS NOT FOR USE AS AN OVER-THE-TOP BROADCAST SPRAY IN CHRISTMAS TREES AND OTHER PINE TREES.

#### Site Preparation:

This product may be used prior to planting non-food tree crops.

USE PRECAUTIONS: Take precautions to protect non-target plants during site preparation applications.

#### Pome Fruits – Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince

TYPES OF APPLICATIONS: Those listed in "TREE, VINE AND SHRUB CROPS" section.

USE RESTRICTIONS: Allow a minimum of 1 day between last application and harvest in Pome crops.

#### Stone Fruits – Apricot, Cherry (Sweet, Tart), Nectarine, Olive, Peach, Plum/Prune (All types), Plumcot

TYPES OF APPLICATIONS: Those listed in "TREE, VINE AND SHRUB CROPS" section.

USE RESTRICTIONS: Allow a minimum of 17 days between last application and harvest in stone fruit crops. For Olive groves, apply as directed sprays only.

RESTRICTIONS ON APPLICATION EQUIPMENT: For Cherries, any application equipment listed in this section may be used in all states. Any application equipment listed in this section may be used in Apricots, Nectarines, Peaches, and Plums/Prunes growing in Arizona, California, Colorado, Idaho, Kansas, Kentucky, New Jersey, North Dakota, Oklahoma, Oregon, Texas, Utah and Washington, except for Peaches grown in the states specified in the following paragraph. In all other states, use wiper equipment only.

For Peaches grown in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee only, apply with a shielded boom sprayer or shielded wiper applicator, which prevents any contact of this product with the foliage or bark of trees. Apply no later than 90 days after first bloom. Applications made after this time may result in severe damage. 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 2 or more years. EXTREME CARE MUST BE TAKEN TO ENSURE NO PART OF THE PEACH TREE IS CONTACTED.

#### Tree Nuts – 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.

USE RESTRICTIONS: Allow a minimum of 3 days between last application and harvest of tree nuts, except Coconut. Allow 14 days between application and harvest in Coconut.

**Tropical and Subtropical Trees and Fruits – Ambarella, Atemoya, Avocado, Banana, Barbados cherry (Acerola), Biriba, Blimbe, Breadfruit, Cacao (Cocoa) bean, Canistel, Carambola (Starfruit), Cherimoya, Coffee, Custard apple, Dates, Durian, Feijoa, Figs, Governor's plum, Guava, Illama, Imbe, Imbu, Jaboticaba, Jackfruit, Longan, Lychee, Mamey apple, Mango, Mangosteen, Marmaladebox (Genip), Mountain papaya, Papaya, Pawpaw, Plantain, Persimmon, Pomegranate, Pulasan, Rambutan, Rose apple, Sapodilla, Sapote (Black, Mamey, White), Spanish lime, Soursop, Star apple, Sugar apple, Surinam cherry, Tamarind, Tea, Ti (Roots, Leaves), Wax jambu**

**TYPES OF APPLICATIONS:** Those listed in “*TREE, VINE AND SHRUB CROPS*” section plus Bananacide.

**USE PRECAUTIONS:** In Coffee and Banana, delay applications 3 months after transplanting to allow the new Coffee or Banana plant to become established.

**USE RESTRICTIONS:** Allow a minimum of 1 day between last application and harvest in Banana, Guava, Papaya, and Plantain crops. For any other tropical or subtropical fruit trees, allow a minimum of 14 days between last application and harvest. Allow a minimum of 28 days between last application and harvest in Coffee crops.

#### **Bananacide (Bananas Only):**

This product may be used 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 fluid ounce (1 mL) of this product's concentrate per 2 to 3 inches of pseudostem diameter. Make the injection at least 1 foot above the ground, except for very small plants, which should be injected vertically into the top. Any subsequent regrowth must also be destroyed. All plants and mats (or units) adjacent (within a 4 foot radius) to a treated mat shall be mechanically destroyed.

For control of the Banana bunchy 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.

**USE PRECAUTIONS:** Following transplant of new Banana plants into treated areas, allow plants to become established for 3 months before applying this product for weed control.

**USE RESTRICTIONS:** Do not apply more than 0.5 fluid ounce (15 mL) of this product's 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.

#### **Vine Crops – Grapes (Raisin, Table, Wine), Hops, Kiwi, Passion fruit**

**TYPES OF APPLICATIONS:** Those listed in “*TREE, VINE AND SHRUB CROPS*” section.

**USE RESTRICTIONS:** Do not make applications when green shoots, canes or foliage are in the spray zone. In the Northeast and Great Lakes regions, applications must be made prior to the end of bloom stage of Grapes to avoid injury, or make applications with shielded sprayers or wiper equipment. Do not use selective equipment in Kiwi.

**Pre-harvest Interval (PHI):** Allow a minimum of 14 days between last application and harvest in vine crops.

#### **Vegetable Crops**

THIS SECTION GIVES DIRECTIONS THAT APPLY TO ALL LISTED VEGETABLE CROPS BELOW. SEE THE INDIVIDUAL CROP CATEGORIES FOR SPECIFIC INSTRUCTIONS, PRE-HARVEST INTERVALS, PRECAUTIONS AND RESTRICTIONS.

**TYPES OF APPLICATIONS:** Chemical Fallow, Pre-plant Fallow Beds, Pre-plant, Pre-emergence, Prior to Transplanting Vegetables, At-planting, Hooded Sprayers in Row Middles, Shielded Sprayers in Row Middles, Wiper Applications in Row Middles, Post-Harvest, Directed Applications (Non-bearing Ginseng), Over-the-top Wiper Applicator (Carrots, Rutabagas and Sweet potatoes Only).

**USE PRECAUTIONS:** When applying this product prior to transplanting or direct-seeding crops into plastic mulch, care must be taken to remove residues of this product, which could cause crop injury, from the plastic prior to planting. Residues can be removed by a single one-half inch application of water, either by natural rainfall or via a sprinkler system. Insure the washwater flushes off the plastic mulch 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.

When making pre-emergence 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.

**USE RESTRICTIONS:** Unless otherwise specified in this product's labeling, treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest. Post-harvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop. (See “*APPLICATION EQUIPMENT AND TECHNIQUES*” section of this label for additional information.)

**Brassica Vegetables – Broccoli, Chinese broccoli (Gai Ion), Broccoli raab (Rapini), Brussels sprouts, Cabbage, Chinese cabbage (Bok choy), Chinese cabbage (Napa), Chinese mustard cabbage (Gai choy), Cauliflower, Cavalo broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens**

**Bulb Vegetables – Garlic, Great-headed garlic, Leek, Onion (Dry bulb and Green), Welsh onion, Shallot**

**Cucurbit Vegetables and Fruits – Chayote (Fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cucumber, Gherkin, Edible gourd (includes Hyotan, Cucuzza, Hechima, Chinese okra), Melons (All), *Momordica* spp. (includes Balsam apple, Balsam pear, Bittermelon, Chinese cucumber), Muskmelon (includes Cantaloupe, Casaba, Crenshaw melon, Golden pershaw melon, Honeydew melon, Honey ball melon, Mango melon, Persian melon, Pineapple melon, Santa Claus melon, Snake melon), Pumpkin, Summer squash (includes Crookneck squash, Scallop squash, Straightneck squash, Vegetable marrow, Zucchini), Winter squash (includes Butternut squash, Calabaza, Hubbard squash, Acorn squash, Spaghetti squash), Watermelon**

**USE RESTRICTIONS:** Allow at least 3 days between application and planting for Cantaloupe, Casaba melon, Crenshaw melon, Cucumber, Gherkin, Gourds, Honeydew melon, Honey ball melon, Mango melon, Melons (All), Muskmelon, Persian melon, Pumpkin, Squash (Summer, Winter), and Watermelon.

**Leafy Vegetables – Amaranth (Chinese spinach), Arugula (Roquette), Beet greens, Cardoon, Celery, Chinese celery, Celtuce, Chaya, Chervil, Edible-leaved chrysanthemum, Garland chrysanthemum, Corn salad, Cress (Garden, Upland), Dandelion, Dock (Sorrel), Dokudami, Endive (Escarole), Florence fennel, Gow kee, Lettuce (Head, Leaf), Orach, Parsley, Purslane (Garden, Winter), Radicchio (Red chicory), Rhubarb, Spinach, New Zealand spinach, Vine spinach, Swiss chard, Watercress (Upland), Water spinach**

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

**Fruiting Vegetables – Eggplant, Groundcherry (*Physalis* spp.), Pepino, Pepper (includes Bell pepper, Chili pepper, Cooking pepper, Pimento, Sweet pepper), Tomatillo, Tomato**

USE PRECAUTIONS: For Tomato, avoid hooded or shielded sprayer applications in row middles.

USE RESTRICTIONS: For Eggplant, Ground cherry, Pepper (All), and Tomatillo, allow at least 3 days between application and planting.

**Legume Vegetables (Succulent or Dried) - Beans (*Lupinus*: includes Grain lupin, Sweet lupin, White lupin, and White sweet lupin), Beans (*Phaseolus*: includes Field bean, Kidney bean, Lima bean, Navy bean, Pinto bean, Runner bean, Snap bean, Tepary bean, Wax bean), Beans (*Vigna*: includes Adzuki bean, Asparagus bean, Blackeyed pea, Catjang, Chinese longbean, Cowpea, Crowder pea, Moth bean, Mung bean, Rice bean, Southern pea, Urd bean, Yardlong bean), Broad bean (Fava), Chickpea (Garbanzo), Guar, Jackbean, Lablab bean, Lentil, Peas (*Pisum*: includes Dwarf pea, Edible-podded pea, English pea, Field pea, Garden pea, Green pea, Snowpea, Sugar snap pea), Pigeon pea, Soybean (immature seed), Sword bean**

**Root and Tuber Vegetables – Arracacha, Arrowroot, Chinese artichoke, Jerusalem artichoke, Beet (Garden), Burdock, Canna, Carrot, Cassava (Bitter, Sweet), Celeriac, Chayote (Root), Chervil (Turnip-rooted), Chicory, Chufa, Dasheen (Taro), Galangal, Ginger, Ginseng, Horseradish, Leren, Kava (Turnip-rooted), Parsley, Parsnip, Potato, Radish, Oriental radish, Rutabaga, Salsify, Black salsify, Spanish salsify, Skirret, Sweet potato, Tanier, Turmeric, Turnip, Wasabi, Yacon, Yam bean, True yam**

**Directed Applications (Non-Bearing Ginseng Only):**

This product may be used for weed control in established non-bearing Ginseng. Applications may be made with boom equipment, CDA, shielded sprayers, handheld and high volume wands, lances, and orchard guns or with wiper application equipment.

USE PRECAUTIONS: Direct applications so that there is no contact of this product with the Ginseng plant.

USE RESTRICTIONS: Applications must be made at least one year prior to harvest of Ginseng.

**Over-the-top Wiper Applicator (Carrots, Rutabagas and Sweet Potatoes Only):**

Apply a 33% solution of this product by volume in water using a wiper applicator operated over the top of Carrots, Rutabagas and Sweet potatoes for the control of tall weeds. See additional use instructions for wiper applicators under the section “APPLICATION EQUIPMENT AND TECHNIQUES”.

USE RESTRICTIONS: For Carrot, a maximum of two wiper or sponge bar applications may be made with a minimum of 60 days prior to harvest following the first application and 7 days prior to harvest following the second application of if only 1 wiper application is made over the top of Carrots. For Rutabagas, allow at least 14 days between application and harvest. For Sweet potatoes, a maximum of 5 wiper or sponge bar applications may be made with a minimum of 14 days between applications and a minimum of 7 days prior to harvest.

**Miscellaneous Crops**

**[Aloe vera, Asparagus, Bamboo shoots, Globe artichoke, Okra, Peanut (Groundnut), Pineapple, Strawberry, Sugar beet]**

TYPES OF APPLICATIONS: Those listed in “USE DIRECTIONS FOR ANNUAL AND PERENNIAL CROPS” plus the following: Weed control, Site preparation, Spot Treatment (Asparagus), Post-harvest Applications (Asparagus).

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

USE PRECAUTIONS: 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 pre-emergence 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.

USE RESTRICTIONS: Unless otherwise specified in this product's labeling, treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest. Post-harvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop. (See “APPLICATION EQUIPMENT AND TECHNIQUES” section of this label for additional information.)

**Weed Control / Site Preparation:**

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

USE PRECAUTIONS: When applying this product prior to transplanting or direct-seeding crops into plastic mulch, care must be taken to remove residues of this product, which could cause crop injury, from the plastic prior to planting. Residues can be removed by a single one-half inch application of water, either by natural rainfall or by a sprinkler system. Ensure 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.

USE RESTRICTIONS: Do not apply within a week before the first Asparagus spears emerge. Do not feed or graze treated Pineapple forage following application.

**Spot Treatment (Asparagus):**

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

USE RESTRICTIONS: Do not harvest within 5 days of treatment of Asparagus. Do not treat more than 10% of the total field area to be harvested.

**Post-harvest Applications (Asparagus):**

This product may be applied after the last harvest of Asparagus and all spears have been removed. If spears are allowed to regrow, delay application until ferns has developed. Delayed treatments must be applied as a directed or shielded spray in order to avoid contact of the spray with ferns, stems or spears.

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

**Roundup Ready Crops**

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

USE THIS PRODUCT FOR POST-EMERGENCE APPLICATION ONLY ON CROP VARIETIES DESIGNATED AS CONTAINING A ROUNDUP READY GENE OR GLYPHOSATE-TOLERANT GENE.

Applying this product to crop varieties that are not designated as Roundup Ready or 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 a Roundup Ready or Glyphosate-tolerant gene, since severe injury or destruction will result. The Roundup Ready or Glyphosate-tolerant designation indicates that the crop variety contains a patented gene that provides tolerance to this product. Information on Glyphosate-tolerant crop varieties may be obtained from your seed supplier or company representative. Roundup Ready or Glyphosate-tolerant crop varieties must be purchased from an authorized licensed seed supplier.

**Ground Applications Using Broadcast Equipment:**

Apply this product in 5 to 20 gallons of spray solution per acre unless otherwise specified. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results, use flat spray nozzles. Check for even distribution of spray droplets.



### Aerial Applications:

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

**ATTENTION:** AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS WHICH DO NOT CONTAIN A GLYPHOSATE-TOLERANT GENE.

FOR AERIAL APPLICATIONS IN CALIFORNIA, REFER TO THE “*AERIAL APPLICATION IN CALIFORNIA*” SECTION OF THIS LABEL FOR REQUIREMENTS IN THAT STATE.

### Tank-Mixing and Application Instructions:

See the “*MIXING, ADDITIVES, AND APPLICATION INSTRUCTIONS*” section of this label for additional directions and restrictions on the application of this product.

Tank-mixtures with other herbicides, insecticides, fungicides, micronutrients or foliar fertilizers may result in reduced weed control or crop injury. DO NOT use for over-the-top applications of this product unless otherwise noted in this product label, supplemental labeling or fact sheets published separately by Drexel.

Ammonium sulfate may be mixed with this product for applications to Roundup Ready crops. Refer to the “*MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS*” section for use instructions for Ammonium sulfate.

### Sprayer Preparation:

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

**NOTE:** The following instructions are based on a clean start at-planting by using a burndown application or tillage to control existing weeds before crop emergence. In no-till and stale seedbed systems, a pre-plant burn-down treatment of this product will control existing weeds prior to crop emergence. Some weeds, such as Black nightshade, broadleaf Signalgrass, Sicklepod, Texas panicum, Sandbur, annual Morningglory, Woolly cupgrass, Shattercane, Wild proso millet, Burcucumber, and Giant ragweed with multiple germination times or suppressed (stunted) weeds may require a second application of this product for complete control. Make the second application after some regrowth has occurred and at least 10 days after a previous application of this product.

### ALFALFA WITH THE ROUNDUP READY GENE

#### Weed Control Applications in Seed Production of Alfalfa with the Roundup Ready Gene

This product will control many troublesome emerged weeds with over-the-top applications in Roundup Ready Alfalfa grown for seed. In-crop applications may be made from emergence through the late vegetative stage and spot treatments may be made from early bud stage through seed harvest.

#### Ground Applications:

For ground applications with broadcast equipment, apply this product in 3 to 40 gallons of spray solution per acre. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

#### Aerial Applications:

For aerial application, use the specified rates of this product in 3 to 15 gallons of spray solution per acre. Do not apply during low-level inversion conditions when winds are gusty or any other conditions that favor drift. Drift may cause any damage to vegetation contacted to which treatment is not intended. To prevent injury to adjacent desirable vegetation, appropriate buffer zones must be maintained. DO NOT EXCEED 2 QUARTS OF THIS PRODUCT PER ACRE WHEN MAKING APPLICATIONS BY AIR.

See the “*APPLICATION EQUIPMENT AND TECHNIQUES*” section of this label for procedures to avoid spray drift that may cause injury to any vegetation not intended for treatment.

TYPES OF APPLICATIONS: Pre-plant, At-planting, Pre-emergence, Post-emergence and Post-harvest of seed.

#### Maximum Allowable Combined Application Rates (Qts./Ac.)

Combined total per year for all applications	8
Total of Pre-plant, At-planting and Pre-emergence applications	2
Total in-crop application rate from emergence through the late vegetative stage	6
Spot-treatment during early bud stage through seed harvest (See the “ <i>Spot Treatment After Late Vegetative Stage</i> ” section and the “ <i>USE PRECAUTIONS</i> ” and “ <i>USE RESTRICTIONS</i> ” sections for complete instructions.)	Apply spray-to-wet; do not apply to the point of runoff.

**There are no rotational crop restrictions following applications of this product. For any crop NOT listed in this label, applications must be at least 30 days prior to planting.**

#### Over-the-top Applications:

Broadcast applications of this product may be made using ground or aerial equipment in-crop on Roundup Ready Alfalfa from emergence through the late vegetative stage. Do not make broadcast applications of this product between the initiation of Alfalfa budding and the harvest of seed. Any single over-the-top broadcast application of this product must not exceed 2 quarts per acre. Make sequential applications of this product at least 7 days apart.

Due to the biology and breeding constraints of Alfalfa, up to 10% of the seedlings may not contain the Roundup Ready gene and will not survive or thrive after the first application of this product. To limit undesirable effects of stand gaps created by the loss of plants not containing the Roundup Ready gene, make a single application of at least 1 quart of this product per acre at or before the 3 to 4 trifoliate growth stage.

#### Spot Treatments After Late Vegetative Stage:

For late emerging weeds, this product may be applied as a spot treatment in Roundup Ready Alfalfa grown for seed during the early bud stage through seed harvest. Applications made during this stage may result in reduced seed yield and quality. Make applications on a spray-to-wet basis. Do not spray to the point of runoff. If a spot treatment is made after the late vegetative stage, harvested seed must not be used for Alfalfa sprout production.

#### Post-harvest Applications:

Following harvest of Roundup Ready Alfalfa seed, the stand may be managed for forage and hay production. Refer to the below section on “*WEED CONTROL APPLICATIONS IN FORAGE AND HAY PRODUCTION OF ALFALFA WITH THE ROUNDUP READY GENE*”.

#### Weeds Controlled:

For specific rates of application and instructions for control of various annual and perennial weeds, refer to the “*WEEDS CONTROLLED AND RATES*” section of this label.

Some weeds with multiple germination times or suppressed (stunted) weeds may require a second application of this product for complete control. Make the second application after some regrowth of weeds has occurred.

In addition to those weeds listed in this label, this product will suppress or control the parasitic weed, Dodder (*Cuscuta* spp.) in Roundup Ready Alfalfa seed production. Repeat applications may be necessary for complete control.

Do not make over-the-top applications of this product when in tank-mixture with other herbicides, insecticides, or fungicides as this may result in crop injury or reduced weed control.

For applications made prior to the 4 trifoliate growth stage during stand establishment, the use of Ammonium sulfate may result in crop injury. Refer to “*ADDITIVES*” under the “*MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS*” section of this label for use instructions for Ammonium sulfate.

**USE RESTRICTIONS:** Do not make over-the-top broadcast applications of this product between the initiation of Alfalfa budding and the harvest of Roundup Ready Alfalfa seed. If a spot treatment of this product is made after the late vegetative stage, do not use harvested Roundup Ready Alfalfa seed for Alfalfa sprout production. Regardless of applications made, the use of harvested Roundup Ready Alfalfa seed is not suitable for production of Alfalfa sprouts.

## Weed Control Applications in Forage and Hay Production of Alfalfa with the Roundup Ready Gene

This product will control many troublesome emerged weeds with over-the-top applications in Roundup Ready Alfalfa. Allow at least 5 days between the last application and grazing, or, cutting and feeding of Alfalfa forage and hay.

### Ground Applications:

For ground applications with broadcast equipment, apply this product in 3 to 40 gallons of spray solution per acre. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

### Aerial Applications:

For aerial application, use the specified rates of this product in 3 to 15 gallons of spray solution per acre.

DO NOT EXCEED 2 QUARTS OF THIS PRODUCT PER ACRE WHEN MAKING APPLICATIONS BY AIR.

Do not apply during low-level inversion conditions, when winds are gusty or under any other conditions that favor drift. Drift may cause damage to any vegetation contacted to which treatment is not intended. To prevent injury to adjacent desirable vegetation, appropriate buffer zones must be maintained.

See the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for procedures to avoid spray drift that may cause injury to any vegetation not intended for treatment.

TYPES OF APPLICATIONS: Pre-plant, At-planting, Pre-emergence, Post-emergence and Post-harvest of seed.

Maximum Allowable Combined Application Rates (Qts./Ac.)	
Combined total per year for all applications including pre-plant during year of establishment	8
Total of Pre-plant, At-planting and Pre-emergence applications	2
Combined total per year in-crop applications for newly established and established stands	6

**There are no rotational crop restrictions following applications of this product. For any crop NOT listed in this label, applications must be at least 30 days prior to planting.**

### Over-the-top Applications:

Apply this product to Roundup Ready Alfalfa from its emergence until 5 days prior to cutting. Do not exceed 2 quarts of this product per acre for any single over-the-top application. Sequential applications of this product have to be at least 7 days apart.

**Note:** Where Roundup Ready Alfalfa is grown with a companion or cover crop, or is over-seeded with a second species, over-the-top applications of this product will eliminate the non-Roundup Ready species.

During stand establishment, due to the biology and breeding constraints of Alfalfa, up to 10% of the seedlings may not contain the Roundup Ready gene and will not survive or thrive after the first application of this product. To remove the undesirable effects of stand gaps created by the loss of plants not containing the Roundup Ready gene, apply a single application of at least 1 quart of this product per acre at or before the 3 to 4 trifoliate growth stage.

In both newly seeded and established stands, apply this product after weeds have emerged but before Alfalfa growth or regrowth interferes with application spray coverage of the target weeds in order to maximize yield and quality potential of forage and hay.

### Weeds Controlled:

For specific rates of application and instructions for control of various annual and perennial weeds, refer to the "WEEDS CONTROLLED AND RATES" of this label. Some weeds with multiple germination times or suppressed (stunted) weeds may require a second application of this product for complete control. Make the second application after some regrowth of weeds has occurred.

In addition to those weeds listed on this label, this product will suppress or control the parasitic weed, Dodder (*Cuscuta* spp.) in Roundup Ready Alfalfa seed production. Repeat applications may be necessary for complete control.

USE RESTRICTIONS: Do not apply more than 2 quarts of this product by any single over-the-top application. Sequential applications of this product have to be made at a minimum of 7 day intervals. The combined total per year for all in-crop application in newly established and established stands must not exceed 6 quarts per acre.

Before application, remove domestic livestock. Wait for at least 5 days after the last application before grazing or cutting and feeding of the Roundup Ready Alfalfa forage and Hay.

## CANOLA WITH THE ROUNDUP READY GENE

TYPES OF APPLICATIONS: Pre-plant, Pre-emergence, At-planting, Post-emergence.

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

This product will control many troublesome emerged weeds when applied pre-plant, pre-emergent and/or with over-the-top applications in Roundup Ready Canola. Allow a minimum of 60 days between last application and Canola harvest.

Maximum Allowable Combined Application Quantities Per Season (Qts./Ac.)	
Total of Pre-plant, At-planting, Pre-emergence applications	2
Total in-crop application rate from emergence to 6 leaf stage (Spring varieties) or prior to bolting in the Spring (Winter varieties)	1

### Ground Applications:

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

### Aerial Applications:

For aerial applications, apply this product in 3 to 15 gallons of water per acre.

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.

Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations which dispense spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure.

There are no rotational crop restrictions following applications of this product.

### Pre-plant, Pre-emergence, At-Planting Applications:

This product may be applied before, during or after planting Canola by aerial or ground application equipment. The maximum combined application rate from all pre-plant and pre-emergent applications must not exceed 2 quarts per acre per season.

**Note:** In no-till and stale seedbed systems, always use a burndown treatment to control existing weeds before Canola emerges. Apply a pre-plant burndown treatment of 0.5 to 1 quart of this product per acre.

### Roundup Ready Spring Canola Varieties

Roundup Ready Spring Canola is defined as those Roundup Ready Canola varieties that are seeded in the Spring and harvested in the Fall, and do not enter a Winter dormancy period.

### Post-emergence Applications:

This product may be applied by aerial or ground application equipment post-emergence to Roundup Ready Spring Canola varieties from emergence through the 6 leaf stage of development. Applications made during bolting or flowering may result in crop injury and yield loss. To maximize yield potential, make applications early to eliminate competing weeds.

### Weeds Controlled:

For specific rates of application and instructions, refer to the "WEEDS CONTROLLED AND RATES" section of this label.

### Single Application:

Apply 0.5 to 0.75 quart 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 11 fluid ounces per acre are applied after the 4 leaf stage.

### Sequential Application:

Apply 0.5 quart per acre to 1 to 3 leaf Canola followed by a sequential application at a minimum interval of 10 days, but no later than the 6 leaf stage. Do not make sequential applications for early emerging annual weeds and perennial weeds such as Canada thistle and Quackgrass or when controlling weeds with multiple application times.

This product will control or suppress most perennial weeds. For some perennial weeds, repeat applications may be required to eliminate crop competition throughout the growing season.

### Use Restrictions:

No more than two over-the-top broadcast applications may be made from crop emergence through the 6 leaf stage of development and the total in-crop application must not exceed 1 quart per acre. Allow a minimum of 60 days between last application and Canola harvest.

### Roundup Ready Winter Canola

Roundup Ready Winter Canola is defined as those Roundup Ready Canola varieties that are seeded in the Fall and harvested the following Spring or Summer. Winter Canola varieties are intended to enter a cold period dormancy in the Winter.

### Post-emergence Applications:

This product may be applied post-emergence by aerial or ground application equipment to Roundup Ready Winter Canola varieties from emergence to the 6 leaf stage in the Fall and prior to bolting in the Spring. Applications made during or after bolting may result in crop injury and yield loss. To maximize yield potential, make applications early to eliminate competing weeds. Allow a minimum of 60 days between last application and harvest.

### Single Application:

Apply 0.5 to 0.75 quart per acre in the Fall and no later than the 6 leaf stage for the control of annual weeds. Avoid overlapping applications which may result in temporary yellowing, delayed flowering, and growth reduction.

### Sequential Applications:

Apply 0.5 quart per acre to 1 to 3 leaf Canola in the Fall, followed by a sequential application at a minimum interval of 10 days, but before bolting in the Spring. Do not make sequential applications for early emerging annual weeds and Winter emerging weeds such as Downy brome, Jointed goatgrass and Ryegrass.

This product will control or suppress most perennial weeds. For some perennial weeds, sequential applications may be required to eliminate crop competition throughout the growing season.

### Use Restrictions:

No more than two over-the-top broadcast applications may be made from crop emergence up the onset of bolting and the total in-crop application must not exceed 1 quart per acre. Allow a minimum of 60 days between last application and Canola harvest.

### Weeds Controlled:

For specific rates of application and instructions for control of various annual and perennial weeds, refer to the "WEEDS CONTROLLED AND RATES" sections of this label.

Do not make over-the-top application of this product when in tank-mixture with other herbicides, insecticides, or fungicides as this may result in reduced weed control or crop injury.

Some weeds with multiple germination times or suppressed (stunted) weeds may require sequential applications of this product for control. Make the second application after some regrowth has occurred and at least 10 days after a previous application of this product.

## CORN WITH THE ROUNDUP READY GENE

TYPES OF APPLICATIONS: Pre-plant, Pre-emergence, At-planting, Post-emergence (In-Crop), Spot treatment, Pre-harvest, Post-harvest.

Summary Table of Use Directions of This Product on Roundup Ready Corn			
Applications	Maximum Rate of This Product per Application	Maximum Amount Applied	Pre-harvest Interval (PHI) When Corn is Harvested for:
<b>Pre-plant, Pre-emergence, At-Planting</b>			
Single or Sequential	—	5 qts./Ac.	Forage – 50 days Grain – See below
<b>Post-emergence, In-crop (Emergence to V-8 stage or 30 inches high)</b>			
Single	1 qt./Ac.	1 qt./Ac.	Forage – 50 days Grain – See below
Sequential (minimum 10 day interval between applications)	1 qt./Ac.	2 qts./Ac.	Forage – Prohibited Grain – See below
<b>Pre-harvest, Corn for Grain (Black layer until 7 days before harvest)</b>			
Single	1 qt./Ac.	1 qt./Ac.	Grain - 7 days
<b>Combined per year total for all applications: 8 qts./Ac.</b>			

When applied as directed, this product controls labeled annual grasses and broadleaf weeds in Roundup Ready Corn. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more applications of this product. Apply to actively growing weeds before they reach the maximum height listed in the "WEEDS CONTROLLED AND RATES" section.

Refer to "MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS" section of this label for proper use instructions.

### Ammonium Sulfate:

Ammonium sulfate may be mixed with this product for application to Roundup Ready Corn. Refer to the "MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS" section of this label for use instructions for Ammonium sulfate.

### Pre-harvest Intervals (PHI):

Allow a minimum of 50 days between application of this product and harvest of Corn forage and 7 days between application and harvest of Corn grain. Allow a minimum of 10 days between in-crop applications of this product. **Do not graze, harvest or feed Corn forage or silage following sequential in-crop applications of this product on Roundup Ready Corn.** There are no rotational crop restrictions following applications of this product.

### Ground Applications:

Use the specified rates of this product in 5 to 20 gallons of spray solution per acre as a broadcast spray. Carefully select correct nozzles and spray pressure to avoid spraying a fine mist. Check for even distribution of spray droplets.

### Aerial Applications:

Use the specified rates of this product in 3 to 15 gallons of spray solution per acre. Do not exceed 1 quart per acre. See the "WEEDS CONTROLLED AND RATES" section of this label for specified rates. AERIAL APPLICATIONS TO ROUNDUP READY CORN MAY BE MADE ONLY IN THE FOLLOWING STATES: AL, AR, CO, FL, GA, KS, LA, MS, MO (Bootheel only), NE, NC, ND, OK, SC, SD, TN, TX.

### Weeds Controlled:

Apply 0.75 to 1 quart of this product per acre for control of labeled grasses and broadleaf weeds in conventional and no-till Corn production systems. See "ANNUAL WEEDS" under the "WEEDS CONTROLLED AND RATES" section of this label for rates and directions for specific annual weeds. This product, applied up to 1 quart per acre will also control or suppress the growth of perennial weeds such as:



Bermudagrass	Horsenettle	Redvine
Canada thistle	Nutsedge	Trumpet creeper
Common milkweed	Quackgrass	Swamp smartweed
Field bindweed	Rhizome johnsongrass	Wirestem muhly
Hemp dogbane		

For additional use information on perennial weeds, see “*PERENNIAL WEEDS*” under the “*WEEDS CONTROLLED AND RATES*” section of this label.

#### **Pre-emergence Followed by Post-emergence Weed Control Program:**

This product may be applied post-emergence in-crop following any labeled pre-emergence herbicide application. Make post-application of this product before the weeds reach a height and/or density that the weeds become competitive with the crop. A single in-crop application of this product at the specified rate will provide control of emerged weeds listed on this label. This product may be applied post-emergence to Roundup Ready Corn from emergence through V-8 (8 leaves with collars) stage or until Corn height reaches 30 inches (free standing), whichever comes first.

#### **Post-emergence Only Weed Control Program:**

This product may be applied alone as a post-emergence in-crop application to provide control of emerged weeds listed on the label. Make post-emergence application of this product before the weeds reach a height and/or density that the weeds become competitive with the crop. If new flushes of weeds occur, a sequential application of this product at 0.75 to 1 quart per acre will control the listed grasses and broadleaf leaves. This product may be applied post-emergence to Roundup Ready Corn from emergence to the V-8 stage or until Corn height reaches 30 inches (free standing), whichever comes first. **Note:** Non-ionic surfactants which are labeled for use with post-emergence herbicides may be used. When using additional surfactant, use 0.5% surfactant concentration (2 qts. per 100 gals. of spray solution) for those surfactants containing less than 70% active ingredient.

The addition of certain surfactants to this product may result in some crop response, including leaf necrosis, leaf chlorosis or leaf speckling due to the surfactant added to the spray mixture. Read and carefully observe precautionary statements and other information in the surfactant label.

#### **Post-harvest Applications:**

This product may be applied after harvest of Corn.

Higher rates may be required for control of large weeds that were growing in the crop at the time of harvest. Tank-mixtures with 2,4-D or Dicamba may be used.

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

#### **For Post-emergence Applications to Roundup Ready Corn 2**

The use of the higher in-crop over-the-top rates described in this section on other than Roundup Ready Corn 2 may cause crop injury and reduce yields.

For Roundup Ready Corn 2 from emergence through the V8 stage (8 leaves with collars) or until Corn height reaches 30 inches, whichever comes first, this product may be applied over-the-top broadcast or with drop nozzles. When Corn height is 24 to 30 inches (free standing), use drop nozzles for optimum spray coverage and weed control. For Corn heights 30 to 48 inches (free standing), apply this product only using ground application equipment with drop nozzles adjusted to avoid spraying into the whorls of the Corn plants. Single in-crop applications of this product must not exceed 1.5 quarts per acre.

<b>Maximum Allowable Combined Application Quantities Per Season (Qts./Ac.)</b>	
Total of Pre-plant, At-planting, Pre-emergence applications	5
Post-emergence (in-crop): Maximum combined total of multiple in-crop applications from emergence through the 48 inch stage	3
Pre-harvest: Maximum pre-harvest application rate after maximum kernel fill is complete and the crop is physiologically mature (black layer formation) with 35% grain moisture or less until 7 days before harvest. See “ <i>USE RESTRICTIONS</i> ” on pre-harvest applications.	1
<b>Cropping Season: Combined total per year for all applications</b>	<b>8</b>

The addition of 1 to 2% dry Ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this product under hard water conditions, drought conditions or when tank-mixed with Alachlor herbicide. 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. The addition of other additives, including fertilizers and micronutrients are not directed with this product since this may result in increased potential for crop injury.

#### **Ground Applications:**

For ground applications, use the specified rates of this product in 5 to 20 gallons of spray solution per acre as a broadcast spray. Carefully select correct nozzles and spray pressure to avoid spraying a fine mist. Check for even distribution of spray droplets.

#### **Aerial Applications:**

For aerial applications, use the specified rates of this product in 3 to 15 gallons of spray solution per acre. Do not exceed 1 quart per acre. See the “*WEEDS CONTROLLED AND RATES*” section of this label. **AVOID DRIFT – DO NOT APPLY DURING INVERSION CONDITIONS, WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITIONS WHICH FAVOR DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. TO PREVENT INJURY TO ADJACENT VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.**

#### **Weeds Controlled:**

Apply 0.75 to 1 quart of this product per acre for control of labeled grasses and broadleaf weeds in conventional and no-till Corn production systems. Refer to “*ANNUAL WEEDS*” under the “*WEEDS CONTROLLED AND RATES*” section of this label for specified rates for specific annual weeds. This product applied at up to 1.5 quarts per acre will control or suppress the growth of perennial weeds such as Bermudagrass, Canada thistle, Common milkweed, Field bindweed, Hemp dogbane, Horsenettle, Nutsedge, Quackgrass, Rhizome johnsongrass, Redvine, Trumpet creeper, Swamp smartweed, and Wirestem muhly. For additional information on perennial weeds, see “*PERENNIAL WEEDS*” under the “*WEEDS CONTROLLED AND RATES*” section of this label.

#### **Pre-plant, Pre-emergence, At-Planting Applications:**

This product may be applied alone or in tank-mixture before, during or after planting Corn.

#### **Pre-emergence Followed by Post-emergence Weed Control Program:**

This product may be applied post-emergence in-crop following any labeled pre-emergence herbicide application. Make post-application of this product before the weeds reach a height and/or density that the weeds become competitive with the crop.

An in-crop application of this product at the specified rates will provide control of emerged weeds listed on the label. This product may be applied over-the-top broadcast or with drop nozzles post-emergence to Roundup Ready Corn 2 from emergence through the V8 stage (8 leaves with collars) or until Corn height reaches 30 inches (free standing), whichever comes first. When Corn height is 24 to 30 inches, use drop nozzles for optimum spray coverage and weed control. For Corn heights 30 to 48 inches (free standing), apply this product only using ground application equipment with drop nozzles and avoid spraying into the whorls of the Corn plants.

#### **Post-emergence Only Weed Control Program:**

This product may be applied alone as a post-emergence in-crop application to provide control of emerged weeds listed on the label. Make post-emergence application of this product before the weeds reach a height and/or density that the weeds become competitive with the crop. If new flushes of weeds occur, a sequential application of this product at 0.75 to 1 quart per acre will control the labeled grasses and broadleaf weeds. This product may be applied over-the-top broadcast or with drop nozzles post-emergence to Roundup Ready Corn 2 from emergence through the V8 stage or until Corn height reaches 30 inches (free standing), whichever comes first. When Corn height is 24 to 30 inches, use drop nozzles for optimum spray coverage and weed control. For Corn height 30 to 48 inches (free standing), apply this product only using ground application equipment with drop nozzles and avoid spraying into the whorls of the Corn plants.

### Tank-Mixtures:

This product may be applied in tank-mixtures with but not limited to the following products. Refer to the specific product label and observe all use precautions and limitations on the label for all products used in tank-mixtures, including application timing restrictions, soil restrictions, minimum re-cropping interval and rotational guidelines. The more restrictive requirements apply. Tank-mixtures with other products may result in increased potential for crop injury and/or weed antagonism. Refer to the following table for height limitation for tank-mix partner.

Tank-Mix Partner	Maximum Height of Corn For Application (Inches)
Acetochlor	11
Alachlor	5
Atrazine	12
Halosulfuron	24
Metolachlor	40

There are no rotational crop restrictions following applications of this product.

### Use Restrictions:

Single in-crop applications of this product must not exceed 1.5 quarts per acre. Allow a minimum of 10 days between in-crop applications of this product. Allow a minimum of 50 days between application of this product and harvest of Corn forage or grain. For applications at pre-harvest timing (see “Pre-harvest Applications” section below), allow a minimum of 7 days between application and harvest or feeding of Corn stover or grain.

### Pre-harvest Applications:

A single pre-harvest application of up to 1 quart of this product per acre may be made, if no more than a total of 2 quarts of this product has been previously applied in over-the-top or drop nozzle applications. Make a pre-harvest application at 35% grain moisture or less. Ensure that maximum kernel fill is complete and the Corn is physiologically mature (black layer formed).

USE RESTRICTIONS: Do not make a pre-harvest application of this product if more than a combined total of 2 quarts of this product has been previously applied in over-the-top or drop nozzle applications. Allow a minimum of 7 days between a pre-harvest application and harvest or feeding of Corn stover or grain.

### Post-harvest Applications:

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

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

### For Control and Management of Glyphosate-Resistant Horseweed/Marestail (*Conyza canadensis*) in Roundup Ready Corn Hybrids Only

For ground applications, use 10 to 20 gallons of water per acre. For aerial applications, use 3 to 15 gallons of water per acre. For tank-mixtures, read and carefully observe the precautionary statements and all other information appearing on the product labels, supplemental labeling or fact sheets published separately for all herbicides used. Follow the most restrictive label.

### In-crop

For in-crop Roundup Ready Corn, apply a tank-mixture of this product (1 qt. per acre) plus Dicamba (0.25 to 0.5 lb. per acre) or 2,4-D (0.5 to 1 lb. per acre). Apply between Corn emergence and the 5 leaf stage of growth (approximately 8 inches tall).

### COTTON WITH THE ROUNDUP READY GENE

ONLY USE THIS PRODUCT OVER-THE-TOP OF OR DIRECTED ONTO IMPROVED COTTON VARIETIES THAT ARE DESIGNATED AS COTTON WITH THE ROUNDUP READY GENE.

COTTON WITH THE ROUNDUP READY GENE MAY ONLY BE USED FOR PLANTING A COMMERCIAL CROP IN A SINGLE SEASON. SEED MAY NOT BE SAVED FOR REPLANTING AND SAVED SEED MAY NOT BE SUPPLIED TO OTHERS FOR REPLANTING. DREXEL DOES NOT WARRANT THE SAFETY OR PERFORMANCE OF THIS PRODUCT WHEN USED ON “BROWN BAG” OR FARMER-MADE SEED.

**ATTENTION: Use of this product in accordance with label directions is expected to result in normal growth of Roundup Ready Cotton, however, various environmental conditions,**

**agronomic practices and other factors make it impossible to eliminate all risks associated with the use of this product, even when applications are made in conformance with the label specifications. In some cases, these factors can result in boll loss, delayed maturity and/or yield loss.**

TYPES OF APPLICATIONS: Pre-plant, Pre-emergence, At-planting, Post-emergence (Over-the-top), Selective Equipment, Pre-harvest.

Maximum Allowable Yearly Rates of This Product (Qts./Ac.)	
Total of Pre-plant, Pre-emergence applications	5
Total in-crop applications from cracking to lay-by	4
Maximum pre-harvest application rate	2
<b>Combined total per year for all applications</b>	<b>8</b>

### Ground Applications:

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

### Aerial Applications:

Apply this product in 3 to 15 gallons of spray solution per acre. DO NOT EXCEED A MAXIMUM RATE OF 1 QUART OF THIS PRODUCT PER ACRE WHEN MAKING APPLICATIONS BY AIR.

Do not apply during low-level inversion conditions, when winds are gusty or under any other conditions which favor drift. Drift may cause damage to any vegetation contacted to which treatment is not intended. To prevent injury to adjacent desirable vegetation, appropriate buffer zones must be maintained.

There are no rotational crop restrictions following applications of this product.

### Pre-plant, Pre-emergence, At-planting Applications:

This product may be applied before, during or after planting Cotton.

### Post-emergence (Over-the-top) Applications:

This product may be applied by aerial or ground application equipment post-emergence to Roundup Ready Cotton from the ground cracking stage until the 4 leaf (node) stage of development (until the 5th true leaf reaches the size of a quarter). Over-the-top applications made after the 4 leaf (node) stage of development may result in boll loss, delayed maturity and/or yield loss. Any single over-the-top broadcast application must not exceed 1 quart per acre. No more than 2 over-the-top broadcast applications may be made from crop emergence through the 4 leaf (node) stage of development. Sequential over-the-top applications of this product must be at least 10 days apart and Cotton must have at least 2 nodes of incremental growth between applications. **Note:** Always plant into a weed-free seedbed. In no-till and stale seedbed systems always burn down existing weeds before Cotton emerges. Apply a pre-plant burndown treatment of 0.5 to 1.5 quarts (16 to 48 fl. ozs.) of this product per acre.

### Post-directed or Hooded Applications:

This product may be applied using precision post-directed or hooded sprayers to Roundup Ready Cotton through lay-by. At this stage, use post-directed equipment which directs the spray to the base of the Cotton plants. Avoid spray contact with Cotton leaves to the maximum extent possible. To minimize spray onto the leaves of the Cotton plants, place nozzles in a low position directing a horizontal spray pattern under the Cotton leaves to contact the weeds in the row, and maintain low spray pressure (less than 30 psi). For best results make applications while weeds are small (less than 3 inches). Applications that contact the Cotton leaves may result in boll loss, delayed maturity and/or yield loss. Any single post-directed application must not exceed 1 quart of this product per acre. Do not make more than two applications from the 5 leaf stage through lay-by. Sequential in-crop applications of this product must be at least 10 days apart and Cotton must have at least two nodes of incremental growth between applications.

### Salvage Treatment:

This treatment may be used after the 4 leaf stage of development. Use only where weeds threaten to cause the loss of the crop. One quart per acre may be applied either as an over-the-top application or as a post-directed treatment sprayed higher on the Cotton plants and over the weeds. **Note:** Salvage treatments will result in significant boll loss, delayed maturity and/or yield loss. **Do not make more than one salvage treatment per growing season.**

### Weeds Controlled:

For specific rates of application and instructions for control of various annual and perennial weeds, refer to the “WEEDS CONTROLLED AND RATES” section of this label. This product, applied at the 1 quart rate per acre, will burndown or suppress the growth of the following perennial weeds and reduce crop competition.

Common bermudagrass	Silverleaf nightshade
Redvine	Trumpet creeper
Rhizome johnsongrass	Yellow and Purple nutsedge

Fall pre-harvest application may be required for control of these perennial weeds. Do not use this product in tank-mixtures with other herbicides for over-the-top applications as this may result in reduced weed control or crop injury.

Some weeds with multiple germination times or suppressed (stunted) weeds may require sequential applications of this product for control.

### Pre-harvest Applications:

This product may be applied for pre-harvest annual and perennial weed control as a broadcast treatment to Roundup Ready Cotton after 20% boll crack.

Allow a minimum of 7 days between application and harvest.

THE USE OF ADDITIVES FOR PRE-HARVEST APPLICATION TO ROUNDUP READY COTTON IS PROHIBITED.

**Note:** This product will not enhance the performance of harvest aids when applied to Roundup Ready Cotton. DO NOT APPLY THIS PRODUCT PRE-HARVEST TO CROPS GROWN FOR SEED.

Non-ionic surfactants which are labeled for use with post-emergence herbicides may be used. When using additional surfactant, use 0.5% surfactant concentration (2 qts. per 100 gals. of spray solution) when using surfactant which contains at least 70% active ingredient, or a 1% surfactant concentration (4 qts. per 100 gals. of spray solution) for surfactant containing less than 70% active ingredient.

### For Cotton with the Roundup Ready Gene for Application (Arizona Only)

See “USE INFORMATION” and “MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS” sections of this label for essential product performance information.

TYPES OF APPLICATIONS: Pre-plant, At-planting, Pre-emergence, Over-the-top, Selective Equipment, Pre-harvest.

Maximum Allowable Combined Application Quantities Per Season (Qts./Ac.)	
Total of Pre-plant, At-planting, Pre-emergence applications	5
Total in-crop applications from ground cracking to lay-by	3.75
Total in-crop over-the-top from ground cracking to 4 leaf stage	3
Total in-crop applications using selective equipment through lay-by	2
Maximum pre-harvest application rate	2
<b>Combined total per year for all applications</b>	<b>8</b>

USE PRECAUTIONS: DO NOT combine these instructions with other use directions made for crop varieties that do not contain the Roundup Ready gene. See the “USE DIRECTIONS FOR ANNUAL AND PERENNIAL CROPS” section of this label.

Sequential in-crop over-the-top or post-directed applications of this product must be at least 10 days apart and Cotton must have at least two nodes of incremental growth between applications.

Applications made in excess of maximum label rates are expected to result in boll loss, delayed maturity and/or yield loss.

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

USE RESTRICTIONS: The combined total application of this product from Cotton emergence until harvest must not exceed 6 quarts per acre. No more than two over-the-top broadcast applications may be made from crop emergence through the 4 leaf (node) stage of development. Do not make more than two post-directed applications from the 5 leaf stage through lay-by. Allow a minimum of 7 days between application and harvest.

### Pre-plant, At-Planting, Pre-emergence Applications:

This product may be applied before, during or after planting Cotton.

### Post-emergence (Over-the-top) Applications:

This product may be applied by aerial or ground application equipment at rates up to 1 quart per acre per application post-emergence to Roundup Ready Cotton from the ground cracking stage until the 4 leaf (node) stage of development (until the fifth true leaf reaches the size of a quarter). **Note:** Over-the-top applications made after the 4 leaf (node) stage of development may result in boll loss, delayed maturity and/or yield loss.

### Applications Using Selective Equipment:

This product may be applied in-crop using precision post-directed or hooded sprayers to Roundup Ready Cotton through lay-by. Unless otherwise directed, any single application using selective equipment must not exceed 1 quart per acre. Sequential in-crop applications using selective equipment may be made up to a maximum of 2 quarts per acre. At this stage, use post-directed equipment which directs the spray to the base of the Cotton plants. Avoid spray contact with Cotton leaves to the maximum extent possible. To minimize spray onto the leaves of the Cotton plants, place nozzles in a low position directing a horizontal spray pattern under the Cotton leaves to contact weeds in the row, and maintain low spray pressure (less than 30 psi). For best results, make applications while weeds are small (less than 3 inches).

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

USE RESTRICTIONS: The combined total of in-crop over-the-top plus selective equipment applications must not exceed 4 quarts per acre.

### Salvage Treatment:

This treatment may be used after the 4 leaf stage of development and only where weeds threaten to cause the loss of the crop. One quart per acre may be applied either as an over-the-top applications or as a post-directed treatments sprayed higher on the Cotton plants and over the weeds. **Note:** SALVAGE TREATMENTS WILL RESULT IN SIGNIFICANT BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS. NO MORE THAN ONE SALVAGE TREATMENT MAY BE USED PER GROWING SEASON.

For specific rates of application and instructions, refer to the “WEEDS CONTROLLED AND RATES” section of this label.

### Pre-harvest Applications:

This product may be applied for pre-harvest annual and perennial weed control as a broadcast treatment to Roundup Ready Cotton after 20% boll crack. Up to 2 quarts of this product per acre may be applied using either aerial or ground spray equipment. **Note:** This product will not enhance the performance of harvest aids when applied to Roundup Ready Cotton.

USE RESTRICTIONS: Allow a minimum of 7 days between application and harvest of Cotton. Do not apply this product pre-harvest to Roundup Ready Cotton grown for seed.

### For Control and Management of Glyphosate-Resistant Horseweed/Marestail (*Conyza canadensis*) in Roundup Ready Cotton Varieties Only

For ground applications, use 10 to 20 gallons of water per acre. For aerial applications, use 3 to 15 gallons of water per acre. For tank-mix directions, read and carefully observe the precautionary statements and all other information appearing on the product labels, supplemental labeling or fact sheets published separately for all herbicides used.

### Post-directed Applications:

Management of early season weed competition and the development of a crop height differential between Cotton and the Horseweed/Marestail (*Conyza canadensis*) are often achieved by a combination of pre-plant burndown and post-emergent over-the-top and/or directed applications of this product. These measures enhance the development of a height differential that is necessary to successfully make post-directed treatments. Make in-crop post-directed applications of MSMA (2 lbs./Ac.) tank-mixed with Diuron (0.5 to 0.75 lbs. per acre) when the temperature is 80°F or higher.



### Tank-mixtures of This Product with Metolachlor

Apply this product as a tank-mixture with Metolachlor in water post-emergence directed or post-emergence over-the-top for control of emerged weeds as listed on this and Metolachlor labels as well as for residual pre-emergence weed control of the weeds listed on the Metolachlor label. See the section **"POST-EMERGENCE (OVER-THE-TOP) APPLICATIONS"** for use rates and timings of this product and follow the Metolachlor label for its specified rates, method of application, and timing of application restrictions. DO NOT add fertilizer additives, surfactants and spray adjuvant or pesticides to this tank-mixture if it is to be applied post-emergence over-the-top to Cotton or crop injury may occur.

USE PRECAUTIONS: Post-emergence over-the-top applications of this tank-mixture may cause temporary injury such as necrotic spotting on the exposed Cotton leaves, which will not affect normal plant development.

USE RESTRICTIONS: Do not apply this tank-mixture post-emergence to Cotton varieties not designated as Roundup Ready. Do not apply post-emergence over-the-top to Cotton past the growth stage limit. Do not use on *Sand* or *Loamy sand soils* in Gaines County, Texas.

### Flex Cotton with Roundup Ready Gene

AVOID CONTACT OF HERBICIDE WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT CROPS (EXCEPT AS SPECIFIED FOR INDIVIDUAL ROUNDUP READY CROPS), DESIRABLE PLANTS AND TREES, BECAUSE SEVERE INJURY OR DESTRUCTION MAY RESULT.

See **"USE INFORMATION"** and **"MIXING, ADDITIVES, AND APPLICATION INSTRUCTIONS"** sections in this label for important product performance information.

The instructions provided in this section are specific to, and may only be used with, varieties designated as Roundup Ready Flex Cotton. Applications described in this section on other than Roundup Ready Flex Cotton will cause crop injury and reduced yields. DO NOT combine the instructions in this section, with those in the **"ROUNDUP READY COTTON"** section of this label, or with any other Roundup Ready Cotton or Roundup Ready Flex Cotton instructions on labeling for this or any other Glyphosate-containing products. Drift of this product from an application made to Roundup Ready Flex Cotton onto adjacent fields of post 4 leaf (node) Roundup Ready Cotton may cause extensive injury including boll loss, delayed maturity and/or yield loss.

TYPES OF APPLICATIONS: Pre-plant, At-Planting, Pre-emergence, Post-emergence (In-Crop), Pre-harvest.

Maximum Allowable Combined Application Quantities Per Season (Qts./Ac.)	
Total of all Pre-plant, At-planting, Pre-emergence applications	5
Total of all in-crop applications from ground cracking to 60% open bolls	6
Total of all in-crop applications between lay-by and 60% open bolls	2
Total of all in-crop applications from 60% bolls open to 7 days prior to harvest	2
Total of all in-crop applications from emergence through harvest	6
<b>Combined total per year for all applications</b>	<b>8</b>

### Pre-plant, Pre-emergence, At-Planting

This product may be applied before, during or after planting Roundup Ready Flex Cotton.

TANK-MIXTURES: This product may be tank-mixed with 2,4-D or Dicamba and applied prior to planting only. This product may be tank-mixed with the following products and applied prior to crop emergence. Ensure that the specific product being used is labeled for application prior to planting or the emergence of Cotton.

Read and follow label directions of all products in the tank-mixture. Clomazone, Diuron, Flumioxazin, Fluometuron, Fomesafen, Metolachlor, Pendimethalin, Prometryn, Pyriithobac.

USE RESTRICTIONS: Maximum quantity of this product that may be applied for all pre-plant, at-planting and pre-emergence applications combined is 5 quarts per acre per season. Refer to individual tank-mix product label for restrictions and precautions. Use according to the most restrictive precautionary statements for each product in the tank-mixture.

### Post-emergence (In-Crop) Applications:

When applied in accordance with the label, this product will control listed annual grasses and broadleaf weeds in Roundup Ready Flex Cotton. To maximize yield potential, spray Cotton early to eliminate competing weeds. Many perennial weeds will be controlled or suppressed with one or more applications of this product. Use an initial application of 1 quart per acre to control or suppress 1 to 3 inch tall annual grass and broadleaf weeds. This product may be applied by ground application equipment at rates up to 1.5 quarts per acre per application to Roundup Ready Flex Cotton. In addition to broadcast applications, post-directed equipment may be used to achieve more thorough weed coverage.

TANK-MIXTURES: This product may be tank-mixed with the following products and applied post-emergence (in-crop) over the top of Roundup Ready Flex Cotton. Ensure that the specific product being used is labeled for application post-emergence (in-crop) to Cotton. Read and follow label directions of all products in the tank-mixture. Clethodim, Fluazifop, Fomesafen, Metolachlor, Pyriithobac, Quizalofop, Sethoxydim, Trifloxysulfuron.

Pyriithobac may cause leaf yellowing and/or leaf crinkling when applied post-emergence (in-crop) to Roundup Ready Flex Cotton. Metolachlor over-the-top of Roundup Ready Flex Cotton may cause leaf injury in the form of necrotic spotting.

This product can be tank-mixed with the following product for in-crop application using precision post-directed or hooded sprayer. Ensure that the specific product being used is labeled for application post-emergence (in-crop) to Cotton. Read and follow label directions of all products in the tank-mixture. Carfentrazone, Diuron, Flumioxazin, Fluometuron, Linuron, Pendimethalin, Prometryn, Pyriithobac, Trifloxysulfuron.

Pyriithobac may cause leaf yellowing and/or leaf crinkling when applied post-emergence (in-crop) in Roundup Ready Flex Cotton.

USE PRECAUTIONS: In-crop application rates above 1 quart of this product per acre made alone or with the addition of other crop chemical products containing surfactant may cause a crop response including leaf speckling or leaf necrosis. DO NOT ADD ADDITIONAL SURFACTANT OR ADDITIVES CONTAINING SURFACTANT TO THIS PRODUCT FOR OVER-THE-TOP APPLICATION TO ROUNDUP READY FLEX COTTON. Refer to individual tank-mix product label for restrictions and precautions; use according to the most restrictive precautionary statements for each product in the tank-mixture.

USE RESTRICTIONS: The maximum rate of this product for any single in-crop application is 1.5 quarts per acre using ground application equipment. Do not exceed a maximum rate of 1 quart of this product when making applications by air. Between lay-by and 60% open bolls, the maximum combined total rate of this product that may be applied is 2 quarts per acre. The maximum combined total rate of all applications made from crop emergence to 60% open bolls must not exceed 6 quarts per acre.

### Pre-harvest Applications:

This product may be applied to Roundup Ready Flex Cotton up to 2 quarts per acre for annual and perennial weed control prior to harvest after 60% boll crack. **Note:** This product will not enhance the performance of harvest aids when applied to Roundup Ready Flex Cotton.

USE RESTRICTIONS: Allow a minimum of 7 days between application and harvest of Roundup Ready Flex Cotton.

DO NOT ADD ADDITIONAL SURFACTANT OR ADDITIVES CONTAINING SURFACTANT TO THIS PRODUCT FOR PRE-HARVEST APPLICATION TO ROUNDUP READY FLEX COTTON.

### SOYBEANS WITH THE ROUNDUP READY GENE

TYPES OF APPLICATIONS: Pre-plant, Pre-emergence, At-Planting, Post-emergence, Pre-harvest, Post-harvest.

This product may be applied post-emergence to Roundup Ready Soybeans from the cracking stage through the full flowering stage.

Maximum Allowable Combined Application Quantities Per Season (Qts./Ac.)	
Total of Pre-plant, At-planting, Pre-emergence applications	5
Total in-crop applications from cracking throughout flowering	3
Maximum pre-harvest application rate	1
<b>Combined total per year for all applications</b>	<b>8</b>

### Pre-plant, Pre-emergence, At-Planting Applications:

This product may be applied before, during or after planting Soybeans. Refer to the table above for maximum allowable quantities of this product that can be applied per season.

### Post-emergence Applications:

When applied as directed, this product will control labeled annual grasses and broadleaf weeds in Roundup Ready Soybeans. Applications of this product can be made in Roundup Ready Soybeans from emergence (cracking) throughout flowering. Refer to "ANNUAL WEEDS" under the "WEEDS CONTROLLED AND RATES" section of this label for specified rates for specific annual weeds. Make an initial application of 1 quart of this product per acre on 2 to 8 inch tall weeds. Weeds will generally be 2 to 8 inches tall 2 to 5 weeks after planting. If the initial application is delayed and weeds are larger, apply a higher rate of this product. This product may be used up to 2 quarts per acre in any single in-crop application for control of annual weeds and where heavy weed densities exist.

This product at 1 to 2 quarts per acre (single or multiple applications), will control or suppress perennial weeds such as: Bermudagrass, Canada thistle, Common milkweed, Field bindweed, Hemp dogbane, Horsenettle, Horsetweed/Marestail (*Conyza canadensis*), Nutsedge, Quackgrass, Rhizome johnsongrass, Redvine, Trumpet creeper, Swamp smartweed and Wirestem muhly. For best results, allow perennial weed species to achieve at least 6 inches of growth before spraying with this product.

Under adverse growing conditions such as drought, hail, wind damage or a poor Soybean stand that slows or delays canopy closure, a sequential application of this product may be necessary to control late flushes of weeds. IN THE SOUTHERN STATES, A SEQUENTIAL APPLICATION OF THIS PRODUCT WILL BE REQUIRED TO CONTROL NEW FLUSHES OF WEEDS IN THE ROUNDUP READY SOYBEAN CROP. To control Giant ragweed, apply 1 quart of this product per acre when the weed is 8 to 12 inches tall to increase control and possibly avoid the need for a sequential application.

USE RESTRICTIONS: The combined total application from crop emergence through harvest must not exceed 3 quarts per acre. The maximum rate for any single in-crop application is 2 quarts per acre. The maximum combined total of this product that can be applied during flowering is 2 quarts per acre.

### Pre-harvest Applications:

This product provides weed control when applied prior to harvest of Soybeans. Up to 1 quart of this product per acre can be applied by aerial or ground application. Refer to the table above for maximum allowable quantities of this product that can be applied per season.

USE PRECAUTIONS: Avoid excessive seed shatter loss due to ground application equipment.

USE RESTRICTIONS: Allow a minimum of 14 days between final application and harvest of Soybean grain or feeding of Soybean grain, forage or hay.

### Post-harvest Applications:

This product may be applied after harvest of Roundup Ready Soybeans. Higher rates may be required for control of large weeds which were growing in the crop at the time of harvest. Tank-mixtures with 2,4-D or Dicamba may be used.

### Cropping Season:

Combined total for the year for all applications of this product may not exceed 8 quarts per acre.

When used as directed, this product will control annual grasses and broadleaf weeds listed in Roundup Ready Soybeans. Many perennial grasses and broadleaf weeds will be controlled or suppressed with 1 or more applications of this product.

There are no rotational crop restrictions following applications of this product.

### Ground Applications:

Use the specified rates of this product in 5 to 20 gallons of spray solution per acre as a broadcast spray. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results with ground application equipment, use nozzles which provide a flat fan pattern. Check for even distribution of spray droplets.

### Aerial Applications:

Use the specified rates of this product in 3 to 15 gallons of water per acre. Do not exceed 1 quart of this product per acre. DO NOT APPLY DURING LOW LEVEL INVERSION CONDITIONS WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITIONS WHICH FAVOR DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION

CONTACTED TO WHICH TREATMENT IS NOT INTENDED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.

### Rates for Annual Weeds:

The following rates will provide control of annual grasses and broadleaf weeds listed in conventional and no-till Soybean production systems. Refer to "ANNUAL WEEDS" under the "WEEDS CONTROLLED AND RATES" section of this label for specified rates for specific annual weeds. Do not use this product in tank-mixtures with other herbicides due to the potential for crop injury and/or weed antagonism, and to rotational crop restrictions of the tank-mixed partner.

This product may be used at a rate of up to 2 quarts per acre in any single application for control of annual weeds where heavy weed densities exist. The maximum combined total of this product which can be applied during flowering is 2 quarts per acre. **Note:** The following are based on a clean start at planting by using a burndown application or tillage to control existing weeds before Soybean emergence. In stale seedbed or no-till systems, a pre-plant burndown treatment of 0.5 to 2 quarts of this product per acre may be applied to control existing weeds prior to crop emergence.

### Midwest / Mid-Atlantic Uses

**Narrow-row or Drilled Soybeans:** A single in-crop application of this product will provide effective control of labeled weeds. For best results, make an initial application of 1 quart per acre on 4 to 8 inch weeds. Weeds will generally be 4 to 8 inches tall 3 to 5 weeks after planting. If the initial application is delayed and weeds are 8 to 18 inches tall, use 1.5 quarts per acre for best results.

Under adverse conditions such as drought, hail, wind damage or a poor Soybean stand that slows or delays canopy closure, a sequential application of this product at 0.75 to 1 quart per acre may be necessary to control late flushes of weeds. The combined total applications of this product made in-crop must not to exceed 3 quarts per acre.

**Wide-row Soybeans:** An in-crop application of this product will provide effective control of the initial stand of labeled weeds. For best result, make an initial application of 1 quart per acre on 4 to 8 inch weeds. Weeds will generally be 4 to 8 inches tall 3 to 5 weeks after planting. If new flushes of weeds occur, they can be controlled by sequential applications of this product.

Initial Treatment and Sequential* (if needed) Applications	
Weed Height (Inches)	Rate (Qts./Ac.)
1 to 4	0.75
4 to 8	1
8 to 18	1.5
* Combined total application in-crop shall not exceed 3 qts. per Ac.	

Black nightshade, Pennsylvania smartweed, Velvetleaf and Waterhemp: Apply 32 fluid ounces (1 qt.) per acre to weeds 3 to 6 inches tall and 1.5 quarts to weeds up to 12 inches tall. For Morningglory species, apply 1 quart to weeds up to 4 inches and 1.5 quarts to weeds up to 6 inches.

Giant ragweed: Apply 1 quart per acre when the weed is 8 to 12 inches tall to avoid the need for sequential application.

Some weeds such as Black nightshade, Burcucumber, Giant ragweed, Shattercane, Wild proso millet and Woolly cupgrass with multiple germination times may require a sequential application of this product.

Suppressed or stunted weeds may also require sequential application. Make sequential applications after some regrowth has occurred. Use a minimum of 16 fluid ounces of this product per acre for sequential applications.

The combined yearly total of in-crop applications post-emergence of this product must not exceed 3 quarts per acre.

### Southeast Uses

**Narrow-row, Drilled or Wide-row Soybeans:** A single in-crop application of this product will provide effective control of the initial stand of labeled weeds. For best results, make an initial application of 1 quart per acre on 3 to 6 inch weeds. Weeds will generally be 3 to 6 inches tall 2 to 3 weeks after planting.

Initial Treatment	
Weed Height (Inches)	Rate (Qts./Ac.)
3 to 6	1
6 to 12	1.5

Under adverse growing conditions such as drought, hail, wind damage or a poor stand of Soybeans that slows or delays canopy closure, a sequential application of this product at 0.5 to 1 quart per acre may be necessary to control late flushes of weeds.

Sequential Application* (if needed)	
Weed Height (Inches)	Rate (Qts./Ac.)
2 to 3	0.5
3 to 6	0.75
6 to 12	1
* Combined total application in-crop shall not exceed 3 qts. per Ac.	

Florida pusley, Hemp sesbania and Spurred anoda: Apply 1 quart per acre to weeds 2 to 4 inches tall for the initial application. Apply 1 quart per acre when these weeds are 3 to 6 inches tall if a sequential application is needed.

For Black nightshade, Groundcherry, Morningglory and Pennsylvania smartweed, apply the following rates for the initial application:

Weed Height (inches)	Rate (qts./Acre)
1 to 3	0.75
3 to 6	1
6 to 12	1.5

Some weeds, such as Black nightshade, broadleaf Signalgrass, Burcucumber, Sicklepod and Texas panicum with multiple germination times may require a sequential application of this product. Suppressed or stunted weeds may also require sequential application. Make sequential applications after some regrowth has occurred. Use a minimum of 0.5 quart of this product per acre for sequential applications. The combined total of all in-crop applications of this product post-emergence must not exceed 3 quarts per acre.

#### Delta / Mid-South Uses

**Narrow-row, Drilled or Wide-row Soybeans:** A single in-crop application of this product will provide effective control of the initial stand of labeled weeds. New flushes of weeds can be controlled by sequential applications of this product. Combined yearly total of this product is not to exceed 3 quarts per acre. For best results, make an initial application of 1 quart per acre on 2 to 4 inch weeds. Weeds will generally be 2 to 4 inches tall in 2 to 3 weeks after planting.

Initial Treatment	
Weed Height (Inches)	Rate (Qts./Ac.)
2 to 4	1
5 to 12	1.5

Sequential Application*	
Weed Height (Inches)	Rate (Qts./Ac.)
2 to 3	0.5
3 to 6	0.75
6 to 12	1
* Combined total application in-crop shall not exceed 3 qts. per acre.	

Hemp sesbania and Spurred anoda: Apply a sequential treatment of 1 quart per acre on weeds 3 to 6 inches tall if required.

Some weeds such as Black nightshade, broadleaf Signalgrass, Burcucumber, Sicklepod and Texas panicum, with multiple germination times may require a sequential application of this product.

Suppressed or stunted weeds may also require sequential application. Make sequential application after some regrowth has occurred. Use a minimum of 0.5 quart of this product per acre for sequential applications. The combined total applications post-emergence of this product must not exceed 3 quarts per acre.

#### Perennial Weeds Rate Uses:

This product at 1 to 2 quarts per acre rate (single or sequential applications), will control or suppress perennial weeds such as Bermudagrass, Canada thistle, Common milkweed, Field bindweed, Hemp dogbane, Horsenettle, Horseweed/Marestail (*Conyza canadensis*), Nutsedge, Quackgrass, Redvine, Rhizome johnsongrass, Trumpet creeper, Swamp smartweed and Wirestem muhly. For best results, allow perennial weed species to achieve at least 6 inches of growth before spraying with this product. For additional information on perennial weeds, see "PERENNIAL WEEDS" under the "WEEDS CONTROLLED AND RATES" section of this label. For some perennial weeds, repeat application may be required to eliminate crop competition throughout the growing season. **Note:** Non-ionic surfactants which are labeled for use with post-emergence

herbicides may be used. When using additional surfactant, use 0.5% surfactant concentration (2 qts. per 100 gals. of spray solution) when using surfactant which contain at least 70% active ingredient or a 1% surfactant concentration (4 qts. per 100 gals. of spray solution) for those surfactants containing less than 70% active ingredient.

The addition of certain surfactants to this product may result in some crop response including leaf necrosis, leaf chlorosis or leaf speckling due to the surfactant added to the spray mixture. Read and carefully observe precautionary statements and other information appearing on the surfactant label.

#### Soybeans with Roundup Ready Gene in the State of California Only

The California Department of Pesticide Regulation has reviewed and authorized the use of this product for applications in Roundup Ready Soybeans. Applicators must read and follow the use directions specified in the "SOYBEANS WITH THE ROUNDUP READY GENE" section of this label.

#### For Control and Management of Glyphosate Resistant Horseweed/Marestail (*Conyza canadensis*) in Roundup Ready Soybean Varieties Only

For ground applications, use 10 to 20 gallons of water per acre. For aerial applications, use 3 to 15 gallons of water per acre. For tank-mixtures, read and carefully observe the precautionary statements and all other information appearing on the product labels, supplemental labeling or fact sheets published separately for all herbicides used.

#### Post-emergence (In-crop) Applications:

Control Horseweed prior to planting using pre-plant burndown treatments. In in-crop Roundup Ready Soybeans, apply a tank-mixture of this product (1 qt. per acre) with 0.3 oz. per acre of Amplify® (Cloransulam-methyl). Use this treatment as a salvage treatment only for a Horseweed/Marestail (*Conyza canadensis*) infestation that was not controlled pre-plant. Apply between full emergence of the first trifoliate leaf and 50% flowering stage of Soybeans. At the time of treatment, Horseweed has to be 6 inches or less in height.

#### SUGAR BEETS WITH THE ROUNDUP READY GENE

TYPES OF APPLICATIONS: Pre-plant, Pre-emergence, At-Planting, Post-emergence.

Maximum Allowable Combined Application Quantities Per Season (Qts./Ac.)	
Pre-plant, At-planting, Pre-emergence applications	5
Emergence to 8 leaf stage	2.5
Emergence to 8 leaf stage	2
<b>Combined total per year for all applications</b>	<b>8</b>

**USE RESTRICTIONS:** The combined total application from crop emergence through harvest must not exceed 4.5 quarts per acre. The maximum rate for any single application from crop emergence until the 8 leaf stage is 1.5 quarts per acre. The maximum rate for any single application between the 8 leaf stage and canopy closure is 1 quart per acre. Allow a minimum of 30 days between last application and Sugar beets harvest.

#### Pre-plant, Pre-emergence, At-Planting Applications:

This product may be applied before, during or after planting of Roundup Ready Sugar beets.

#### Post-emergence (In-Crop) Applications:

This product may be applied on Roundup Ready Sugar beets post-emergent over-the-top from emergence to 30 days prior to harvest. To maximize yield potential, spray Sugar beets early to eliminate competing weeds. Up to 4 sequential applications of this product may be made with at least 10 days between applications. Refer to "ANNUAL WEEDS" under the "WEEDS CONTROLLED AND RATES" section of this label for specified rates for specific annual weeds. This product will control or suppress most perennial weeds. For some perennial weeds, repeat applications may be required to eliminate crop competition throughout the growing season.

#### Non-crop Uses Around Farmstead

TYPES OF APPLICATIONS: Non-selective weed control, Trim-and-Edge, Greenhouse/Shadehouse, Chemical mowing, Cut stumps, Habitat management.

#### Weed Control and Trim-and-Edge Uses

This product may be used to control annual weeds, perennial weeds and woody brush which are found in any part of the farmstead, including building foundations, along and in fences, in dry ditches



and canals, along ditch banks, farm roads, and shelterbelts, prior to landscape plantings and equipment storage areas.

**TANK-MIXTURES:** This product may be tank-mixed with the following products. Refer to the label of these products for approved farmstead sites and application rates.

For annual weeds, use 1 quart of this product per acre when weeds are less than 6 inches tall, 48 fluid ounces (1.5 qts.) per acre when weeds are 6 to 12 inches tall and 64 fluid ounces (2 qts.) per acre when weeds are greater than 12 inches tall. For perennial weeds, apply 64 to 160 fluid ounces (2 to 5 qts.) per acre in these tank-mixes. For tank-mixtures with these products through backpack sprayers, handguns or other high-volume spray-to-wet applications, see "HANDHELD OR HIGH VOLUME EQUIPMENT" under the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for use instructions.

2,4-D*	Diuron*	Oryzalin	Prodiamine
Bromacil	Imazapic	Oxadiazon	Simazine*
Chlorosulfuron	Imazapyr	Pendimethalin	Sulfometuron methyl
Dicamba	Metsulfuron methyl		

\* Individual tank-mix product must be registered for use on this site.  
 \*\* This product plus Dicamba may not be applied by air in California.

When tank-mixing, do not exceed specified application rates and use only in accordance with the most restrictive instructions on the respective product labels.

### Greenhouse / Shadehouse Uses

This product may be used to control weeds in and around greenhouses and shadehouses. Desirable vegetation must not be present during application and air circulation fans must be turned off.

### Chemical Mowing

This product will suppress perennial grasses listed in this section to serve as a substitute for mowing.

Use 6 fluid ounces (0.25 qt.) of this product per acre when treating Kentucky bluegrass. Use 8 fluid ounces (0.25 qt.) of this product per acre when treating Fine fescue, Orchardgrass, Bahiagrass or Quackgrass covers. Use 16 fluid ounces (0.5 qt.) of this product per acre when treating Bermudagrass. Use 64 fluid ounces (2 qts.) of this product per acre when treating Torpedograss or Paragrass.

Apply treatments in 10 to 20 gallons of spray solution per acre. Chemical mowing applications may be made along farm ditches and other parts of farmsteads.

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

### Cut Stumps

Use this product for treating cut stumps in any non-crop sites listed on this label.

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 to 100% solution of this product to the freshly cut surface immediately after cutting. Delays in application may result in reduced performance. For best results, apply during periods of active growth and full leaf expansion.

Alder	Pepper (Brazilian)	Sweetgum
Eucalyptus	Pine (Austrian)	Tan oak
Madrone	Reed (Giant)	Willow
Oak	Saltcedar	

USE PRECAUTIONS: Do not make cut stump applications when the roots of desirable woody brush or trees may be grafted to the roots of the cut stump. Some sprouts, stems, or trees may share the same root system. Adjacent trees having a similar age, height and spacing may signal shared roots. Whether grafted or shared, injury is likely to occur to non-treated stems/trees when one or more trees sharing common roots are treated.

### 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 in habitat management areas. Spot treatments can be made 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.

### Industrial, Turf and Ornamental Uses

See "USE INFORMATION", "MIXING ADDITIVES AND APPLICATION INSTRUCTIONS", and "APPLICATION EQUIPMENT AND TECHNIQUES" sections of this label and the following sections for specific uses and instructions.

### WEEDS CONTROLLED

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

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

For low volume directed spray applications, use a 5 to 10% solution of this product for control or partial control of annual weeds, perennial weeds, or woody brush and trees. Spray coverage should be uniform with at least 50% of the foliage contacted. Coverage of the top one-half of the plant is important for best results. 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 resprouts.

Refer to the following label sections for rates to control annual and perennial weeds and woody brush and trees. For difficult to control annual or perennial weeds and woody brush and trees, where plants are growing under stressed conditions, or where infestations are dense, this product may be used at 160 to 320 fluid ounces (5 to 10 qts.) per acre for enhanced results.

### Annual Weeds:

Anoda (Spurred)	Fleabane (Rough)*	Ragweed (Giant)
Barley*	Florida pusley	Red rice
Barnyardgrass*	Foxtail*	Russian thistle
Bassia (Fivehook)	Goatgrass	Rye*
Bittercress*	(Jointed)*	Ryegrass*
Black nightshade*	Goosegrass	Sandbur (Field)*
Bluegrass (Annual)*	Grain sorghum	Shattercane*
Bluegrass	(Milo)*	Shepherdspurse*
(Bulbous)*	Groundsel	Sicklepod
Brome (Downy)*	(Common)*	Signalgrass
Brome (Japanese)*	Hemp sesbania	(Broadleaf)*
Browntop panicum*	Henbit	Smartweed
Buttercup*	Horseweed/	(Ladysthumb)*
Carolina foxtail*	Marestail	Smartweed
Carolina geranium	(Coryza	(Pennsylvania)*
Castor bean	canadensis)	Sowthistle
Cheatgrass*	Itchgrass*	(Annual)
Cheeseweed	Johnsongrass	Spanishneedles
(Malva parviflora)	(Seedling)	Speedwell
Chervil*	JungleRice	(Purslane)*
Chickweed*	Knotweed	Sprangletop*
Cocklebur*	Kochia	Spurge (Annual)
Copperleaf	Lambsquarters*	Spurge (Prostrate)*
(Hophornbeam)	Little Barley*	Spurge (Spotted)*
Corn*	London rocket*	Spurry (Umbrella)*
Corn speedwell*	Mayweed	Starthistle (Yellow)
Crabgrass*	Medusahead*	Stinkgrass*
Dwarf dandelion*	Morningglory	Sunflower*
Eastern	(Ipomoea spp.)	Teaweed/
mannagrass*	Mustard (Blue)*	Prickly sida
Eclipta*	Mustard (Tansy)*	Texas panicum*
Fall panicum*	Mustard (Tumble)*	Velvetleaf
False dandelion*	Mustard (Wild)*	Virginia copperleaf
Falseflax	Oats	Virginia
(Smallseed)*	Pigweed*	pepperweed*
Fiddleneck	Plains/Tickseed	Wheat*
Field pennycress*	coreopsis*	Wild oats*
Filaree	Prickly lettuce*	Witchgrass*
Fleabane (Annual)*	Puncturevine	Woolly cupgrass*
Fleabane (Hairy)	Purslane (Common)	Yellow rocket
(Coryza	Ragweed	
bonariensis)*	(Common)*	

(Continued)

(Cont.)
USE INSTRUCTIONS: Use 32 fl. ozs. (1 qt.) per acre if weeds are less than 6 inches in height or runner length and 48 to 128 fl. ozs. (1.5 to 4 qts.) per acre if weeds are over 6 inches in height or runner length or when weeds are growing under stressed conditions. Use the higher rate for tough-to-control species regardless of the weed size at application. Treat tough-to-control weeds early when they are relatively small. This product may be tank-mixed provided that the specific tank-mix product is registered for use on the target site. Refer to these product labels for approved sites and application rates.
For spray-to-wet applications, apply a 0.5% solution of this product to weeds less than 6 inches in height or runner length. Apply prior to seedhead formation in grass or bud formation in broadleaf weeds. For annual weeds over 6 inches tall, or for smaller weeds growing under stressed conditions, use a 1 to 2% solution. Use the higher rate for tough-to-control species or for weeds over 24 inches tall.
* When using field broadcast equipment (aerial applications or boom sprayers using flat-fan nozzles), these species will be controlled or partially controlled using 16 fl. ozs. (0.5 qt.) of this product per acre. Applications must be made using 3 to 10 gals. of carrier volume per acre. Use nozzles that ensure thorough coverage of foliage and treat when weeds are in an early growth stage.

### Perennial Weeds:

In addition to the weeds listed below, refer to “*PERENNIAL WEEDS*” under the “*WEEDS CONTROLLED AND RATES*” section of this label for list of perennial weeds this product can be used on.

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 broadleaf). For non-flowering plants, best results are obtained when the plants reach a mature stage of growth. In many situations, treatments are required prior to these growth stages.

When using spray-to-wet treatments with handheld equipment, ensure thorough coverage.

For low volume directed spot treatments using handheld equipment, apply a 5 to 10% solution of this product.

Allow 7 or more days after application before tillage.

Perennial Weeds	Rate (Fl. Oz. / Ac.)	Handheld (% Solution)
Beachgrass (European) ( <i>Ammophila arenaria</i> )	96 to 160 (3 to 5 qts.)	2
German ivy	64 to 128 (2 to 4 qts.)	1 to 2
Pepperweed (Perennial)	128 (4 qts.)	2

### Woody Brush and Trees:

In addition to the woody brush and trees listed below, refer to “*WOODY BRUSH AND TREES*” under the “*WEEDS CONTROLLED AND RATES*” section of this label for list of woody brush and trees this product can be used on.

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.

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

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

When using spray-to-wet treatments with handheld equipment, ensure thorough coverage. For low volume directed spot treatments using handheld equipment, apply a 5 to 10% solution of this product.

Woody Brush and Trees	Broadcast Rate (Fl. Oz. / Ac.)	Handheld Spray-to-Wet (% Solution)
Deerweed	64 to 160 (2 to 5 qts.)	2
Oak (Pin)	64 to 128 (2 to 4 qts.)	1 to 1.5
Sumac (Laurel, Sugarbrush)*	64 to 128 (2 to 4 qts.)	1 to 2
Toyon*	—	2
Yerbasanta*	—	2
* Partial control		

### USE INSTRUCTIONS

Unless otherwise specified, applications may be made to control any weeds listed in the “*WEEDS CONTROLLED*” section under “*INDUSTRIAL, TURF AND ORNAMENTAL USES*”. Refer also to “*SELECTIVE EQUIPMENT*” under the “*APPLICATION EQUIPMENT AND TECHNIQUES*” section of this label.

### Cut Stumps

Cut stump treatments may be made on any sites listed on this label. This product will control many types of woody brush and tree species including those listed under the “*WEEDS CONTROLLED AND RATES*” section of this label. Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut trees or resprouts close to the soil surface. Apply a 50 to 100% solution of this product to the freshly-cut surface immediately after cutting. Delays in application may result in reduced performance. For best results, make applications during periods of active growth and full leaf expansion. DO NOT MAKE CUT STUMP APPLICATIONS WHEN THE ROOTS OF DESIRABLE WOODY BRUSH OR TREES MAY BE GRAFTED TO THE ROOTS OF THE CUT STUMP. Some sprouts, stems, or trees may share the same root system. Adjacent trees having a similar age, height and spacing may signal shared roots. Whether grafted or shared, injury is likely to occur to non-treated stems/trees when one or more trees sharing common roots are treated.

### Forestry Site Preparation

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

This product can also be used for site preparation prior to planting any tree species, including Christmas trees, Eucalyptus, hybrid tree cultivars and silvicultural nursery sites.

Refer to the “*WEEDS CONTROLLED AND RATES*” and “*WOODY BRUSH AND TREES*” sections of this label for specific application rates and instructions.

Use higher rates of this product within the specified 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. Increase rates within the specified range for control of perennial herbaceous weeds any time after emergence and before seedheads, flowers or berries appear.

Use the lower rates of this product within the specified range for control of annual herbaceous weeds and actively growing perennial herbaceous weeds after seedheads, flowers or berries appear. Apply to the foliage of actively growing annual herbaceous weeds any time after emergence.

This product has no herbicidal or residual activity in the soil. Where repeat applications are necessary, do not exceed 10.6 quarts of this product per acre per year.

USE RESTRICTIONS: Unless otherwise directed, do not apply this product as an over-the-top broadcast spray for forestry conifer or hardwood release.

### Tank-Mixtures:

Tank-mixtures of this product may be used to increase the spectrum of vegetation controlled. When tank-mixing, read and carefully observe the label claims, precautionary statements and all information on the labels of all products used. Use according to the most restrictive precautionary statements for each product in the mixture. **Note:** Make sure the tank-mix product is approved for use prior to planting the desired species. Observe planting interval restrictions.

Any labeled specified rate of this product may be used in a tank-mix with the following products for forestry site preparation.

Imazapyr	Sulfometuron methyl
Metsulfuron methyl	Triclopyr

## Conifer Release

Apply only where Conifers have been established for more than one year. Vegetation should not be disturbed prior to treatment or until visible symptoms appear after treatment. Symptoms of treatment are slow to appear, especially in woody species treated in late Fall. Injury may occur to Conifers treated for release, especially where spray patterns overlap or the higher rates are applied or when applications are made during periods of active Conifer growth. **Do not use additional surfactant with Conifer release applications.** Applications must be made after formation of final Conifer resting buds in the Fall or prior to initial bud swelling in Spring. Some autumn colors on undesirable deciduous species are acceptable provided no major leaf drop has occurred. Use the following rates for Conifer release to control or partially control the weeds listed under **"WEEDS CONTROLLED"** in the above **"INDUSTRIAL, TURF AND ORNAMENTAL USES"** section.

### For release of the following Conifer species:

Douglas fir	Hemlock	Spruce
Fir	Pine*	

\*Includes all species except Eastern white pine, Loblolly pine and Slash pine.

Apply 48 to 64 fluid ounces (1.5 to 2 qts.) of this product per acre except in Washington and Oregon, West of the crest of the Cascade Mountains. For Spring treatments West of the crest of the Cascade Mountains, apply 32 fluid ounces (1 qt.) of this product per acre before Conifer bud swell for control of annual weeds. For Fall treatments in Washington and Oregon, West of the crest of the Cascade Mountains, apply 32 to 48 fluid ounces (1 to 1.5 qts.) of this product per acre before any major leaf drop of deciduous species. For release of Western hemlock, apply 32 fluid ounces (1 qt.) of this product per acre.

### For release of the following Conifer species:

Eastern white pine	Loblolly pine	Slash pine
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Late season application — Apply 48 to 64 fluid ounces (1.5 to 2 qts.) of this product in a minimum of 5 gallons of spray solution per acre in early autumn. Applications made prior to September 1 or when conditions are conducive to rapid growth of Conifers will create the potential for increased injury in the form of tip and/or needle burn. Injury may decrease with later applications. Some autumn colors are acceptable at the time of applications. Apply prior to frost or leaf drop of undesirable plants. Applications made according to label directions will release Loblolly pine, Eastern white pine and Slash pine by reducing competition from the following species:

Ash	Oak	Sassafras
Cherry (Black, Pin)	(Black, Post,	Sourwood
Elm	Southern red, White)	Sumac
Hawthorn	Persimmon	(Poison, Smooth,
Locust (Black)	Poplar, yellow	Winged)
Maple (Red)	(Tulip tree)	Sweetgum

Apply only to those sites where woody brush and trees listed in this label constitute the majority of the undesirable species.

### This Product Plus Sulfometuron methyl Tank-mixtures for Conifer Release from Herbaceous Weeds:

To release Loblolly pines from herbaceous weeds, tank-mixtures of this product with Sulfometuron methyl will provide control of annual weeds listed under **"WEEDS CONTROLLED"** in the above **"INDUSTRIAL, TURF AND ORNAMENTAL USES"** section of this label and the Oust label. This tank-mixture will also provide partial control of the perennial weeds listed below.

Apply 16 to 24 fluid ounces (0.5 to 0.75 qts.) of this product with appropriate rate of Sulfometuron methyl in 10 to 30 gallons of spray solution per acre. Make application to actively growing weeds as a broadcast spray over the top of the young Loblolly pines.

This tank-mixture may be applied using aerial equipment. When applying by air, use the specified rate in 5 to 15 gallons of spray solution per acre. For control of annual weeds below 12 inches in height (or runner length on annual vines), use the lower rates of both products. Use higher specified rates of both products when annual weeds are in more advanced stages of growth and are approaching flower or seed formation. Use the higher specified rates of both products for partial control of the following perennial weeds. Use the lower specified rates for suppression of growth.

Bahiagrass	Fescue, Tall	Vaseygrass
Broomsedge	Johnsongrass*	Vervain, Blue
Dock, Curly	Poorjoe*	
Dogfennel	Trumpet creeper**	

\* Control at the higher rates.  
\*\* Suppression at higher rates only.

Pine damage may occur or can be accentuated if treatment takes place when young trees are under stress from drought, flood water, insects or disease. Read and observe the precautionary statements and all other information appearing on the labels of the herbicides used.

**Note to User:** This product must not be used in areas where adverse impact on federally designated endangered/threatened plant or aquatic species are likely. Prior to making applications, the user of this product must determine no such species are located in or immediately adjacent to the area to be treated.

### Non-crop Areas and Industrial Sites

Use in areas including airports, apartment complexes\*, Christmas tree farms, commercial sites, Conservation Reserve Program (CRP) areas, ditch banks, dry ditches, dry canals, fencerows, golf courses, greenhouses, industrial sites, landscape areas, lumber yards, manufacturing sites, municipal sites, natural areas, office complexes, ornamentals, parks, parking areas, pastures, petroleum tank farms and pumping installations, plant nurseries, public areas, railroads, rangeland, recreational areas, residential areas\*, rights-of-way, roadsides, schools, sod or turf seed farms, sports complexes, storage areas, substations, Turf grass areas, utility sites, warehouse areas, and wildlife management areas.

### \*Intended To Be Applied By Certified/Professional Applicators.

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

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

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

**TANK-MIXTURES:** This product may be tank-mixed with the following products provided that the specific product is registered for use on the target site. Refer to these product labels for approved sites and application rates. 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 precautionary statements for each product in the mixture. User is responsible for ensuring that the mixture product's label allows the specific applications when tank-mixing with a single generic active ingredient listed below.

2,4-D*	Diuron*	Oryzalin	Simazine*
Atrazine*	Hexazinone	Oxadiazon	Sulfometuron methyl
Bromacil	Imazapic	Oxyfluorfen	Sulfosulfuron
Chlorsulfuron	Imazapyr	Pendimethalin	Tebuthiuron
Clopyralid	Isoxaben	Prodiamine	Triclopyr
Dicamba	Metsulfuron methyl	Sethoxydim	

\* Individual tank-mix product must be registered for use on this site.

\*\* This product plus Dicamba tank-mixed may not be applied by air in California.

When applied as a tank-mixture for bare ground, this product provides control of the emerged annual weeds and control or partial control of emerged perennial weeds, woody brush and trees.

For control or partial control of the following perennial weeds, apply 32 to 64 fluid ounces (1 to 2 qts.) of this product plus appropriate rate of Sulfometuron methyl per acre.

Bahiagrass	Dock, Curly	Poorjoe
Bermudagrass	Dogfennel	Quackgrass
Broomsedge	Fescue, Tall	Vaseygrass
Dallisgrass	Johnsongrass	Vervain, Blue

**TANK-MIXTURES FOR BRUSH CONTROL:** Tank-mixtures of this product may be used to increase the spectrum of control for herbaceous weeds, woody brush and trees. When tank-mixing, read and carefully observe the label claims, precautionary statements and all information on the labels of all products used. Use according to



the most restrictive precautionary statements for each product in the mixture. Any specified rate of this product may be used in a tank-mix. For control of herbaceous weeds, use this product in tank-mixture with Imazapyr, Metsulfuron methyl, Triclopyr.

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

**Note:** For side-trimming treatments, use this product alone or in a tank-mixture with Triclopyr.

#### **Chemical Mowing – Perennials:**

This product will suppress perennial grasses listed in this section to serve as a substitute for mowing. Use 8 fluid ounces (0.25 qt.) of this product per acre when treating Fine fescue, Tall fescue, Orchardgrass, Quackgrass or Reed canarygrass covers. Use 6 fluid ounces (0.18 qt.) of this product per acre when treating Kentucky bluegrass. Apply treatments in 10 to 40 gallons of spray solution per acre. Use only in areas where some temporary injury or discoloration of perennial grasses can be tolerated.

#### **Chemical Mowing – Annuals:**

For growth suppression of some annual grasses, such as Annual Ryegrass, Wild Barley and Wild oats growing in coarse turf on roadsides or other industrial areas, apply 4 to 5 fluid ounces (0.12 to 0.15 qt.) of this product in 10 to 40 gallons of spray solution per acre. Make applications 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.

#### **Bromus Species and Medusahead in Pastures and Rangelands:**

**Bromus species** – This product may be used to treat Downy brome (*Bromus tectorum*), Japanese brome (*Bromus japonicus*), Soft chess (*Bromus mollis*) and Cheatgrass (*Bromus secalinus*) found in industrial, rangeland and pasture sites. Apply 8 to 16 fluid ounces (0.25 to 0.5 qt.) of this product per acre on a broadcast basis. For best results, coincide treatment with early seedhead emergence of the most mature plants. Delaying the application until this growth stage will maximize the emergence of other weedy grass flushes. Apply to the same site each year until seed banks are depleted and the desirable perennial grasses can become reestablished on the site.

**Medusahead** – To treat Medusahead, apply 16 fluid ounces (0.5 qt.) of this product per acre as soon as plants are actively growing, and prior to the 4 leaf stage. Applications may be made in the Fall or Spring. Applications to Brome and Medusahead may be made using ground or aerial equipment. Aerial applications for these uses may be made using fixed wing or helicopter equipment. For aerial applications, apply in 2 to 10 gallons of water per acre. For applications using ground equipment, apply in 10 to 20 gallons of water per acre. When applied as directed in this label, there are no grazing restrictions.

#### **Dormant Turf Grass:**

This product may be used to control or suppress many Winter annual weeds and Tall fescue for effective release of dormant Bermudagrass and Bahiagrass turf. Treat only when turf is dormant and prior to Spring greenup. Apply 8 to 64 fluid ounces (0.25 to 2 qts.) of this product per acre. Apply the labeled rates in 10 to 40 gallons of water per acre. Use only in areas where Bermudagrass or Bahiagrass are desirable ground covers and where some temporary injury or discoloration can be tolerated.

Treatments in excess of 16 fluid ounces (1 qt.) per acre may result in injury or delayed greenup in highly maintained areas, such as golf courses and lawns. DO NOT apply tank-mixtures of this product plus Sulfometuron methyl in highly maintained Turf grass areas. For further uses, refer to the “ROADSIDES” section of this label, which gives rates for dormant Bermudagrass and Bahiagrass treatments.

#### **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. DO NOT apply more than 16 fluid ounces (0.5 qt.) of this product per acre in highly maintained Turf grass areas. DO NOT apply tank-mixtures of this product plus Sulfometuron methyl in highly maintained Turf grass areas. For further uses, refer to the “ROADSIDES” section of this label, which gives rates for actively growing Bermudagrass treatments. Use only in areas where some temporary injury or discoloration can be tolerated.

#### **Turf Grass Renovation, Seed, or Sod Production:**

This product controls most existing vegetation prior to renovating Turf grass areas or establishing Turf grass 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. Where repeat treatments are necessary, sufficient regrowth must be attained prior to application.

For warm-season grasses such as Bermudagrass, Summer or Fall applications provide the best control. Where existing vegetation is growing under mowed Turf grass management, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the spray.

Desirable Turf grasses may be planted following the above procedures.

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

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 translocation into underground plant parts. If application rates total 96 fluid ounces (3 qts.) per acre or less, no waiting period between treatment and feeding or livestock grazing is required. If the rate is greater than 96 fluid ounces (3 qts.) per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

#### **Habitat Management**

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

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

##### **Wildlife Food Plots:**

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

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

This product may be used to control woody brush and trees such as Sycamore and those listed under “WOODY BRUSH AND TREES” under the “WEEDS CONTROLLED AND RATES” section by injection or frill applications. Apply this product using suitable equipment that must penetrate into the living tissue. Apply the equivalent of 1/25 fluid ounce (1 mL) of this product per each 2 to 3 inches of trunk diameter at breast height (DBH). This is best achieved by applying a 50 to 100% concentration of this product either to a continuous frill around the tree or as cuts evenly spaced around the tree below all branches. As tree diameter increases in size, better results are achieved by applying diluted material to a continuous frill or more closely spaced cuttings. Avoid application techniques that allow runoff to occur from frilled or cut areas in species that exude sap freely. In species such as this, make the frill or cuts at an oblique angle to produce a cupping effect and use a 100% concentration of this product. For best results, apply during periods of active growth and after full leaf expansion.

##### **Hollow Stem Injection**

This product may be applied through handheld injection devices that deliver the specified amounts of this product into targeted hollow stem plants growing in any non-crop site specified on this label. For control of the following hollow stem plants, follow the instructions below: Japanese knotweed (*Polygonum cuspidatum*) – Inject 6 mL per stem of this product between second and third internode.

Bohemian knotweed (*Polygonum bohemicum*) – Inject 6 mL per stem of this product between second and third internode.

Giant hogweed (*Heracleum mantegazzianum*) – Inject one leaf cane per plant 12 inches above root crown with 6 mL of a 5% v/v solution of this product.

Poison hemlock (*Conium maculatum*) – Inject one leaf cane per plant 10 to 12 inches above root crown with 6 mL of a 5% v/v solution of this product.

Field horsetail (*Equisetum arvense*) – Inject one segment above the root crown with 0.6 mL per stem of this product. Use a small syringe that calibrates to this rate.

Canada thistle (*Cirsium arvense*) – Cut 8 to 9 of the tallest plants at bud stage in a clump with clippers. Use a cavity needle that is pushed

into the stem center and then slowly removed as 0.6 mL per stem of this product is injected into the stem.

**Note:** The combined total for all treatments must not exceed 10.6 quarts of this product per acre. At 6 mL per stem, 10.6 quarts treats about 1,600 stems per acre.

### Ornamentals, Plant Nurseries, and Christmas Trees Post-Directed, Trim-and-Edge:

This product may be used as a post-directed spray around established woody ornamental species including Arborvitae, Azalea, Boxwood, Crabapple, Douglas fir, Eucalyptus, Euonymus, Fir, Jojoba, Holly, Lilac, Magnolia, Maple, Oak, Pine, Poplar, Privet, Spruce and Yew.

This product may also be used to trim-and-edge around trees, buildings, sidewalks and roads, potted plants and other objects in a nursery setting.

Desirable plants may be protected from the spray solution by using shields or coverings made of cardboard or other impermeable material. **THIS PRODUCT IS NOT FOR USE AS AN OVER-THE-TOP BROADCAST SPRAY IN ORNAMENTALS AND CHRISTMAS TREES.** Care must be exercised to avoid contact of spray, drift or mist with foliage or green bark of established ornamental species.

### Site Preparation:

This product may be used prior to planting any ornamental, nursery or Christmas tree species.

### Wiper Applications:

This product may be used through wick or other suitable wiper applicators to control or partially control undesirable vegetation around established Eucalyptus or Poplar trees. See the “**SELECTIVE EQUIPMENT**” under the “**APPLICATION EQUIPMENT AND TECHNIQUES**” section of this label for further information about the proper use of wiper applicators.

### Greenhouse / Shadehouse Uses:

This product may be used to control weeds growing in and around greenhouses and shadehouses. Desirable vegetation must not be present during application and air circulation fans must be turned off.

### Parks, Recreational and Residential Areas\*

This product may be used in parks, recreational and residential areas\*. It may be applied with any application equipment described in this label. This product may be used to trim-and-edge around trees, fences, and paths, around buildings, sidewalks, and other objects in these areas. This product may be used for spot treatment of unwanted vegetation. This product may be used to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. This product may be used prior to planting an area to ornamentals, flowers, Turf grass (sod or seed), or prior to laying asphalt or beginning construction projects. All of the instructions in the “**NON-CROP AREAS AND INDUSTRIAL SITES**” section apply to park and recreational areas.

**\*Intended To Be Applied By Certified/Professional Applicators.**

### Railroads

The instructions in the “**NON-CROP AREAS AND INDUSTRIAL SITES**” section may be used on railroads.

### Bare Ground, Ballast and Shoulders, Crossings, and Spot Treatment:

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

**TANK-MIXTURES:** This product may be tank-mixed with the following products for ballast, shoulder, spot, bare ground and crossing treatments provided that the specific product is registered for use on such sites. Refer to these product labels for approved non-crop sites and application rates. Read and carefully observe the precautionary statements, restrictions and all other information appearing on the labels of all herbicides used. Use according to the most restrictive statements for each product in the mixture. User is responsible for ensuring the mixture product's label allows the specific applications when tank-mixing with a single generic active ingredient listed below:

2,4-D*	Clopyralid	Imazapyr	Sulfosulfuron
Atrazine*	Dicamba**	Metsulfuron methyl	Tebuthiuron
Bromacil	Diuron*	Simazine*	Triclopyr
Chlorsulfuron	Hexazinone	Sulfometuron methyl	

\* The individual tank-mix product must be registered for use on this site.

\*\* This product plus Dicamba tank-mixed may not be applied by air in California.

### Brush Control:

This product may be used to control woody brush and trees on railroad rights-of-way. Apply 126 to 320 fluid ounces (4 to 10 qts.) of this product per acre as a broadcast spray using boom-type or boomless nozzles. Up to 80 gallons of spray solution per acre may be used. Apply a 0.75 to 2% solution of this product when using high-volume spray-to-wet applications. Apply a 5 to 10% solution of this product when using low volume directed sprays for spot treatment.

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

Chlorsulfuron	Fosamine	Metsulfuron methyl
Clopyralid	Hexazinone	Picloram
Diglycolamine	Imazapyr	Triclopyr

When tank-mixing, do not exceed specified application rates and use only in accordance with the most restrictive instructions on the respective product labels.

### Bermudagrass Release:

This product may be used to control or partially control many annual and perennial weeds for effective release of actively growing Bermudagrass. Apply 16 to 48 fluid ounces (0.5 to 1.5 qts.) of this product in up to 80 gallons of spray solution per acre. Use the lower rate when treating annual weeds below 6 inches in height (or runner length). Use the higher rate as weeds increase in size or as they approach flower or seedhead formation. These rates will also provide partial control of the following perennial species:

Bahiagrass	Fescue (Tall)	Trumpet creeper
Bluestem (Silver)	Johnsongrass	Vaseygrass

**TANK-MIXTURES:** This product may be tank-mixed with Sulfometuron methyl. If tank-mixed, use no more than 16 to 48 fluid ounces (0.5 to 1.5 qts.) of this product with an appropriate rate of Sulfometuron methyl per acre. Use the lower rates of each product to control annual weeds less than 6 inches in height (or runner length) that are listed in this label and the Sulfometuron methyl label. Use the higher rates as annual weeds increase in size and approach the flower or seedhead stages. These rates will also provide partial control of the following perennial weeds:

Bahiagrass	Broomsedge	Dogfennel	Raspberry
Blackberry	Dallisgrass	Fescue (Tall)	Trumpet creeper
Bluestem	Dewberry	Johnsongrass	Vaseygrass
(Silver)	Dock (Curly)	Poorjoe	Vervain (Blue)

Use only on well-established Bermudagrass. Bermudagrass injury may result from the treatment, but regrowth will occur under moist conditions. Repeat applications in the same season may cause severe injury.

When tank-mixing, do not exceed specified application rates and use only in accordance with the most restrictive instructions on the respective product labels.

### Roadsides

The instructions in the “**NON-CROP AREAS AND INDUSTRIAL SITES**” section may apply to roadsides.

### Shoulder Treatments:

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

### Guardrails and Other Obstacles to Mowing:

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

### Spot Treatment:

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

### Tank-Mixtures:

This product may be tank-mixed with other products including the following for shoulder, guardrail, spot and bare ground treatments provided that the specific product is registered for use on such sites. Refer to these product labels for approved non-crop sites and application rates. Read and carefully observe the precautionary

statement and all other information appearing on the labels of all herbicides used. Use according to the most restrictive precautionary statements for each product in the mixture. User is responsible for ensuring that the mixture product's label allows the specific applications when tank-mixing with a single generic active ingredient listed below.

2,4-D*	Diuron*	Oryzalin	Simazine*
Atrazine*	Hexazinone	Oxadiazon	Sulfometuron methyl
Bromacil	Imazapic	Pendimethalin	Sulfosulfuron
Chlorsulfuron	Isoxaben	Prodiamine	
Dicamba**	Metsulfuron methyl	Sethoxydim	

\*The individual tank-mix product must be registered for use on this site.

\*\*This product plus Dicamba tank-mixed may not be applied by air in California.

See the "NON-CROP AREA AND INDUSTRIAL SITES" section of this label for tank-mixing instructions.

### Release of Bermudagrass or Bahiagrass:

**Dormant Applications** – This product may be used to control or partially control many Winter annual weeds and Tall fescue for effective release of dormant Bermudagrass or Bahiagrass. Treat only when turf is dormant and prior to Spring greenup. This product may be tank-mixed with Sulfometuron methyl for residual control. Tank-mixtures of this product with Sulfometuron methyl may delay greenup. For best results on Winter annuals, treat when plants are in an early growth stage (below 6 inches in height) after most have germinated. For best results on Tall fescue, treat when Fescue is at or beyond the 4 to 6 leaf stage.

Apply 8 to 64 fluid ounces (0.25 to 2 qts.) of this product per acre alone or in a tank-mixture with an appropriate rate of Sulfometuron methyl. Apply the labeled rates in 10 to 40 gallons of water per acre. Use only in areas where Bermudagrass or Bahiagrass are desirable ground covers and where some temporary injury or discoloration can be tolerated. To avoid delays in greenup and minimize injury, add no more than what is needed of Sulfometuron methyl per acre on Bermudagrass and Bahiagrass and avoid treatments when these grasses are in a semi-dormant condition.

This product may also be applied at 16 to 64 fluid ounces (0.5 to 2 qts.) in tank-mixture with an appropriate rate of Sulfosulfuron herbicide per acre. Read and follow all label directions for Sulfosulfuron herbicide.

**Actively Growing Bermudagrass** – This product may be used to control or partially control many annual and perennial weeds for effective release of actively growing Bermudagrass. Apply 16 to 48 fluid ounces (0.5 to 1.5 qts.) of this product in 10 to 40 gallons of spray solution per acre. Use the lower rate when treating annual weeds below 6 inches in height (or runner length). Use the higher rate as weeds increase in size or as they approach flower or seedhead formation. These rates will also provide partial control of the following perennial species:

Bahiagrass	Fescue (Tall)	Trumpetcreeper
Bluestem (Silver)	Johnsongrass	Vaseygrass

This product may be tank-mixed with Sulfometuron methyl. If tank-mixed, use no more than 16 to 32 fluid ounces (0.5 to 1 qt.) of this product with an appropriate rate of Sulfometuron methyl per acre. Use the lower rates of each product to control annual weeds less than 6 inches in height (or runner length) that are listed in this label and the Sulfometuron methyl label.

Use the higher rates as annual weeds increase in size and approach the flower or seedhead stages. These rates will also provide partial control of the following perennial weeds:

Bahiagrass	Dallisgrass	Fescue (Tall)	Trumpetcreeper
Bluestem	Dock (Curly)	Johnsongrass	Vaseygrass
(Silver)	Dogfennel	Poorjoe	Vervain (Blue)
Broomsedge			

Use only on well-established Bermudagrass. Bermudagrass injury may result from the treatment but regrowth will occur under moist conditions. Repeat applications of the tank-mix in the same season may cause severe injury.

When tank-mixing, do not exceed specified application rates and use only in accordance with the most restrictive instructions on the respective product labels.

**Actively Growing Bahiagrass** – For suppression of vegetative growth and seedhead inhibition of Bahiagrass for approximately 45 days, apply 6 fluid ounces (0.18 qt.) of this product in 10 to 40 gallons of water per acre. Apply 1 to 2 weeks after full greenup or after mowing to a uniform height of 3 to 4 inches. This application must be made prior to seedhead emergence.

For suppression up to 120 days, apply 4 fluid ounces (0.12 qt.) of this product per acre, followed by an application of 2 to 4 fluid ounces (0.06 to 0.12 qt.) per acre about 45 days later. Make no more than 2 applications per year.

This product may be used for control or partial control of Johnsongrass and other weeds listed on the Sulfosulfuron label in actively growing Bahiagrass. Apply 6.25 fluid ounces (0.19 qt.) of this product plus an appropriate rate of Sulfosulfuron per acre. Use only on well-established Bahiagrass.

A tank-mixture of this product with Sulfometuron methyl may also be used. Apply 6 fluid ounces (0.18 qt.) of this product plus an appropriate rate of Sulfometuron methyl per acre 1 to 2 weeks following an initial spring mowing. Make only one application per year.

When tank-mixing, do not exceed specified application rates and use only in accordance with the most restrictive instructions on the respective product labels.

### Utility Sites

Use this product along electrical power, pipeline and telephone rights-of-way, and in other sites associated with these rights-of-way, such as substations, roadsides, railroads or similar rights-of-way that run in conjunction with utilities.

This product may be used in utility sites and substations for bare ground, trim-and-edge around objects, spot treatment of unwanted vegetation and to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. This product may be used prior to planting a utility site to ornamentals, flowers, Turf grass (sod or seed), or beginning construction projects.

This product can be used in preparing or establishing wildlife openings within these sites, maintaining access roads and for side trimming along utility rights-of-way.

**TANK-MIXTURES:** Tank-mixtures of this product may be used to increase the spectrum of control for herbaceous weeds, woody brush and trees. This product may be tank-mixed with other products including the following provided that the specific product is registered for use on such sites. Refer to the label of these products for approved non-crop sites and application rates. 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 precautionary statements for each product in the mixture. User is responsible for ensuring that the tank-mix product allows the specific applications when tank-mixing with a single generic active ingredient listed below.

2,4-D*	Fosamine	Pendimethalin
Atrazine*	Hexazinone	Simazine*
Bromacil	Imazapic	Sulfometuron methyl
Chlorsulfuron	Imazapyr	Sulfosulfuron
Clopyralid	Metsulfuron methyl	Triclopyr***
Dicamba**	Oryzalin	
Diuron*	Prodiamine	

\* The individual tank-mixed product must be registered for use on this site.

\*\* This product with Dicamba tank-mixed may not be applied by air in California.

\*\*\* Ensure that Triclopyr is thoroughly mixed with water according to label directions before adding this product. Have the spray mixture agitating at the time this product is added to avoid spray compatibility problems. For side trimmings, this product can be used alone or in tank-mixture with Triclopyr.

### Bare Ground and Trim-and-Edge:

This product may be used in utility sites and substations for bare ground, trim-and-edge around objects, spot treatment of unwanted vegetation and to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. This product may be used prior to planting a utility site to ornamentals, flowers, Turf grass (sod or seed), or beginning construction projects. Repeated applications of this product may be used, as weeds emerge, to maintain bare ground.

**TANK-MIXTURES:** This product may be tank-mixed with other products including the following provided that the specific product is registered for use on such sites. Refer to the label of these products for approved non-crop sites and application rates.



Dicamba	Metsulfuron methyl	Simazine
Diuron	Oryzalin	Triclopyr
Imazapic	Oxadiazon	
Imazapyr	Prodiamine	

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Keep container closed to prevent spills and contamination. Store in original container.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product that cannot be used or chemically reprocessed must be disposed of in a landfill approved for pesticide disposal or in accordance with applicable federal, state or local procedures. Emptied container retains vapor and product residue. Observe all labeled safeguards until container is destroyed.

### CONTAINER HANDLING:

**Nonrefillable Container (rigid material; ≤ 5 gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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 one-fourth 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. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**Nonrefillable Container (rigid material; > 5 gallons up to < 250 gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth 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. Dispose of empty container in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**Refillable Container (≥ 250 gallons & Bulk): 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 mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

## WARRANTY—CONDITIONS OF SALE

The label instructions for the use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials or the manner of use or application, all of which are beyond the control of Manufacturer.

Manufacturer warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the "DIRECTIONS FOR USE" set forth in the complete directions for use booklet ("Directions"), subject to the risks referred to above.

To the extent consistent with applicable law, any damage arising from a breach of this warranty shall be limited to direct damages and shall not include consequential commercial damages such as loss of profits or values or any other special or indirect damages.

To the extent consistent with applicable law, Manufacturer makes no other express or implied warranty including any other express or implied warranty of FITNESS or MERCHANTABILITY.

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