

## ATTENTION:

This specimen label is provided for general information only.

- This pesticide product may not yet be available or approved for sale or use in your area.
- It is your responsibility to follow all Federal, state and local laws and regulations regarding the use of pesticides.
- Before using any pesticide, be sure the intended use is approved in your state or locality.
- Your state or locality may require additional precautions and instructions for use of this product that are not included here.
- Monsanto does not guarantee the completeness or accuracy of this specimen label. The information found in this label may differ from the information found on the product label. You must have the EPA approved labeling with you at the time of use and must read and follow all label directions.
- You should not base any use of a similar product on the precautions, instructions for use or other information you find here.
- Always follow the precautions and instructions for use on the label of the pesticide you are using.

63018I5-6



Herbicide

- ◆ Roundup Technology® includes Monsanto's glyphosate-based agricultural herbicides.

For control of annual and perennial weeds in Colorado, Idaho, Kansas\*, Minnesota\*, Montana, Nebraska\*, Nevada, New Mexico\*, North Dakota, Oklahoma\*, Oregon, South Dakota, Texas\*, Utah, Washington and Wyoming.

\*County Distribution see inside booklet for details.

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

The complete broad-spectrum postemergence herbicide for weed control in many agricultural systems

Non-selective, broad-spectrum weed control for many agricultural systems and farmsteads

## Complete Directions for Use

EPA Reg. No. 524-544

2010-1

### \* COUNTY DISTRIBUTION

In **KANSAS, MINNESOTA, NEBRASKA, NEW MEXICO, OKLAHOMA** and **TEXAS**, this product is distributed in those counties listed below:

#### **KANSAS**

Barber, Barton, Butler, Chautauqua, Cheyenne, Clark, Clay, Cloud, Comanche, Cowley, Decatur, Dickinson, Edwards, Elk, Ellis, Ellsworth, Finney, Ford, Gove, Graham, Grant, Gray, Greeley, Greenwood, Hamilton, Harper, Harvey, Haskell, Hodgeman, Jewell, Kearny, Kingman, Kiowa, Lane, Lincoln, Logan, Marion, McPherson, Meade, Mitchell, Morton, Ness, Norton, Osborne, Ottawa, Pawnee, Phillips, Pratt, Rawlins, Reno, Republic, Rice, Rooks, Rush, Russell, Saline, Scott, Sedgwick, Seward, Sheridan, Sherman, Smith, Stafford, Stanton, Stevens, Sumner, Thomas, Trego, Wallace, Washington, Wichita

#### **MINNESOTA**

Becker, Clay, Douglas, Kittson, Lake of the Woods, Mahnomon, Marshall, Norman, Otter Trail, Pennington, Polk, Red Lake, Roseau, Wilkin

#### **NEBRASKA**

Arthur, Banner, Box Butte, Chase, Cheyenne, Custer, Dawes, Dawson, Deuel, Dundy, Frontier, Furnas, Garden, Gosper, Grant, Hayes, Hitchcock, Hooker, Keith, Kimball, Lincoln, Logan, McPherson, Morrill, Perkins, Red Willow, Scotts Bluff, Sheridan, Sioux, Thomas

#### **NEW MEXICO**

Colfax, Harding, Rio Arriba, San Juan, Taos, Union

#### **OKLAHOMA**

Alfalfa, Beaver, Beckham, Blaine, Caddo, Canadian, Carter, Cimarron, Cleveland, Custer, Dewey, Ellis, Garfield, Grady, Grant, Garvin, Harper, Jefferson, Kay, Kingfisher, Logan, Love, Major, McClain, Murray, Noble, Oklahoma, Pawnee, Payne, Roger Mills, Stephens, Texas, Washita, Woods, Woodard

#### **TEXAS**

Dallam, Hansford, Harley, Hemphill, Hutchinson, Lipscomb, Moore, Ochiltree, Roberts, Sherman

Read the entire label before using this product.

Use only according to label instructions.

Read the "LIMIT OF WARRANTY AND LIABILITY" statement at the end of the label before buying or using. If terms are not acceptable, return at once unopened.

THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.

## 1.0 INGREDIENTS

ACTIVE INGREDIENT:

*Glyphosate, N-(phosphonomethyl)glycine, in the form of its potassium salt.....	48.8%
OTHER INGREDIENTS.....	51.2%
	100.0%

\*Contains 660 grams per liter or 5.5 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its potassium salt. Equivalent to 540 grams per liter or 4.5 pounds per U.S. gallon of the acid, glyphosate.

This product is protected by U.S. Patent No's. 5,668,085 and 6,365,551. Other Patents Pending. No license granted under any non-U.S. patent(s).

## 2.0 IMPORTANT PHONE NUMBERS

1. FOR PRODUCT INFORMATION OR ASSISTANCE IN USING THIS PRODUCT, **CALL TOLL-FREE, 1-800-332-3111**
2. IN CASE OF AN EMERGENCY INVOLVING THIS HERBICIDE PRODUCT, OR FOR MEDICAL ASSISTANCE, **CALL COLLECT, DAY OR NIGHT, (314)-694-4000**

## 3.0 PRECAUTIONARY STATEMENTS

### 3.1 Hazards to Humans and Domestic Animals

Keep out of reach of children

## CAUTION!

CAUSES MODERATE EYE IRRITATION  
HARMFUL IF INHALED

Avoid contact with eyes, skin, or clothing.

Avoid breathing vapor or spray mist.

<b>FIRST AID:</b> Call a poison control center or doctor for treatment advice.	
<b>IF IN EYES</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li><li>• Remove contact lenses if present after the first 5 minutes then continue rinsing eye.</li></ul>
<b>IF ON SKIN</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li></ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li></ul>
<ul style="list-style-type: none"><li>• Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</li><li>• This product is identified as <b>RT 3 Powered by Roundup Technology® Herbicide, EPA Registration No. 524-544</b></li><li>• You may also contact <b>(314) 694-4000</b>, collect day or night, for emergency medical treatment information.</li></ul>	

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

### Personal Protective Equipment (PPE)

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

**Mixers, Loaders, Other Handlers and Applicators, when handling this concentrated product or its application solutions of 30 percent concentration or greater, must wear:** long-sleeved shirt and long pants, shoes, socks, and chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.

**Applicators, when handling only spray solutions where concentration is 30 percent of this product or less, must wear:** long-sleeved shirt and long pants, shoes, and socks.

Follow manufacturer's instructions for cleaning/maintaining PPE (Personal Protective Equipment). If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in 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:

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

## 3.2 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 wash waters.

## 3.3 Physical or Chemical Hazards

Spray solutions of this product may 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. This product can only be used in accordance with the Directions for Use on this label or in separately published Monsanto supplemental labeling. Supplemental labeling can be found on the Internet at [www.agrian.com](http://www.agrian.com), [www.cdms.net](http://www.cdms.net), or [www.greenbook.net](http://www.greenbook.net), or obtained from your Authorized Monsanto Retailer or Monsanto Company Representative.

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

### Agricultural Use Requirements

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

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, wear: coveralls, shoes plus socks and chemical-resistant gloves made of any waterproof material.

### Non-Agricultural Use Requirements

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

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

## 4.0 STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination.

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

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

## 5.0 GENERAL INFORMATION

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

Do not add buffering agents or pH adjusting agents to the spray solution when **RT 3 Powered by Roundup Technology Herbicide** is the only pesticide being applied unless otherwise directed. See the "MIXING" section of this label for instructions regarding other additives.

**Time to Symptoms:** This product moves through the plant from the point of foliage contact to and into the root system. Visible effects are a gradual wilting and yellowing of the plant that advances to complete browning of aboveground growth and deterioration of underground plant parts. Effects are visible on most annual weeds within 2 to 4 days, but on most perennial weeds, effects may not be visible for 7 or more days. Extremely cool or cloudy weather following treatment may slow activity of this product and delay development of visual symptoms.

**Stage of Weeds:** Annual weeds are easiest to control when they are small. Best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity. Refer to the "ANNUAL WEEDS RATE SECTION" and "PERENNIAL WEEDS RATE SECTION" for more information on specific weeds.

Always use the higher product application rate within a given range when weed growth is heavy or dense, or when weeds are growing in an undisturbed (non-cultivated) area.

Reduced weed control may result when treating weeds with disease or insect damage, weeds heavily covered with dust, or weeds under poor growing conditions.

**Cultural Considerations:** Reduced control may result when application is made to annual or perennial weeds that have been mowed, grazed or cut, and have not been allowed to re-grow to the specified stage for treatment.

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

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

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

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

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

**Maximum Application Rates:** The maximum application or use rates stated throughout this label are given in units of volume (fluid ounces or quarts) 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 (pounds acid equivalents) does not exceed the maximum allowed. See the "INGREDIENTS" section of this label for necessary product information.

Except as otherwise specified in a crop section of this label, the combined total of all treatments must not exceed 5.3 quarts of this product (6 pounds of glyphosate acid) per acre per year. For applications in non-crop sites the combined total of all treatments must not exceed 7 quarts of this product (8 pounds of glyphosate acid) per acre per year.

**NOTE:** Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or have other unintended consequences.

## 6.0 WEED RESISTANCE MANAGEMENT

GROUP

9

HERBICIDE

Glyphosate, the active ingredient in this product, is a Group 9 herbicide based on the mode of action classification system of the Weed Science Society of America. Any weed population may contain plants naturally resistant to Group 9 herbicides. Weed species resistant to Group 9 herbicides may be effectively managed utilizing another herbicide from a different Group, or by using other cultural or mechanical practices.

### 6.1 General Weed Management

To minimize the occurrence of glyphosate-resistant biotypes, observe the following general weed management practices:

- Scout your fields before and after herbicide application.
- Start with a clean field, using either a burndown herbicide application or tillage.
- Control weeds early when they are relatively small.
- Add other herbicides (e.g. a selective and/or a residual herbicide) and cultural practices (e.g. tillage or crop rotation) where appropriate.
- Use the application rate for the most difficult to control weed in your field. Avoid tank mixtures with other herbicides that reduce this product's efficacy (through antagonism), or with ones that encourage application rates of this product below those specified on this label.
- Control weed escapes and prevent weeds from setting seeds.
- Clean equipment before moving from field to field to minimize the spread of weed seed or plant parts.
- Use new commercial seed that is as free of weed seed as possible.
- Report any incidence of repeated non-performance of this product on a particular weed to your Monsanto representative, local retailer, or county extension agent.

### 6.2 Management of Glyphosate-Resistant Biotypes

**NOTE:** Appropriate testing is critical in order to determine if a weed is resistant to glyphosate. Call 1-800-ROUNDUP (1-800-768-6387) or contact your Monsanto representative to determine if resistance in any particular weed biotype has been confirmed in your area, or visit on the Internet [www.weedresistancemanagement.com](http://www.weedresistancemanagement.com) or [www.weedscience.org](http://www.weedscience.org). For more information see the "ANNUAL WEEDS RATE SECTION" and "PERENNIAL WEEDS RATE SECTION" of this label.

Directions for the control of biotypes confirmed to be resistant to glyphosate are made available on separately published supplemental labeling or Fact Sheets for this product and can be obtained from your local retailer or Monsanto representative.

Since the occurrence of new glyphosate-resistant weeds cannot be determined until after product use and scientific confirmation, Monsanto Company is not responsible for any losses that may result from the failure of this product to control glyphosate-resistant weed biotypes.

**The following good agronomic practices can reduce the spread of confirmed glyphosate-resistant biotypes:**

- If a naturally occurring resistant biotype is present in your field, this product should be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g. crop rotation or tillage) may also be used as appropriate.
- One method for adding other herbicides into a continuous Roundup Ready® system is to rotate to other Roundup Ready crops.
- Scout treated fields after herbicide applications and control weed escapes, including resistant biotypes before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.

## 7.0 MIXING

Spray solutions of this product may be mixed, stored and applied using only clean 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.**

**PRODUCT PERFORMANCE MAY BE SIGNIFICANTLY REDUCED IF WATER CONTAINING SOIL SEDIMENT IS USED AS CARRIER. DO NOT MIX THIS PRODUCT WITH WATER FROM PONDS OR DITCHES THAT IS VISIBLY MUDDY OR MURKY.**

Eliminate any risk of siphoning the contents of the tank back into the carrier source while mixing. Use approved anti-back-siphoning devices where required by State or local regulations.

Clean sprayer parts promptly after using this product by thoroughly flushing with water.

## 7.1 Mixing with Water

This product mixes readily with water. Mix spray solutions of this product as follows. Begin filling the mixing tank or spray tank with clean water. Add the required amount of this product near the end of the filling process and mix gently. During mixing, foaming of the spray solution may occur. To prevent or minimize foaming, mix gently, terminate bypass and return lines at the bottom of the tank, and, if necessary, use an anti-foam or defoaming agent.

### 7.2 Tank Mixtures

This product does not provide residual weed control. This product may be tank-mixed with other herbicides to provide residual weed control, a broader weed control spectrum or an alternate mode of action. Always read and follow label directions for all products used in the tank mixture.

Some tank-mix products have the potential to cause crop injury under certain conditions, at certain growth stages and/or under other circumstances. Read all labels for products used in the tank mixture prior to use to determine the potential for crop injury.

Tank mixtures with other herbicides, insecticides, fungicides, micronutrients or foliar fertilizers may result in reduced weed control or crop injury and are NOT recommended for applications of this product unless otherwise noted in this product label, or in separate supplemental labeling or Fact Sheets published by Monsanto. Monsanto has not tested all tank-mix product formulations for compatibility, antagonism or reduction in product performance. Buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are not expressly specified in this labeling, or in separate supplemental labeling or Fact Sheets published by Monsanto for this product.

When a tank mixture with a generic active ingredient, such as 2,4-D, atrazine, dicamba, diuron or pendimethalin, is listed on this label, the user is responsible for ensuring that the specific application being made is included on the label of the product being used in the tank-mix.

Refer to all individual product labels, supplemental labeling and Fact Sheets for all products in the tank mixture, and observe all precautions and limitations on the label, including application timing restrictions, soil restrictions, minimum re-cropping interval and rotational guidelines. Use according to the most restrictive precautionary statements for each product in the tank mixture.

Always predetermine the compatibility of all tank-mix products together in the carrier by mixing small proportional quantities in advance.

For best results, apply tank mixtures with this product at a minimum spray volume rate of 10 gallons per acre.

### 7.3 Tank-Mixing Procedure

Prepare tank mixtures of this product as follows:

1. Place a 20- to 35-mesh screen or wetting basket over the filling port of the tank.
2. Through the screen, fill the tank one-half full with water and start gentle agitation.
3. If ammonium sulfate is to be used, add it SLOWLY through the screen into the tank and continue adding water into the tank through the screen. If dry ammonium sulfate is being used, ensure that it is completely dissolved in the tank before adding other products.
4. If a wettable powder is used, first prepare a slurry of it with water and add it SLOWLY through the screen into the tank while continuing gentle agitation.
5. If a flowable formulation is used, premix one part flowable with one part water and add the diluted mixture SLOWLY through the screen into the tank while continuing gentle agitation.
6. If an emulsifiable concentrate formulation is used, premix one part emulsifiable concentrate with two parts water and add the diluted mixture SLOWLY through the screen into the tank while continuing gentle agitation.
7. Continue filling the tank with water through the screen and add the required amount of this product near the end of the filling process.
8. Add individual tank-mix components to the tank as follows: wettable powders, flowables, emulsifiable concentrates, drift reduction additives, water soluble liquids (this product).

Maintain gentle agitation at all times until the contents of the tank are sprayed out. If the spray mixture is allowed to settle, thorough agitation is required to re-suspend the mixture before spraying.

Keep by-pass and return lines on or near the bottom of the tank to minimize foaming.

Screen size in nozzle or line strainers should be no finer than 50 mesh.

### 7.4 Mixing for Hand-Held Sprayers

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

## Spray Solution

Desired Volume	Amount of RT 3 Powered by Roundup Technology Herbicide					
	0.4%	0.7%	1%	1.5%	4%	7%
1 gal	0.5 oz	1 oz	1.3 oz	2 oz	5 oz	9 oz
25 gal	0.8 pt	0.7 qt	1 qt	1.5 qt	4 qt	7 qt
100 gal	1.6 qt	2.8 qt	1 gal	1.5 gal	4 gal	7 gal

2 tablespoons = 1 fluid ounce

For backpack sprayers, it is recommended that the appropriate amount of this product be mixed with water in a larger container and then filling the sprayer with this mixed solution.

## 7.5 Ammonium Sulfate

The addition of 1 to 2 percent dry ammonium sulfate by weight, or 8.5 to 17 pounds per 100 gallons of water, may increase the performance of this product on annual and perennial weeds, particularly under hard water conditions, drought conditions or when tank-mixed with certain residual herbicides. An equivalent rate of a liquid formulation of ammonium sulfate may also be used. Ensure that dry ammonium sulfate is completely dissolved in the spray tank before adding herbicides. Thoroughly rinse the spray system with clean water promptly after use to reduce corrosion.

**NOTE:** When using ammonium sulfate, apply this product at rates directed on this label. Lower rates will result in reduced performance.

## 7.6 Colorants or Dyes

Colorants or marking dyes may be added to spray solutions of this product; however, they can reduce product performance. Use colorants or dyes according to the manufacturer's instructions.

## 7.7 Drift Reduction Additives

Drift reduction additives may be used with all equipment types, except wiper applicators, sponge bars and controlled droplet applicator (CDA) equipment. When a drift reduction additive is used, read and carefully observe all precautions, limitations and all other information on the product label. Use of drift reduction additives can affect spray coverage, which can reduce product performance.

## 8.0 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 sprayers, floaters, pick-up sprayers, spray coupes and other ground broadcast equipment

**Hand-Held or Backpack Equipment**—Backpack sprayers, pump-up pressure sprayers, handguns, handwands, mistblowers, lances and other hand-held and motorized spray equipment used to direct the spray onto weed foliage

**Selective Equipment**—Shielded and hooded sprayers, wiper applicators and sponge bars

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

**Controlled Droplet Applicator (CDA)**—Hand-held or boom-mounted applicators that produce a spray consisting of a narrow range of droplet sizes

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

### 8.1 Aerial Equipment

All treatments described on this label may be made using aerial application equipment where appropriate, provided that the applicator complies with the precautions and restrictions specified on this label and in separate supplemental labeling published by Monsanto for this product.

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

Apply this herbicide at the appropriate rate as directed on this label in 3 to 15 gallons of water per acre unless otherwise directed on this label, or in separate supplemental labeling or Fact Sheets published by Monsanto for this product. Unless otherwise specified, do not exceed 44 fluid ounces of this product per acre when using aerial application equipment. Refer to the individual use area sections of this label for application rates, spray volumes, and additional use instructions.

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

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.

### AERIAL SPRAY DRIFT MANAGEMENT

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

1. The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward, parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they should be observed.

### Importance of Droplet Size

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

### Controlling Droplet Size

- **Volume:** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with the higher rated flows produce larger droplets.
- **Pressure:** Use the lower spray pressures 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 air stream, will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- **Nozzle type:** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.
- **Boom length:** For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.
- **Application height:** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces the exposure of the droplets to evaporation and wind.

### Swath Adjustment

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

### Wind

Drift potential is lowest between wind speeds of 2 to 10 miles per hour. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 miles per hour due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

### Temperature and Humidity

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

### Temperature Inversions

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

### Sensitive Areas

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

Avoid direct application to any body of water.



### Aircraft Maintenance

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. **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.

## 8.2 Ground Broadcast Equipment

Apply this product at the appropriate rate in 3 to 40 gallons of water per acre when making broadcast applications using ground application equipment, unless otherwise directed on this label or in separate supplemental labeling or Fact Sheets published by Monsanto for this product. As the weed density increases, the spray volume should be increased towards the upper end of this range to ensure complete coverage. Carefully select proper nozzles to avoid generating a fine mist. For best results with ground application equipment, use flat spray nozzles. Check spray pattern for uniform distribution.

## 8.3 Hand-Held or Backpack Equipment

Apply to foliage of vegetation to be controlled. Spray coverage should be uniform and complete. Use coarse sprays only. For applications made on a spray-to-wet basis, do not spray to the point of runoff. For appropriate rates of application and timing, refer to the "ANNUAL WEEDS—HAND-HELD OR BACKPACK EQUIPMENT" section of this product label.

## 8.4 Selective Equipment

This product may be diluted in water and applied using shielded sprayers, hooded sprayers, wiper applicators or sponge bars to weeds listed on this label growing in any non-crop site specified on this label.

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

**AVOID CONTACT OF THIS HERBICIDE WITH DESIRABLE VEGETATION.**

Contact of this product with desirable vegetation may result in unwanted plant damage or destruction.

### Shielded and Hooded Sprayers

This product, when applied at rates specified on this label using shielded and hooded sprayers according to the directions described in this section, will control those weeds listed in the "ANNUAL WEEDS RATE SECTION" and "PERENNIAL WEEDS RATE SECTION" of this label.

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

Hooded sprayers must be configured and operated in a manner that minimizes bouncing and avoids raising the hood up off the ground surface at any time. If the hood is raised, spray particles may escape and come into contact with the crop, causing damage to or destruction of the crop. Avoid operating this equipment on rough or sloping terrain where the spray hood might be raised up off the ground surface.

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

The following procedures will reduce the potential for crop injury when using hooded sprayers:

- Spray hoods must be operated on the ground or skimming across the ground surface.
- 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 should be 30 inches.)
- Operate at ground speeds of no greater than 5 miles per hour to avoid bouncing of the spray hoods.
- Apply when wind speeds are 10 miles per hour or less.
- Use low-drift nozzles that provide uniform coverage within the treated area.

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

### Wiper Applicators

Wiper applicators are devices that physically wipe this product directly onto the weed. Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting desirable vegetation.

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

Operate this equipment at a ground speed of no greater than 5 miles per hour. Performance may be improved by reducing speed in areas of heavy weed infestations to provide adequate wiper saturation with the herbicide solution. Better results may be obtained when two applications are made in opposite directions.

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

Do not use wiper applicators when weeds are wet.

Mix only the amount of this product to be used during a 1-day period, as reduced product performance may result from the use of solutions held in storage. Clean wiper parts promptly after using this product by thoroughly flushing with water.

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

**For Rope or Sponge Wick Applicators**—Use solutions ranging from 33 to 75 percent of this product in water.

**For Panel Applicators**—Use solutions ranging from 33 to 100 percent of this product in water.

## 8.5 Injection Systems

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

## 8.6 CDA Equipment

The rate of this product applied per acre by vehicle-mounted controlled droplet applicator (CDA) equipment must not be less than the amount specified on this label for conventional broadcast application. For vehicle-mounted CDA equipment, apply in 2 to 15 gallons of water per acre.

For control of annual weeds with hand-held CDA units, apply a 20-percent solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 1.5 miles per hour (1 quart per acre). For the control of perennial weeds, apply a 20- to 30-percent solution of this product at a flow rate of 2 fluid ounces per minute and a walking speed of 0.75 mile per hour (2 to 3 quarts per acre).

Controlled droplet applicators produce a spray pattern that is not easily visible. Extreme care must be taken to avoid spray or drift from contacting the foliage or any other green tissue of desirable vegetation, as damage or destruction of the plant may result.

## 9.0 ANNUAL AND PERENNIAL CROPS

**NOTE:** THIS SECTION GIVES GENERAL DIRECTIONS THAT APPLY TO ALL CROPS LISTED ALPHABETICALLY IN THE SECTIONS THAT FOLLOW. SEE THE INDIVIDUAL CROP SECTIONS FOR SPECIFIC USE INSTRUCTIONS, PREHARVEST INTERVALS, AND ADDITIONAL PRECAUTIONS AND RESTRICTIONS.

**TYPES OF APPLICATION:** Chemical Fallow, Preplant Fallow Beds, Preplant, At-Planting, Preemergence, Hooded Sprayer in Row Middles, Shielded Sprayer in Row Middles, Wiper Application in Row Middles, Post-Harvest

**GENERAL USE INSTRUCTIONS:** Apply this product during fallow intervals preceding planting, prior to planting or transplanting, at-planting, or preemergence to annual and perennial crops listed in this label, except where specifically limited. For any crop not listed on this label, application must be made at least 30 days prior to planting. Unless otherwise specified, apply this product according to the rates listed in the "ANNUAL WEEDS RATE SECTION" and "PERENNIAL WEEDS RATE SECTION" of this label. Application rates specified on this label for the control of tough weeds, or those specified on separate supplemental labeling for this product, supersede the rates in the "ANNUAL WEEDS RATE SECTION" and "PERENNIAL WEEDS RATE SECTION" of this label. Additional information on the control of tough weeds can be found in Fact Sheets published by Monsanto for this product.

Repeat applications may be made up to a maximum of 5.3 quarts of this product per acre per year.

Hooded sprayers and wiper applicators capable of preventing all crop contact with the herbicide solution may be used in mulched or unmulched row middles after crop establishment. Wiper applicators may be used over the top of crops to control tall weeds, only when specifically directed in the individual crop sections that follow. Refer to the "SELECTIVE EQUIPMENT" section of this label for essential precautions regarding crop injury. Crop injury is possible with these types of application, and shall be the sole responsibility of the applicator.

All treatments described in the sections that follow may be made by aerial equipment where appropriate, provided that the applicator complies with the precautions and restrictions specified on this label and on separate supplemental labeling published by Monsanto for this product. Refer to the "AERIAL EQUIPMENT" section of this label for additional information.

**TANK MIXTURES:** This product may be tank-mixed with other herbicides to provide residual weed control, a broader weed control spectrum or an alternate mode of action. Always read and follow label directions for all products in the tank mixture. Use all products according to rates specified on the label. Some tank-mix products have the potential to cause crop injury under certain conditions, at certain crop growth stage and/or under other circumstances. Read all labels for products used in the tank mixture prior to use to determine the potential for crop injury. Always predetermine the compatibility of tank-mix products together in the carrier by mixing small proportional quantities in advance. A tank mixture of this product with other herbicides may cause incompatibility, antagonism, or a reduction in the efficacy of this product. Monsanto has not tested all tank-mix product formulations for compatibility or performance. See the "MIXING" section of this label for more information on tank mixtures.

**GENERAL PRECAUTIONS, RESTRICTIONS:** Avoid contact of this herbicide with foliage, green shoots or stems, bark, exposed roots (including those emerging from plastic mulch), or fruit of crops, as severe crop injury or destruction may result. When making at-planting and preemergence applications, application must be made before crop emergence to avoid severe crop injury. Broadcast application made at emergence will result in injury or death of emerged seedlings. Apply before seed germination in coarse sandy soils to further minimize the risk of injury. Unless otherwise specified on this label, treatments with selective equipment, including wiper applicators and hooded sprayers, must be made at least 14 days prior to harvest. Post-harvest and fallow applications must be made at least 30 days prior to planting any crop not listed on this label. See "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for additional information.

In crops where spot treatment is allowed, do not treat more than 10 percent of the total field to be harvested. The crop receiving spray in the treated area will be killed. Take care not to spray or allow spray to drift outside the target area in order to avoid unwanted crop destruction.

Do not harvest or feed treated vegetation for 8 weeks following broadcast postemergence application, unless otherwise specified.

Observe the maximum application rates stated throughout this label. Maximum application rates apply to the use of this product combined with the use of any and all other herbicides containing glyphosate as the active ingredient, whether applied separately or as mixtures. Calculate the application rates (glyphosate acid equivalents) and ensure that the total use of this and other glyphosate-containing products does not exceed the stated maximum rate. See the "GENERAL INFORMATION" section of this label for more information on Maximum Application Rates.

## 9.1 Cereal and Grain Crops

**LABELLED CROPS:** Barley, Buckwheat, Millet (pearl, proso), Oats, Rice, Rye, Quinoa, Teff, Teosinte, Triticale, Wheat (all types), Wild Rice

**TYPES OF APPLICATION:** Those listed in Section 9.0, plus Red Rice Control Prior to Planting Rice, Spot Treatment (except Rice), Wiper Application (Feed Barley and Wheat Only), Preharvest (Feed Barley and Wheat Only)

**PRECAUTIONS, RESTRICTIONS:** Do not treat rice fields or levees when flooded.

### Preplant, At-Planting, Preemergence

**USE INSTRUCTIONS:** This product may be applied before, during or after planting of cereal crops, but prior to crop emergence.

### Red Rice Control Prior to Planting Rice

**USE INSTRUCTIONS:** Apply 32 fluid ounces 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 at the 2-leaf stage and no more than 4 inches tall. Red rice plants with less than 2 true leaves may be only partially controlled.

**PRECAUTIONS, RESTRICTIONS:** Avoid spraying during conditions of low humidity, as reduced control may result. Do not treat rice fields or levees when the fields contain floodwater. Do not flood treated fields for 8 days following application.

### Spot Treatment (Except Rice)

**USE INSTRUCTIONS:** This product may be applied as a spot treatment in cereal crops, except rice. Apply this product before heading in small grains.

**PRECAUTIONS, RESTRICTIONS:** Do not treat more than 10 percent of the total field area to be harvested. Crop sprayed in treated area will be killed. Take care not to spray or allow spray to drift outside target area in order to avoid unwanted crop destruction.

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

**USE INSTRUCTIONS:** This product may be applied over the top of feed barley and wheat with a wiper applicator. To control common rye or cereal rye, apply after the weeds have headed and achieved maximum growth. See additional instructions on the use of wiper applicators in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

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

### Preharvest (Feed Barley and Wheat Only)

**USE INSTRUCTIONS:** This product provides weed control when applied prior to harvest of feed barley and wheat. For feed barley, apply after the hard-dough stage when the grain contains 20 percent moisture or less. For wheat, apply after the hard-dough stage when the grain contains 30 percent moisture or less. Stubble may be grazed immediately after harvest.

For ground application, apply this product in 10 to 20 gallons of water per acre. For aerial application, apply this product in 3 to 10 gallons of water per acre.

**PRECAUTIONS, RESTRICTIONS:** Do not apply more than 22 fluid ounces of this product per acre. Allow 7 days between application and harvest or grazing. Preharvest application is not recommended for barley or wheat grown for seed, as a reduction in germination or vigor may occur.

### Post-Harvest

**USE INSTRUCTIONS:** This product may be applied for weed control after harvest of cereal crops. Higher rates may be required to control large weeds that were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used. Ensure that the specific product being used is labeled for weed control following harvest of cereal crops. Read and follow label directions of all products in the tank mixture.

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

## 9.2 Corn

**TYPES OF CORN:** Field corn, Seed corn, Silage corn, Sweet corn, Popcorn

**TYPES OF APPLICATION:** Those listed in Section 9.0, plus the following: Spot Treatment, Preharvest

### Preplant, At-Planting, Preemergence

**USE INSTRUCTIONS:** This product may be applied alone or in a tank-mix before, during or after planting corn, but prior to crop emergence.

**TANK MIXTURES:** This product may be tank-mixed with the following products. Ensure that the specific product being used is labeled for application prior to the emergence of corn. Read and follow label directions for all products in the tank mixture. Apply these tank mixtures in 10 to 20 gallons of water, or 10 to 60 gallons of nitrogen solution, per acre.

Bullet<sup>®</sup>, Lariat<sup>®</sup>, Micro-Tech<sup>®</sup>, alachlor, Degree<sup>®</sup>, Degree Xtra<sup>®</sup>, Harness<sup>®</sup>, Harness Xtra, Harness Xtra 5.6L, Frontier, Outlook, FulTime, Keystone, Keystone LA, TopNotch, acetochlor, Bicep MAGNUM, Bicep II MAGNUM, Bicep Lite II MAGNUM, Dual II MAGNUM, Stalwart C, Stalwart Xtra, metolachlor, s-metolachlor, 2,4-D, Aim, Aim EC, atrazine, Axiom, Balance PRO, Banvel, Clarity, Define, Distinct, Epic, Guardsman, Guardsman MAX, Hornet, Leadoff, Linex, Lorox, Marksman, pendimethalin, Python, Python II, Radius, Resolve, Resource

For tough-to-control annual weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 22 fluid ounces per acre in these tank mixtures. For other annual weeds listed on this label, apply 16 to 22 fluid ounces of this product per acre when weeds are less than 6 inches tall, and 22 to 32 fluid ounces per acre when weeds are over 6 inches tall. When using nitrogen solutions as the carrier, application rate may need to be increased for acceptable weed control.

**PRECAUTIONS, RESTRICTIONS:** Applications of 2,4-D or dicamba must be made at least 7 days prior to planting corn. 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.

In Southern states, do not apply this product in nitrogen solutions to tough-to-control grasses such as barnyardgrass, fall panicum, broadleaf signalgrass, annual ryegrass and any perennial weeds. This area includes Oklahoma and Texas.

### Hooded Sprayer

**USE INSTRUCTIONS:** This product may be applied with a hooded sprayer for weed control in-between rows of corn. Only hooded sprayers that completely enclose the spray pattern may be used. See additional instructions on the use of hooded sprayers in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

**PRECAUTIONS, RESTRICTIONS:** Corn must be at least 12 inches tall, measured without extending leaves. Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage. Such damage shall be the sole responsibility of the applicator. Do not apply more than 22 fluid ounces of this product per acre for each hooded sprayer application and no more than 64 fluid ounces per acre per year total.

### Spot Treatment

**USE INSTRUCTIONS:** This product may be applied as a spot treatment prior to silking of corn.

**PRECAUTIONS, RESTRICTIONS:** Do not treat more than 10 percent of the total field area to be harvested. Crop sprayed in the treated area will be killed. Take care not to spray or allow spray to drift outside target area in order to avoid unwanted crop destruction.

### Preharvest

**USE INSTRUCTIONS:** Make application at 35 percent grain moisture or less. Ensure that maximum kernel fill is complete and the corn is physiologically mature (black layer

formed). For ground application, apply up to 64 fluid ounces of this product per acre. For aerial application, apply up to 44 fluid ounces of this product per acre.

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

#### Post-Harvest

**USE INSTRUCTIONS:** This product may be applied for weed control after harvest of corn. Higher rates may be required to control large weeds that were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used. Ensure that the specific product being used is labeled for post-harvest application in corn. Read and follow label directions of all products in the tank mixture.

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

## 9.3 Cotton

**TYPES OF APPLICATION:** Those listed in Section 9.0, plus Selective Equipment, Spot Treatment, Preharvest

#### Preplant, At-Planting, Preemergence

**USE INSTRUCTIONS:** This product may be applied before, during or after planting cotton, but prior to crop emergence.

**TANK MIXTURES:** This product may be tank-mixed with the products listed below. Ensure that the specific product being used is labeled for application prior to planting cotton. Read and follow label directions for all products used in the tank mixture. Apply these tank mixtures in 10 to 20 gallons of water per acre.

Caparol, Clarity, Command, Cotoran, Cotton Pro, Direx, Dual MAGNUM, Dual II MAGNUM, Karmex, Meturon, PARRLAY®, Reflex, Stalwart, Staple, Valor, Zorial, diuron, metolachlor, pendimethalin, 2,4-D

**PRECAUTIONS, RESTRICTIONS:** Refer to individual tank-mix product labels for restrictions and precautions; use according to the most restrictive precautionary statements for each product in the mixture.

#### Selective Equipment

**USE INSTRUCTIONS:** This product may be applied using a hooded sprayer, a shielded sprayer, or a wiper applicator over the top of cotton. See additional instructions on the use of this selective equipment in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

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

#### Spot Treatment

**USE INSTRUCTIONS:** This product may be applied in cotton as a spot treatment prior to boll opening.

**PRECAUTIONS, RESTRICTIONS:** Do not treat more than 10 percent of the total field area to be harvested. Crop sprayed in the treated area will be killed. Take care not to spray or allow spray to drift outside target area in order to avoid unwanted crop destruction.

#### Preharvest

**USE INSTRUCTIONS:** This product provides weed control and cotton re-growth inhibition when applied prior to harvest. For weed control, apply at rates given in the "ANNUAL WEEDS RATE SECTION" and "PERENNIAL WEEDS RATE SECTION" of this label. For cotton re-growth inhibition, apply 11 to 44 fluid ounces of this product per acre. Apply after sufficient bolls have developed to produce the desired yield. Applications made prior to this time could affect maximum yield potential.

**TANK MIXTURES:** This product may be tank-mixed with DEF 6, Dropp, Folex, Ginstar, or Prep to provide additional enhancement of cotton leaf-drop. Read and follow label directions for all products used in the tank mixture.

**PRECAUTIONS, RESTRICTIONS:** Allow a minimum of 7 days between application and harvest. Preharvest application is not recommended for cotton grown for seed, as a reduction in germination or vigor may occur. 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. **DO NOT ADD ADDITIONAL SURFACTANT OR ADDITIVES CONTAINING SURFACTANT TO THIS PRODUCT FOR PREHARVEST APPLICATION TO COTTON.**

## 9.4 Fallow Systems

This product may be applied during the fallow period prior to planting or emergence of any crop listed on this label. For any crop not listed on this label, application must be made at least 30 days prior to planting.

**TYPES OF APPLICATION:** Chemical Fallow, Preplant Fallow Beds, Aid-to-Tillage

#### Chemical Fallow

**USE INSTRUCTIONS:** This product may be used as a substitute for tillage to control annual weeds in fallow fields. Broadcast or spot treatment application will also control or suppress many perennial weeds in fallow fields. Tank-mix this product with 2,4-D or dicamba for a broader weed control spectrum. Aerial application up to 44 fluid ounces

per acre may be made onto fallow sites where there is sufficient buffer to prevent drift onto adjacent crops.

**PRECAUTIONS, RESTRICTIONS:** Refer to individual tank-mix product labels for restrictions and precautions; use according to the most restrictive precautionary statements for each product in the tank mixture.

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

#### Preplant Fallow Beds

**USE INSTRUCTIONS:** This product will control weeds listed in the "ANNUAL WEEDS RATE SECTION" and "PERENNIAL WEEDS RATE SECTION" of this label prior to planting.

**TANK MIXTURES:** Use 8 fluid ounces of this product, plus 2 to 3 fluid ounces of Goal 2XL, per acre to control the following weeds up to the maximum height or length indicated: 3 inches—common cheeseweed, chickweed, groundsel; 6 inches—London rocket, shepherd's-purse.

Use 11 fluid ounces of this product, plus 2 to 3 fluid ounces of Goal 2XL, per acre to control the following weeds up to the maximum height or length indicated: 6 inches—common cheeseweed, groundsel, marestalk (*Conyza canadensis*), 12 inches—chickweed, London rocket, shepherd's-purse.

#### Aid-to-Tillage

**USE INSTRUCTIONS:** This product may be used in conjunction with tillage practices in fallow systems, or preplant to crops listed on this label, to control downy brome, cheat, volunteer wheat, tansy mustard and foxtail. Apply 8 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 no later than 15 days after treatment and before re-growth occurs. Allow at least 1 day after application before tillage.

**PRECAUTIONS, RESTRICTIONS:** Tank mixtures with residual herbicides may result in reduced performance of this product.

## 9.5 Grain Sorghum (Milo)

**TYPES OF APPLICATION:** Those listed in Section 9.0, plus Spot Treatment, Wiper Application, Preharvest

#### Preplant, At-Planting, Preemergence

**USE INSTRUCTIONS:** This product may be applied alone or in a tank mixture before, during or after planting grain sorghum, but prior to crop emergence.

**TANK MIXTURES:** This product may be tank-mixed with the products listed below. Ensure that the specific product being used is labeled for application prior to planting or emergence of grain sorghum. Read and follow label directions for all products used in the tank mixture. Apply these tank mixtures in 10 to 20 gallons of water, or 10 to 60 gallons of nitrogen solution, per acre.

atrazine, s-metolachlor, Bicep II MAGNUM, Bullet, Dual II MAGNUM, INTRRO®, Lariat, Micro-Tech

For tough-to-control annual weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply 22 fluid ounces of this product per acre in a tank mixture with one of the products listed above.

For control of other annual weeds listed on this label, apply 16 to 22 fluid ounces of this product per acre when weeds are less than 6 inches tall, and 22 to 32 fluid ounces per acre when weeds are over 6 inches tall. When using nitrogen solutions as the carrier, the use rate may need to be increased to achieve adequate weed control.

**PRECAUTIONS, RESTRICTIONS:** 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.

#### Spot Treatment, Wiper Application

**USE INSTRUCTIONS:** This product may be applied as a spot treatment in grain sorghum before heading. This product may be applied over the top of grain sorghum with a wiper applicator to control tall weeds. See additional instructions on the use of wiper applicators in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

**PRECAUTIONS, RESTRICTIONS:** For spot treatment, do not treat more than 10 percent of the total field area to be harvested. Crop sprayed in the treated area will be killed. Take care not to spray or allow spray to drift outside target area in order to avoid unwanted crop destruction.

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

#### Hooded Sprayer

**USE INSTRUCTIONS:** This product may be applied using a hooded sprayer for weed control in-between rows of grain sorghum. Only hooded sprayers that completely enclose the spray pattern may be used. See additional instructions on the use of hooded sprayers in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

**PRECAUTIONS, RESTRICTIONS:** Grain sorghum must be at least 12 inches tall, measured without extending leaves. Treat before grain sorghum sends tillers between the drill rows. If tillers are sprayed with this herbicide, the main plant may be damaged or destroyed. Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage. Such damage shall be the sole responsibility of the applicator. Do not graze or feed grain sorghum forage or fodder following application of this product with



a hooded sprayer. Do not apply more than 22 fluid ounces of this product per acre per hooded sprayer application, and no more than 64 fluid ounces per acre per year total.

#### Preharvest

USE INSTRUCTIONS: This product may be applied prior to harvest after sorghum grain has reached 30 percent moisture or less.

PRECAUTIONS, RESTRICTIONS: Do not apply more than 44 fluid ounces of this product per acre. As with other herbicides that cause sudden plant death, avoid preharvest application of this product to milo infected with charcoal rot as lodging can occur. Allow a minimum of 7 days between application and harvest of grain sorghum. Preharvest application is not recommended for sorghum grown for seed, as a reduction in germination or vigor may occur.

#### Post-Harvest

USE INSTRUCTIONS: This product may be applied for weed control after harvest of grain sorghum. Higher rates may be required to control large weeds that were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used. Ensure that the specific product being used is labeled for post-harvest application in grain sorghum (milo). Read and follow label directions of all products in the tank mixture.

This product may be applied to grain sorghum stubble following harvest to control or suppress re-growth. Apply 22 fluid ounces of this product per acre for control, or 16 fluid ounces of this product per acre for suppression.

PRECAUTIONS, RESTRICTIONS: Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation. Application must be made at least 30 days prior to planting any crop not listed on this label. Refer to each individual tank-mix product label for restrictions and precautions; use according to the most restrictive precautionary statements for each product in the tank mixture.

## 9.6 Legume Vegetables (Succulent or Dried)

LABELED CROPS: Bean (*Lupinus*: includes grain lupin, sweet lupin, white lupin, and white sweet lupin), Bean (*Phaseolus*: includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean), Bean (*Vigna*: includes adzuki bean, asparagus bean, blackeye 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, Pea (*Pisum*: includes dwarf pea, edible-podded pea, English pea, field pea, garden pea, green pea, snowpea, sugar snap pea), Pigeon pea, Soybean (immature seed), Sword bean

TYPES OF APPLICATION: Those listed in Section 9.0, plus Spot Treatment (Dry Beans, Peas, Lentils and Chickpeas Only), Preharvest (Dry Beans, Peas, Lentils and Chickpeas Only)

#### Spot Treatment (Dry Beans, Peas, Lentils and Chickpeas Only)

USE INSTRUCTIONS: This product may be applied as a spot treatment to control troublesome weeds such as Canada thistle, quackgrass, mayweed (dog fennel), and milkweed in dry beans, peas, lentils and chickpeas. Apply up to 22 fluid ounces of this product per acre in dry beans, or up to 64 fluid ounces per acre in dry peas, lentils and chickpeas, in 10 to 20 gallons of water using ground spray equipment, or use a 2-percent solution in a hand-held sprayer. For best results, application should be made at or beyond the bud stage of growth.

PRECAUTIONS, RESTRICTIONS: Apply at least 7 days before harvest. Only one application may be made per year. Do not combine spot treatment with a preharvest broadcast spray on the same crop area. Observe at least a 30-day plant-back interval between treatment and replanting of any crop not listed on this label. Do not feed treated vines and hay to livestock. Do not treat cowpeas or field (feed) peas, since these crops are considered to be grown as livestock feed.

Crop sprayed in the treated area will be killed. Take care not to spray or allow spray to drift outside target area in order to avoid unwanted crop destruction.

#### Preharvest (Dry Beans, Peas, Lentils and Chickpeas Only)

USE INSTRUCTIONS: This product may be applied over the top of dry beans, peas, lentils and chickpeas prior to harvest. Apply up to 22 fluid ounces of this product per acre in dry beans, or up to 64 fluid ounces per acre in dry peas, lentils and chickpeas, in 3 to 20 gallons of water per acre at the hard dough stage of the legume seed (30 percent grain moisture or less).

PRECAUTIONS, RESTRICTIONS: Apply at least 7 days before harvest. Only one preharvest application may be made per year. Do not combine a preharvest spray with a spot treatment on the same crop area. Observe at least a 30-day plant-back interval between treatment and replanting of any crop not listed on this label. Do not feed treated vines and hay to livestock. Preharvest application is not recommended for legumes grown for seed, as a reduction in germination or vigor may occur. Do not treat cowpeas or field (feed) peas, since these crops are considered to be grown as livestock feed.

## 9.7 Oil Seed Crops

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

TYPES OF APPLICATION: Those listed in Section 9.0, plus Preharvest (Safflower and Sunflower Only)

GENERAL USE INSTRUCTIONS: Refer to the following table for maximum application rates of this product for use in canola, safflower and sunflower. See the "GENERAL INFORMATION" section of this label for more information on Maximum Application Rates.

Maximum Application Rates	
<b>Canola</b>	
Combined total for all preemergence and shielded sprayer applications	44 fluid ounces per acre
<b>Safflower</b>	
Combined total for all preemergence and shielded sprayer applications	64 fluid ounces per acre
Preharvest application	64 fluid ounces per acre
<b>Sunflower</b>	
Combined total for all preemergence and shielded sprayer applications	22 fluid ounces per acre
Preharvest application	22 fluid ounces per acre

#### Preplant, At-Planting, Preemergence

USE INSTRUCTIONS: This product may be applied before, during or after planting oil seed crops listed in this section, but prior to crop emergence. Observe the maximum application rates for canola, safflower and sunflower listed at the beginning of this section.

TANK MIXTURES: For sunflowers, a tank mixture with pendimethalin may be applied before, during or after planting into conventionally tilled soil, a cover crop, established sod or previous crop residue.

#### Selective Equipment

USE INSTRUCTIONS: Wiper applicators or shielded sprayers may be used in-between the rows once the crop is established. See additional instructions on the use of wiper applicators and hooded sprayers in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label. Observe the maximum application rates for canola, safflower and sunflower listed at the beginning of this section.

#### Preharvest (Safflower and Sunflower Only)

USE INSTRUCTIONS: This product provides weed control as a harvest aid when applied to a physiologically mature crop of safflower and sunflower prior to harvest. For safflower, apply a maximum of 64 fluid ounces of this product when seed has lost its opaque character, approximately 20 to 30 days after the end of flowering of the secondary branches. For sunflower, apply a maximum of 22 fluid ounces of this product when the backsides of sunflower heads are yellow and bracts are turning brown, and seed moisture content is less than 35 percent.

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

#### Post-Harvest

USE INSTRUCTIONS: This product may be applied for weed control after harvest of oil seed crops. 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. Read and follow label directions for all products used in the tank mixture.

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

## 9.8 Soybean

TYPES OF APPLICATION: Those listed in Section 9.0, plus Spot Treatment, Preharvest, Selective Equipment

#### Preplant, At-Planting, Preemergence

USE INSTRUCTIONS: This product may be applied alone or in a tank mixture before, during or after planting soybeans, but prior to crop emergence.

TANK MIXTURES: This product may be tank-mixed with the following products. Ensure that the specific product being used is labeled for application prior to planting or the emergence of soybean. Read and follow label directions for all products in the tank mixture. Apply these tank mixtures in 10 to 20 gallons of water per acre.

INTRRO, Micro-Tech, PARRLAY, Aim, Assure II, Authority First, Authority MTZ, Axiom, Blanket, Boundary, Canopy, Classic, Cobra, Command, Command Xtra, Domain, Dual MAGNUM, Dual II MAGNUM, FirstRate, Flexstar, Frontier, Fusion, Gangster, Gauntlet, Lexone, Linex, linuron, Lorox, Lorox Plus, metolachlor, s-metolachlor, Me-Too-Lachlor, Outlook, Pendimax, pendimethalin, Pursuit, Pursuit Plus, Python, Reflex, Resource, Scepter, Select, Select MAX, Sencor, Spartan, Squadron, Steel, Treflan, Valor, Valor XLT, 2,4-D

For tough-to-control annual weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 22 fluid ounces per acre in these tank mixtures. For other annual weeds listed on this label, apply 16 to 22 fluid ounces of this product per acre when weeds are less than 6 inches tall, and 22 to 32 fluid ounces per acre when weeds are over 6 inches tall.

PRECAUTIONS, RESTRICTIONS: 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.



### Spot Treatment

USE INSTRUCTIONS: This product may be applied as a spot treatment prior to initial pod set in soybean.

PRECAUTIONS, RESTRICTIONS: Do not treat more than 10 percent of the total field area to be harvested. Crop sprayed in the treated area will be killed. Take care not to spray or allow spray to drift outside target area in order to avoid unwanted crop destruction.

### Preharvest

USE INSTRUCTIONS: This product may be applied to soybean prior to harvest after pods have set and lost all green color.

Apply at rates given in the "ANNUAL WEEDS RATE SECTION" and "PERENNIAL WEEDS RATE SECTION". Care should be taken to avoid excessive seed shatter loss due to ground application equipment.

PRECAUTIONS, RESTRICTIONS: Do not apply more than 3.3 quarts of this product per acre for preharvest application. Do not apply more than 44 fluid ounces of this product per acre by air. Allow a minimum of 7 days between application and harvest of soybeans. If the preharvest application rate is greater than 22 fluid ounces per acre, do not graze or harvest treated hay or fodder for livestock feed within 25 days of last preharvest application. If the application rate is 22 fluid ounces per acre or lower, the grazing restriction is reduced to 14 days after last preharvest application. Preharvest application is not recommended for soybeans grown for seed, as a reduction in germination or vigor may occur.

### Selective Equipment

USE INSTRUCTIONS: This product may be applied in soybean using a shielded applicator, a hooded sprayer, a wiper applicator or a sponge bar. See additional instructions on the use of this selective equipment in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

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

## 10.0 PASTURE GRASSES, FORAGE LEGUMES AND RANGELANDS

GENERAL USE INSTRUCTIONS: Refer to the "ANNUAL WEEDS RATE SECTION" and "PERENNIAL WEEDS RATE SECTION" of this label for application rates of this product for specific weeds. When applied as directed, this product will control those annual and perennial grasses and broadleaf weeds. Application rates specified on this label for the control of tough weeds, or those specified on separate supplemental labeling for this product, supersede rates listed in the "ANNUAL WEEDS RATE SECTION" and "PERENNIAL WEEDS RATE SECTION" of this label. Additional information on the control of tough weeds can be found in Fact Sheets published by Monsanto for this product.

### 10.1 Conservation Reserve Program (CRP)

TYPES OF APPLICATION: Renovation (Rotating out of CRP), Site Preparation, Postemergence Weed Control in Dormant CRP Grasses, Wiper Application

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

USE INSTRUCTIONS: This product may be used to prepare CRP land for crop production. Refer to Federal, State or local use guides for CRP renovation information.

PRECAUTIONS, RESTRICTIONS: Crops listed on this label may be planted into the treated area at any time; all other crops may be planted 30 days after application.

#### Postemergence Weed Control in Dormant CRP Grasses, Wiper Application

USE INSTRUCTIONS: Apply this product to suppress competitive growth and seed production of undesirable vegetation on CRP land. Application may be made using a wiper applicator to control tall weeds, or as a broadcast or spot treatment to dormant CRP grasses. For selective weed control using broadcast spray equipment, apply 5 to 8 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 application can be made after desirable perennial grasses have reached dormancy.

PRECAUTIONS, RESTRICTIONS: Some stunting of CRP perennial grasses will occur if broadcast application is made when plants are not dormant. No waiting period is required between application and grazing or harvesting for feed. Do not apply more than 2 quarts of this product per acre per year onto CRP land.

### 10.2 Grass Seed or Sod Production

LABELLED CROPS: Any grass (*Gramineae* family) except Corn, Sorghum, Sugarcane and those listed in the "CEREAL AND GRAIN CROPS" section of this label

TYPES OF APPLICATION: Preplant, At-Planting, Preemergence, Renovation, Removal of Established Stands, Site Preparation, Shielded Sprayer, Wiper Application, Spot Treatment, Creating Rows in Annual Ryegrass

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

USE INSTRUCTIONS: This product controls most existing vegetation for purposes of renovating turf or forage grass seed production areas, or for establishing turfgrass grown for sod. It may be used to destroy remaining undesirable grass vegetation when production fields are converted to alternate species or crops. Apply before, during, or

after planting, or for renovation purposes. For maximum control of existing vegetation, delay planting to determine if any re-growth of underground plant parts occurs. Where existing vegetation is growing under mowed turfgrass management, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the herbicide spray. Where repeat treatments are necessary, sufficient re-growth must be attained prior to application. For warm-season grasses, such as bermudagrass, summer or fall application provides best control. Broadcast equipment may be used to control sod remnants or other unwanted vegetation after sod is harvested. Application rates of up to 3.3 quarts per acre may be used to totally remove an established stand of tough to kill grass species.

PRECAUTIONS, RESTRICTIONS: Do not disturb soil or underground plant parts before treatment. Tillage or renovation techniques such as vertical mowing, coring or slicing should be delayed for 7 days after application to allow for herbicide translocation into underground plant parts. If application rates total 2 quarts per acre or less, no waiting period between treatment and feeding or livestock grazing is required. If the rate is greater than 2 quarts per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting. Crops listed on this label may be planted into the treated area at any time; all other crops may be planted 30 days after application. Application must be made prior to crop emergence in order to avoid crop injury.

#### Shielded Sprayer

USE INSTRUCTIONS: Apply 22 to 64 fluid ounces of this product in 10 to 20 gallons of water per acre to control weeds between grass seed rows. Uniform planting in straight rows will aid shielded sprayer application. Best results are obtained when the grass seed crop is small enough to easily pass by the protective shields. See additional instructions on the use of shielded sprayers in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

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

#### Wiper Application

USE INSTRUCTIONS: This product may be applied over the top of desirable grasses using a wiper applicator for the control of tall weeds. See additional instructions on the use of wiper applicators in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

PRECAUTIONS, RESTRICTIONS: Droplets, mist, foam or splatter of the herbicide solution settling onto desirable vegetation may result in discoloration, stunting or destruction. Such damage shall be the sole responsibility of the applicator.

#### Spot Treatment

USE INSTRUCTIONS: Apply a 1-percent solution of this product using hand-held spray equipment to control weeds within established vegetation prior to heading of grasses grown for seed. Hand-held equipment may also be used to control sod remnants or other unwanted vegetation after sod is harvested.

PRECAUTIONS, RESTRICTIONS: Crop sprayed in the treated area will be killed. Take care not to spray or allow spray to drift outside the target area in order to avoid unwanted crop destruction.

#### Creating Rows in Annual Ryegrass

USE INSTRUCTIONS: Apply 11 to 22 fluid ounces of this product per acre. Best results are obtained when application is made before ryegrass reaches 6 inches in height. Use the higher rate within this range when ryegrass is greater than 6 inches in height. Set nozzle heights to allow the establishment of the desired row spacing. Use low-pressure nozzles or drop nozzles designed to target the application over a narrow band.

PRECAUTIONS, RESTRICTIONS: Take care not to spray or allow spray to drift outside target area in order to avoid unwanted crop destruction.

**Grower assumes all responsibility for crop losses resulting from misapplication of this product.**

### 10.3 Pastures

LABELLED CROPS: Any grass (*Gramineae* family) except Corn, Sorghum, Sugarcane and those listed in the "CEREAL AND GRAIN CROPS" section of this label, but including Bahiagrass, Bermudagrass, Bluegrass, Brome, Fescue, Guinea grass, Kikuyugrass, Orchardgrass, Pangola grass, Ryegrass, Timothy, Wheatgrass

TYPES OF APPLICATION: Preplant, Preemergence, Pasture Renovation, Spot Treatment, Wiper Application, Postemergence Weed Control (Broadcast Treatment)

#### Preplant, Preemergence, Pasture Renovation

USE INSTRUCTIONS: This product may be applied for weed control prior to planting or emergence of forage grasses. This product may also be applied to control perennial pasture species listed on this label prior to re-planting.

PRECAUTIONS, RESTRICTIONS: If application rates total 2 quarts of this product per acre or less, no waiting period between treatment and feeding or livestock grazing is required. If the rate is greater than 2 quarts per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting. Crops listed on this label may be planted into the treated area at any time; all other crops may be planted 30 days after application.

#### Spot Treatment, Wiper Application

USE INSTRUCTIONS: This product may be applied in pastures as a spot treatment, or over the top of desirable grasses using a wiper applicator to control tall weeds. Application

may be repeated in the same area at 30-day intervals. See additional instructions on the use of wiper applicators in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

**PRECAUTIONS, RESTRICTIONS:** For spot treatment or wiper application at rates of 2 quarts of this product per acre or less, the entire field or any portion of it may be treated. For spot treatment or wiper application at rates above 2 quarts of this product per acre, no more than 10 percent of the total pasture may be treated at any one time. To achieve maximum performance, remove domestic livestock before application and wait 7 days after application before grazing livestock or harvesting for feed.

#### **Postemergence Weed Control (Broadcast Treatment)**

**USE INSTRUCTIONS:** This product may be applied to pastures to suppress competitive growth and seed production of annual weeds and undesirable vegetation. For selective weed control using broadcast spray equipment, apply 8 to 11 fluid ounces of this product per acre in early spring before desirable perennial grasses break dormancy and initiate green growth. Higher application rates to control tough-to-control weeds may be used; however, injury will occur if perennial grasses are no longer dormant. Late fall application can be made after desirable perennial grasses have reached dormancy.

**PRECAUTIONS, RESTRICTIONS:** Some stunting of perennial grasses will occur if broadcast application is made when pastures are not dormant. Higher application rates will cause stand reduction. No waiting period is required between application and grazing or harvesting for feed. Do not apply more than 2 quarts per acre per year onto pasture grasses except for renovation uses as described on this label. If replanting is needed due to severe stand reduction, wait 30 days after application before planting any crop not listed on this label.

## **10.4 Rangelands**

**TYPES OF APPLICATION:** Postemergence

**USE INSTRUCTIONS:** This product will control or suppress many annual weeds growing in perennial cool and warm-season grass rangelands.

Preventing weed seed production is critical to the successful control and invasion of annual grassy weeds in rangelands. Follow-up applications in sequential years should eliminate most of the viable seeds.

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

Apply 8 to 11 fluid ounces of this product per acre to control or suppress many weeds, including downy brome, cheatgrass, cereal rye and jointed goatgrass in rangelands. Apply when most brome plants are in early flower and before the plants, including seedheads, turn color. Allowing for secondary weed flushes to occur in the spring following rain events further depletes the seed reserve and encourages perennial grass conversion on weedy sites. Fall application is recommended where spring moisture is usually limited and fall germination allows for good weed growth.

For medusahead, apply 11 fluid ounces of this product per acre at the 3-leaf stage. Delaying application beyond this stage will result in reduced or unacceptable control. Controlled burning may be useful in eliminating the thatch layer produced by slowly 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 re-establishing desirable perennial grasses in medusahead-dominated rangelands.

**PRECAUTIONS, RESTRICTIONS:** Slight discoloration of the desirable grasses may occur, but they will re-green and re-grow under moist soil conditions as effects of this product wear off. Do not use ammonium sulfate when spraying rangeland grasses with this product. No waiting period between treatment and feeding or livestock grazing is required. Do not apply more than 2 quarts of this product per acre per year.

## **11.0 NON-CROP USES AROUND THE FARMSTEAD**

**TYPES OF USES:** General Weed Control, Trim-and-Edge, Chemical Mowing, Cut Stump, Habitat Management

**GENERAL USE INSTRUCTIONS:** Refer to the "ANNUAL WEEDS RATE SECTION" and "PERENNIAL WEEDS RATE SECTION" of this label for application rates for specific weeds. When applied as directed, this product will control those annual and perennial grasses and broadleaf weeds. Application rates of this product specified in the following sections, or on separate supplemental labeling or Fact Sheets published by Monsanto for this product, on how to control tough weeds supersede rates in the "ANNUAL WEEDS RATE SECTION" and "PERENNIAL WEEDS RATE SECTION" of this label.

### **11.1 General Weed Control and Trim-and-Edge**

**USE INSTRUCTIONS:** This product may be used to control annual weeds, perennial weeds and woody brush found in any part of the farmstead, including around building foundations and equipment storage areas, along and in fences, in dry ditches and canals, along ditchbanks, farm roads, shelterbelts, and prior to planting landscape ornamentals.

**TANK MIXTURES:** This product may be tank-mixed with the following products, provided that the specific product used is labeled for use on these non-crop sites. Refer to the individual product labels for approved farmstead sites and application rates. Read and follow label directions of all products in the tank mixture.

2,4-D, simazine, Arsenal, Banvel, Barricade 65WG, Clarity, diuron, Endurance, Escort XP, Karmex DF, Krovar 1 DF, Oust, Pendulum 3.3 EC, Pendulum WDG, Plateau, Princep DF, Princep 4L, Ronstar, Sahara DG, Surflan AS Specialty, Telar DF, Vanquish

For annual weeds, use 22 fluid ounces of this product per acre when weeds are less than 6 inches tall, 32 fluid ounces per acre when weeds are 6 to 12 inches tall and 44 fluid ounces per acre when weeds are greater than 12 inches tall. For perennial weeds, apply 44 fluid ounces to 3.3 quarts per acre in these tank mixes. For application of these tank mixtures using a backpack sprayer, handgun or other hand-held applicator, see the "ANNUAL WEEDS—HAND-HELD OR BACKPACK EQUIPMENT" section of this label for the required concentration of this product in the mix.

**PRECAUTIONS, RESTRICTIONS:** 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.

### **11.2 Chemical Mowing**

**USE INSTRUCTIONS:** This product will suppress perennial grasses listed in this section to serve as a substitute for mowing. Apply 4 fluid ounces of this product per acre when treating Kentucky bluegrass or when treating tall fescue, fine fescue, orchardgrass, bahiagrass or quackgrass covers. Apply 11 fluid ounces of this product per acre when treating bermudagrass. Apply 44 fluid ounces of this product per acre when treating torpedograss or paragrass. Make all applications in 10 to 20 gallons of spray solution per acre. Chemical mowing application may be made along farm ditches and other parts of farmsteads.

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

### **11.3 Cut Stump**

**TYPES OF USES:** Treating cut stumps in any non-crop site listed on this label

**USE INSTRUCTIONS:** This product will control re-growth of cut stumps and re-sprouts 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 re-sprouts close to the soil surface. Apply a 50- to 100-percent solution of this product to the freshly cut surface immediately after cutting. Delays in application may result in reduced performance. For best results, application should be made during periods of active growth and full leaf expansion.

Alder	Pepper, Brazilian	Sweetgum
Eucalyptus	Pine, Austrian	Tan oak
Madrone	Reed, giant	Willow
Oak	Saltcedar	

**PRECAUTIONS, RESTRICTIONS:** Do not make a cut stump application 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.

### **11.4 Habitat Management**

**TYPES OF USES:** Habitat Restoration and Maintenance, Wildlife Food Plots

#### **Habitat Restoration and Maintenance**

**USE INSTRUCTIONS:** This product may be used to control exotic and other undesirable vegetation in habitat management areas. Application 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 treatment can be made to selectively remove unwanted plants for habitat maintenance and enhancement.

#### **Wildlife Food Plots**

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

**PRECAUTIONS, RESTRICTIONS:** There are no rotational restrictions for planting any wildlife food species or for allowing native species to repopulate the area following application of this product.

## 12.0 ANNUAL WEEDS RATE SECTION

When water carrier volumes are between 16 and 40 gallons per acre for ground application, and between 6 and 15 gallons per acre for aerial application, the following use rates will control the annual weeds listed in the table that follows:

- 22 fluid ounces per acre—grass and broadleaf annual weeds less than 6 inches in height or circumference, and vines less than 3 inches in length.
- 32 fluid ounces per acre—grass and broadleaf annual weeds 6 to 12 inches in height or circumference, and vines 3 to 6 inches in length.
- 44 fluid ounces per acre—grass and broadleaf annual weeds greater than 12 inches in height or circumference, and vines greater than 6 inches in length.

**WHEN WATER CARRIER VOLUMES ARE BETWEEN 3 AND 15 GALLONS PER ACRE FOR GROUND APPLICATION, AND BETWEEN 3 AND 5 GALLONS PER ACRE FOR AERIAL APPLICATION, USE THE RATES SPECIFIED FOR INDIVIDUAL WEEDS IN THE FOLLOWING "ANNUAL WEEDS RATE TABLE".**

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

Older, mature (hardened) and otherwise tough to control annual weed species may require higher rates than specified in this table, even if they meet the size requirements listed. This product may be used up to 44 fluid ounces per acre for tough-to-control annual weeds and where heavy weed densities exist. Follow all precautions and restrictions, including the maximum allowed application rates and crop stage timings specified in the instructions for the crops, including Roundup Ready crops, and use sites listed on this label.

Maximum size refers to the maximum plant height, length of runners for vines or circumference of rosette plants in inches.

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 re-growth to occur prior to treatment.

**ANNUAL WEEDS RATE TABLE**

WEED SPECIES	RATE (fluid ounces per acre)				
	11	16	22	27	32
	Maximum height/length (in inches)				
Barley	18	18+	-	-	-
Barnyardgrass	-	3	6	7	9
Bittercress	12	20	-	-	-
Bluegrass, annual	10	-	-	-	-
Bluegrass, bulbous	6	-	-	-	-
Brome, downy <sup>1,2</sup>	6	12	-	-	-
Brome, Japanese	6	12	24	-	-
Buckwheat, wild <sup>3</sup>	-	1	2	-	-
Burcucumber	-	6	12	-	18
Buttercup	12	20	-	-	-
Carpetweed	-	6	12	-	-
Cheat <sup>2</sup>	6	20	-	-	-
Chickweed	-	12	18	-	-
Cocklebur	12	18	24	-	36
Coreopsis, plains	-	6	12	-	18
Corn, volunteer	6	12	20	-	-
Crabgrass	3	6	12	-	-
Devilsclaw (unicorn plant)	-	3	6	-	-
Dwarf dandelion	12	-	-	-	-
Fall panicum	4	-	6	-	12
Falseflax, smallseed	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	-	-
Foxtail, giant, bristly, yellow	6	12	20	-	-
Foxtail, Carolina	10	-	-	-	-
Foxtail, green	12	-	-	-	-
Goatgrass, jointed	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
Johnsongrass, seedling*	6	12	18	-	24
Junglerice	-	3	6	7	9
Knotweed	-	-	6	-	12
Kochia* <sup>4</sup>	-	3 to 6	12	-	-
Lambsquarters	-	6	12	-	20
Little barley	6	12	-	-	-

WEED SPECIES	RATE (fluid ounces per acre)				
	11	16	22	27	32
	Maximum height/length (in inches)				
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, Palmer*	-	12	18	24	-
Pigweed species*	-	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 species*	-	-	6	-	12
Sandbur, field	6	12	-	-	-
Sandbur, longspine	6	12	-	-	-
Shattercane	6	12	20	-	-
Shepherd's-purse	6	12	-	-	-
Sicklepod	-	2	4	-	8
Signalgrass, broadleaf	-	3	6	7	9
Sowthistle, annual	-	-	6	-	12
Speedwell, purslane	12	-	-	-	-
Sprangletop	6	12	20	-	-
Spurge, prostrate	-	6	12	-	-
Spurge, spotted	-	6	12	-	-
Spurry, umbrella	6	-	-	-	-
Stinkgrass	-	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
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	-	-	-
Yellow rocket	-	12	20	-	-

<sup>1</sup> For control of downy brome in no-till systems, use 16 fluid ounces per acre.

<sup>2</sup> Performance is better if application is made before this weed reaches the boot stage of growth.

<sup>3</sup> Use 16 fluid ounces of this product per acre to control wild buckwheat in the cotyledon to 2-leaf stage. Use 22 fluid ounces per acre to control 2- to 4-leaf wild buckwheat. For better control of wild buckwheat over 2 inches in size, use sequential treatments of 22 fluid ounces followed by 22 fluid ounces 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. If possible, use a tank mixture with 2,4-D, as described below, to 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 on the Internet, [www.weedscience.org](http://www.weedscience.org) or [www.weedresistancemanagement.com](http://www.weedresistancemanagement.com), or contact your Monsanto representative.

## 12.1 Annual Weeds—Tank Mixtures with 2,4-D, Dicamba or Tordon 22K

Better control of certain tough weeds can be achieved by tank-mixing this product with 0.25 pound of dicamba, or 0.5 pound of 2,4-D, or 1 to 2 fluid ounces of Tordon 22K per acre. These other herbicides, combined with the rate of this product specified in the "ANNUAL WEEDS RATE TABLE", will control the following weeds up to the maximum height or length indicated: 6 inches—prickly lettuce, marestail/horseweed, morningglory, kochia (dicamba only), wild buckwheat (Tordon 22K only); 12 inches—cocklebur, lambsquarters, pigweed, Russian thistle (2,4-D only).

At rates given in the "ANNUAL WEEDS RATE SECTION", this product will control the following weeds up to a maximum height or length of 6 inches: common ragweed, giant ragweed, Pennsylvania smartweed, and velvetleaf. For better control, tank-mix this product with 0.5 pound of 2,4-D, per acre.

Ensure that the specific product being used is labeled for application at the desired site. Follow all precautions and limitations on the tank-mix product label, including application timing restrictions, soil restrictions, minimum re-cropping interval and rotational

guidelines. Use according to the more restrictive label requirements. Some crop injury may occur if dicamba or Tordon 22K is applied within 45 days of planting.

## 12.2 Annual Weeds—Hand-Held or Backpack Equipment

For control of weeds listed in the “ANNUAL WEEDS RATE TABLE”, apply a 0.4-percent solution of this product to weeds less than 6 inches in height or runner length 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 0.7-percent solution.

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

When using application methods that result in less than complete coverage, use a 4-percent solution for annual and perennial weeds, and a 4- to 7-percent solution for woody brush and trees.

## 12.3 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.

Application of 16 to 20 fluid ounces of this product, plus 1 to 2 pounds of atrazine, per acre will control the following weeds: barnyardgrass (requires 20 fluid ounces for control), downy brome, green foxtail, lambsquarters, prickly lettuce, tansy mustard, pigweed, field sandbur, stinkgrass, Russian thistle, volunteer wheat, witchgrass and Kochia (add 0.12 pound of dicamba for control). Ensure that the specific atrazine or dicamba product being used is labeled for application on the desired site. Follow all precautions and limitations on the tank-mix product label, including application timing restrictions, soil restrictions, minimum re-cropping interval and rotational guidelines.

## 13.0 PERENNIAL WEEDS RATE SECTION

Apply to actively growing perennial weeds.

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

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

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

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

PERENNIAL WEEDS RATE TABLE

Weed Species	Rate (QT/A)	Water Volume (GPA)	Hand-Held % Solution
Alfalfa	1 – 1.5	3 – 10	1.5%

Make application after the last hay cutting in the fall. Allow alfalfa to re-grow to a height of 6 to 8 inches or more prior to treatment. Application should be followed with deep tillage at least 7 days after treatment, but before soil freeze-up.

Bindweed, field	0.4 – 3.3	3 – 20	1.5%
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Do not treat field bindweed under drought stress, as good soil moisture is necessary for active growth.

For control, apply 2.5 to 3.3 quarts of this product per acre west of the Mississippi River and 2 to 2.5 quarts per acre east of the Mississippi River. Apply when weeds are at or beyond full bloom. For best results, apply in late summer or fall. Fall treatment must be applied before a killing frost.

Also for control, apply 44 fluid ounces of this product, plus 0.5 pound of dicamba, in 10 to 20 gallons of water per acre. Do not apply by air.

For suppression on irrigated agricultural land, apply 22 to 44 fluid ounces of this product, plus 1 pound of 2,4-D, in 10 to 20 gallons of water per acre with ground application equipment only. Application should be made following harvest or in fall fallow ground when the bindweed is actively growing and the majority of runners are 12 inches or more in length. Irrigate at least once to promote active bindweed growth.

For suppression, apply 11 fluid ounces of this product, plus 0.5 pound of 2,4-D, in 3 to 10 gallons of water per acre using ground application, and in 3 to 5 gallons of water per acre using aerial application. Apply by air in fallow and reduced tillage systems only. Application should be delayed until maximum emergence has occurred and when vines are between 6 to 18 inches in length.

Bluegrass, Kentucky	0.7 – 1.5	3 – 40	1.5%
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Apply 44 fluid ounces of this product in 10 to 40 gallons of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 22 to 32 fluid ounces of this product in 3 to 10 gallons of water per acre to actively growing plants when most have reached 4 to 12 inches in height.

Blueweed, Texas	2 – 3.3	3 – 40	1.5%
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Apply 2.5 to 3.3 quarts of this product per acre west of the Mississippi River and 2 to 2.5 quarts per acre east of the Mississippi River when plants are at or beyond full bloom. New leaf development indicates active growth. For best results, apply in late summer or fall. Fall treatment must be applied before a killing frost.

PERENNIAL WEEDS RATE TABLE (Continued)

Weed Species	Rate (QT/A)	Water Volume (GPA)	Hand-Held % Solution
Bromegrass, smooth	0.7 – 1.5	3 – 40	1.5%

Apply 44 fluid ounces of this product in 10 to 40 gallons of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 22 to 32 fluid ounces of this product in 3 to 10 gallons of water per acre to actively growing plants when most have reached 4 to 12 inches in height.

Bursage, woolly-leaf	–	3 – 20	1.5%
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For control, apply 44 fluid ounces of this product plus 0.5 pound of dicamba per acre. For partial control, apply 22 fluid ounces of this product plus 0.5 pound of dicamba per acre when plants are producing new active growth that has been initiated by moisture for at least 2 weeks, and when plants are at or beyond flowering.

Canarygrass, reed <sup>2</sup>	1.5 – 2	3 – 40	1.5%
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Cattail <sup>2</sup>	2 – 3.3	3 – 40	1.5%
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Clover, red or white <sup>1</sup>	2 – 3.3	3 – 20	1.5%
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Also for control, apply 11 to 22 fluid ounces of this product, plus 0.5 to 1 pound of 2,4-D, in 3 to 10 gallons of water per acre.

Dandelion <sup>1</sup>	2 – 3.3	3 – 40	1.5%
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Also for control, apply 11 fluid ounces of this product, plus 0.5 pound of 2,4-D, in 3 to 10 gallons of water per acre.

Dock, curly <sup>1</sup>	2 – 3.3	3 – 40	1.5%
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Also for control, apply 11 to 22 fluid ounces of this product, plus 0.5 to 1 pound of 2,4-D, in 3 to 10 gallons of water per acre.

Dogbane, hemp	3	3 – 40	1.5%
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Apply when most plants have reached the late bud to flower stage of growth. Following crop harvest or mowing, allow weeds to re-grow to a mature stage prior to treatment. For best results, apply in late summer or fall.

For suppression, apply 11 fluid ounces of this product, plus 0.5 pound of 2,4-D, in 3 to 10 gallons of water per acre for ground application, and in 3 to 5 gallons of water per acre for aerial application. Delay application until maximum emergence of dogbane has occurred.

Fescue (except tall) <sup>2</sup>	2 – 3.3	3 – 20	1.5%
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Fescue, tall	0.7 – 2	3 – 40	1.5%
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Apply 64 fluid ounces of this product per acre when most plants have reached boot-to-early seedhead stage of development.

For fall application only, apply 22 fluid ounces of this product in 3 to 10 gallons of water per acre when plants have 6 to 12 inches of new growth. A sequential application of 11 fluid ounces of this product per acre will improve long-term control and will control seedlings germinating after fall treatment or in the following spring.

Horsenettle <sup>1</sup>	2 – 3.3	3 – 20	1.5%
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Horseradish	3	3 – 40	1.5%
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Apply when most plants have reached the late bud to flower stage of growth. For best results, apply in late summer or fall.

Jerusalem artichoke <sup>1</sup>	2 – 3.3	3 – 20	1.5%
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Johnsongrass	0.4 – 2	3 – 40	1%
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In annual cropping systems, apply 22 to 44 fluid ounces of this product per acre in 3 to 10 gallons of water per acre. Use 44 fluid ounces of this product when applying 10 to 40 gallons of water per acre. In non-crop areas or in areas where annual tillage is not practiced (no-till), apply 44 to 64 fluid ounces of this product in 10 to 40 gallons of water per acre.

For best results, apply when most plants have reached the boot-to-head stage of growth or in the fall prior to frost. Allow 7 or more days after application before tillage. Do not tank-mix with residual herbicides when using 22 fluid ounces of this product per acre.

For burndown of johnsongrass, apply 11 fluid ounces of this product in 3 to 10 gallons of water per acre before plants reach a height of 12 inches. For this use, allow at least 3 days after treatment before tillage.

For partial control or suppression, apply a 0.7-percent solution of this product as a spot treatment when johnsongrass is 12 to 18 inches in height. Coverage should be uniform and complete.

Kikuyugrass	1.5 – 2	3 – 40	1.5%
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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	3	3 – 40	1.5%
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Apply when most plants have reached the late bud to flower stage of growth. For best results, apply in late summer or fall.

Milkweed, common	2	3 – 40	1.5%
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Apply when most plants have reached the late bud to flower stage of growth.

Mullein, common <sup>1</sup>	2 – 3.3	3 – 20	1.5%
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Napiergrass <sup>2</sup>	2 – 3.3	3 – 20	1.5%
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Nightshade, silverleaf	1.5	3 – 10	1.5%
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Application should be made when at least 60 percent of the plants have berries. Fall application must be made before a killing frost.



PERENNIAL WEEDS RATE TABLE (Continued)

Weed Species	Rate (QT/A)	Water Volume (GPA)	Hand-Held % Solution
Nutsedge, purple or yellow	0.4 – 2	3 – 40	1 – 1.5%
Apply 64 fluid ounces of this product per acre, or a 1- to 1.5-percent solution, for control of nutsedge plants and immature nutlets attached to treated plants. Treat when plants are in flower or when new nutlets can be found at rhizome tips. Nutlets that have not germinated will not be controlled and may germinate following treatment. Repeat treatments will be required for long-term control of ungerminated tubers.			
Sequential applications of 22 to 44 fluid ounces of this product in 3 to 10 gallons of water per acre will also provide control. Make application 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 11 to 44 fluid ounces of this product in 3 to 40 gallons of water per acre 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 re-growth of existing plants.			
Poison hemlock	–	–	1 – 1.5%
For hand-held equipment, apply as a spray-to-wet treatment. Optimum results are obtained when plants are treated at the bud to full-bloom stage of growth. Thorough coverage is necessary for best control.			
Pokeweed, common	1	3 – 40	1.5%
Apply to actively growing plants up to 24 inches tall.			
Quackgrass	0.7 – 2	3 – 40	1.5%
In annual cropping systems, or in pastures and sods followed by deep tillage, apply 22 fluid ounces of this product in 3 to 10 gallons of water per acre or 44 fluid ounces of this product in 10 to 40 gallons of water per acre. Do not tank-mix with residual herbicides when using the 22-fluid-ounce rate. Spray when quackgrass is 6 to 8 inches in height. Do not till between harvest and fall application 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 44 to 64 fluid ounces of this product in 10 to 40 gallons of water per acre when the quackgrass is greater than 8 inches tall.			
Spurge, leafy	–	3 – 10	1.5%
For suppression, apply 11 fluid ounces of this product, plus 0.5 pound of 2,4-D, in 3 to 10 gallons of water per acre in late summer or fall. If mowing has occurred prior to treatment, apply when most plants are 12 inches tall.			
Starthistle, yellow	1.5	10 – 40	1.5%
Best results are obtained when application is made during the rosette, bolting and early flower stages.			
Sweet potato, wild	–	–	1.5%
For partial control, apply to plants that are at or beyond the bloom stage of growth. Repeat applications may be required.			
Thistle, artichoke	–	–	1.5%
For partial control, apply to plants that are at or beyond the bloom stage of growth. Repeat applications may be required.			
Thistle, Canada	1.5 – 2	3 – 40	1.5%
Apply when most plants are at or beyond the bud stage of growth. After harvest, mowing or tillage in late summer or fall, allow at least 4 weeks for initiation of active growth and rosette development prior to application of this product. Fall treatment must be applied before a killing frost. Allow 3 or more days after application before tillage.			
For suppression in the spring, apply 22 fluid ounces of this product alone, or 11 fluid ounces of this product plus 0.5 pound of 2,4-D, in 3 to 10 gallons of water per acre. Allow rosette re-growth to a minimum of 6 inches in diameter before treating. Application 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 <sup>2</sup>	1.5 – 2	3 – 40	1.5%
Torpedograss	2.5 – 3.3	3 – 40	1.5%
For partial control, apply when most plants are at or beyond the seedhead stage of growth. Repeat applications will be required to achieve control. Fall treatment must be applied before frost.			
Trumpet creeper	1.5	5 – 10	1.5%
For partial control, apply in late September or October to plants that are at least 18 inches tall and have been growing 45 to 60 days since the last tillage operation. Make application at least 1 week before a killing frost.			
Wheatgrass, western <sup>2</sup>	1.5 – 2	3 – 40	1.5%

<sup>1</sup> Apply when most plants have reached the early bud stage of growth.

<sup>2</sup> Apply when most plants have reached the early heading stage of growth.

## 14.0 LIMIT OF WARRANTY AND LIABILITY

Monsanto Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR

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To the extent consistent with applicable law, buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

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

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