



# 41% GLYPHOSATE GRASS & WEED KILLER

## NON-SELECTIVE, BROAD-SPECTRUM WEED CONTROL FOR:

- Many agricultural systems and farmsteads.
- General Non-Crop Areas and Industrial Sites, Forestry Site Preparation, Ornamentals, Plant Nurseries and Christmas Trees, Parks, Recreational and Residential Areas, Railroads, Roadsides, Utility Sites.

## HERBICIDE FOR ROUNDUP READY® CROPS

## CONTAINS GLYPHOSATE, THE SAME ACTIVE INGREDIENT AS ROUNDUP®

*Farm General 41% Glyphosate Grass & Weed Killer is not manufactured or distributed by the Monsanto Company, seller of Roundup®*

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



### ACTIVE INGREDIENT:

* Glyphosate, N-(phosphonomethyl) glycine, in the form of its isopropylamine salt .....	41.0%
OTHER INGREDIENTS .....	59.0%
TOTAL: .....	100.0%

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

EPA Reg. No. 84009-12 EPA Est. No. 084840-LA-001 0917(01)

NET CONTENTS: 2.5 GAL / 320 FL OZ / 9.46 L

## KEEP OUT OF REACH OF CHILDREN CAUTION

See Inside Booklet for Complete Precautionary Statements, First Aid, Directions for Use and Storage and Disposal.

Manufactured For:  
Ragan and Massey, Inc.  
101 Ponchatoula Parkway  
Ponchatoula, Louisiana 70454  
(800) 264-5281  
info@raganandmassey.com



## TABLE OF CONTENTS

<b>3.0 PRECAUTIONARY STATEMENTS</b> .....	<b>3</b>	10.4 NON-FOOD TREE CROPS	27
3.1 HAZARDS TO HUMANS AND DOMESTIC ANIMALS	3	10.5 POME FRUIT	27
3.2 PERSONAL PROTECTIVE EQUIPMENT: (PPE)	3	10.6 STONE FRUIT	28
3.3 ENVIRONMENTAL HAZARDS	3	10.7 TREE NUTS	28
3.4 PHYSICAL OR CHEMICAL HAZARDS	3	10.8 TROPICAL CROPS & SUBTROPICAL TREES & FRUITS	28
3.5 AGRICULTURAL USE REQUIREMENTS	3	10.9 VINE CROPS	29
3.6 NON-AGRICULTURAL USE REQUIREMENTS	3		
<b>4.0 STORAGE AND DISPOSAL</b> .....	<b>4</b>	<b>11.0 PASTURE GRASSES, FORAGE LEGUMES &amp; RANGELANDS</b> .....	<b>30</b>
<b>5.0 USE INFORMATION (MODE OF ACTION)</b> .....	<b>4</b>	11.1 ALFALFA, CLOVER, & OTHER FORAGE LEGUMES	30
<b>6.0 WEED RESISTANCE MANAGEMENT</b> .....	<b>5</b>	11.2 CONSERVATION RESERVE PROGRAM (CRP)	31
6.1 WEED MANAGEMENT DIRECTIONS	5	11.3 GRASS or TURFGRASS SEED PRODUCTION	31
6.2 MANAGEMENT DIRECTIONS FOR	5	11.4 PASTURES	32
<b>7.0 MIXING</b> .....	<b>5</b>	11.5 RANGELANDS	33
7.1 MIXING WITH WATER	5	11.6 TURFGRASS SOD PRODUCTION	34
7.2 TANK MIXING PROCEDURE	5	11.7 RELEASE OF BERMUDAGRASS OR BAHIAGRASS	35
7.3 MIXING FOR HAND-HELD SPRAYERS	6		
7.4 SURFACTANTS	6	<b>12.0 ROUNDUP READY® CROPS</b> .....	<b>35</b>
7.5 AMMONIUM SULFATE	6	12.1 ROUNDUP READY ALFALFA	36
7.6 COLORANTS OR DYES	6	12.2 ROUNDUP READY CANOLA (Spring Varieties)	38
7.7 DRIFT CONTROL ADDITIVES	6	12.3 ROUNDUP READY CANOLA (Fall & Winter Varieties)	39
<b>8.0 APPLICATION EQUIPMENT AND TECHNIQUES</b> .....	<b>6</b>	12.4 ROUNDUP READY CORN	40
8.1 AERIAL EQUIPMENT	6	12.5 ROUNDUP READY COTTON	41
8.2 GROUND BROADCAST EQUIPMENT	8	12.6 ROUNDUP READY FLEX COTTON	43
8.3 HAND-HELD AND HIGH-VOLUME EQUIPMENT	8	12.7 ROUNDUP READY SOYBEANS	44
8.4 SELECTIVE EQUIPMENT	8	12.8 ROUNDUP READY SUGAR BEETS	45
8.5 INJECTION SYSTEMS	9		
8.6 CDA EQUIPMENT	9	<b>13.0 NON-CROP USES AROUND THE FARMSTEAD</b> .....	<b>46</b>
<b>9.0 ANNUAL &amp; PERENNIAL CROPS</b> .....	<b>9</b>	13.1 WEED CONTROL & TRIM-AND-EDGE	46
9.1 CEREAL CROPS	10	13.2 GREENHOUSE/SHADEHOUSE	46
9.2 CORN (Non-Roundup Ready)	11	13.3 CHEMICAL MOWING	47
9.3 COTTON	12	13.4 CUT STUMPS	47
9.4 FALLOW SYSTEMS	13	13.5 HABITAT MANAGEMENT	47
9.5 GRAIN SORGHUM (Milo)	14		
9.6 HERBS AND SPICES	15	<b>14.0 FORESTRY, INDUSTRIAL, TURF &amp; ORNAMENTAL</b> .....	<b>48</b>
9.7 OIL SEED CROPS	16	14.1 FORESTRY SITE PREPARATION	48
9.8 SOYBEANS	17	14.2 NONCROP AREAS & INDUSTRIAL SITES	49
9.9 SUGARCANE	18	14.3 INJECTION & FRILL (Woody Brush & Trees)	50
9.10 VEGETABLE CROPS	20	14.4 HOLLOW STEM INJECTION	50
9.10.1 Brassica Vegetables	20	14.5 ORNAMENTALS, PLANT NURSERIES & CHRISTMAS TREES	51
9.10.2 Bulb Vegetables	20	14.6 PARKS, RECREATIONAL & RESIDENTIAL AREAS	52
9.10.3 Cucurbit Vegetables & Fruits	20	14.7 RAILROADS	53
9.10.4 Leafy Vegetables	21	14.8 ROADSIDES	54
9.10.5 Fruiting Vegetables	21	14.9 UTILITY SITES	55
9.10.6 Legume Vegetables (Succulent Or Dried)	21		
9.10.7 Root & Tuber Vegetables	22	<b>15.0 ANNUAL WEEDS RATE TABLES</b> .....	<b>56</b>
9.11 MISCELLANEOUS CROPS	23	15.1 Water Carrier Volumes of 10 to 40 Gallons Per Acre	58
<b>10.0 TREE, VINE, &amp; SHRUB CROPS</b> .....	<b>24</b>	15.2 Tank Mixtures with 2,4-D, Dicamba, or Picloram 22K	58
10.1 BERRY CROPS	25	15.3 Hand-Held or High-Volume Equipment	58
10.2 CITRUS	26	15.4 Tank Mixtures with Atrazine for Fallow and Reduced Tillage Systems	58
10.3 MISCELLANEOUS TREE FOOD CROPS	27		
		<b>16.0 PERENNIAL WEEDS RATE TABLE</b> .....	<b>59</b>
		16.1 Bromus Species and Medusahead	65
		<b>17.0 WOODY BRUSH AND TREES RATE TABLE</b> .....	<b>65</b>
		<b>18.0 CONDITIONS OF SALE &amp; WARRANTY</b> .....	<b>68</b>

## FIRST AID

### IF IN EYES:

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

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

### HOT LINE NUMBER

For 24 Hour Medical Emergency Assistance (Human or Animal) call 1-800-308-1241 or for Chemical Emergency Assistance (Spill, Leak, Fire or Accident) call CHEMTREC at 1-800-424-9300.

## 3.0

## PRECAUTIONARY STATEMENTS

### 3.1 HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

**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.

### 3.2 PERSONAL PROTECTIVE EQUIPMENT: (PPE)

Applicators and other handlers must wear:

1. Long-sleeved shirt and long pants,
2. Shoes plus socks.

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

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

#### USER SAFETY RECOMMENDATIONS

##### Users should:

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

### 3.3 ENVIRONMENTAL HAZARDS

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

### 3.4 PHYSICAL OR CHEMICAL HAZARDS

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

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

Read the entire label before using this product. Use only according to label instructions.

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

#### 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.

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.

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

### 3.5 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 the label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

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

1. Coveralls
2. Waterproof gloves
3. Shoes plus socks.

### 3.6 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

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

**PESTICIDE STORAGE:** Keep container closed to prevent spills and contamination. Store above 10°F (-12°C) to keep product from crystallizing. Crystals will settle to the bottom. If allowed to crystallize, place in a warm room 68°F (20°C) for several days to redissolve and roll or shake container or recirculate in mini-bulk or bulk container to mix well before using.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures. Empty container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

### CONTAINER DISPOSAL:

**Non-refillable containers (1, 2.5, 30 & 55 gallon):** Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

**(non-refillable <5 gallons):** Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsates for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

**(non-refillable containers >5 gallons):** Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**Pressure rinse as follows (all sizes):** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 45 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

## 5.0

## USE INFORMATION (Mode of Action)

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

Ammonium sulfate, drift control additives, or dyes and colorants may be used. See the MIXING section of this label for instructions.

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

**STAGE OF WEEDS:** Annual weeds are easiest to control when they are small. Best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity. Refer to the annual, perennial, woody brush and trees rate tables for recommendations for specific weeds.

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

Do not treat weeds under poor growing conditions such as drought stress, disease or insect damage, as reduced weed control may result. Reduced results may also occur when treating weeds heavily covered with dust.

**CULTURAL CONSIDERATIONS:** Reduced control may result when applications are made to annual or perennial weeds that have been mowed, grazed, or cut, and have not been allowed to regrow to the recommended stage for treatment.

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

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

**MODE OF ACTION:** The active ingredient in this product inhibits an enzyme found only in plants that is essential to 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. Unemerged plants arising from unattached underground rhizomes or root stocks of perennials will not be affected by the herbicide and will continue to grow.

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

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

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

**ANNUAL MAXIMUM USE RATE:** Except as otherwise specified in a crop section of this label, the combined total of all treatments must not exceed 8 quarts of this product per acre per year. For non-crop uses, the combined total of all treatments must not exceed 10.6 quarts of this product per acre per year. The maximum use rates stated throughout this product's labeling apply to this product combined with the use of all other herbicides containing glyphosate or sulfosate as the active ingredient, whether applied as mixtures or separately. Calculate the application rates and ensure that the total use of this and other glyphosate or sulfosate containing products does not exceed stated maximum use rate.

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

## 6.0

## WEED RESISTANCE MANAGEMENT

Glyphosate, the active ingredient in this product, is a Group 9 herbicide. Target site resistance to Group 9 herbicides is rare. 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 using other cultural practices or mechanical practices.

### 6.1 WEED MANAGEMENT DIRECTIONS

To minimize the occurrence of glyphosate resistant biotypes, observe the following weed management recommendations:

- Scout your fields before and after herbicide applications.
- Start with a clean field, use 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.
- One method of adding other herbicides into a continuous Roundup Ready system is to rotate to other Roundup Ready crops.
- Utilize the specified label 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 tank mixture recommendations that encourage application rates of this product below the label recommendations.
- 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 Ragan and Massey, Inc. representative, local retailer, or county extension agent.

### 6.2 MANAGEMENT DIRECTIONS FOR GLYPHOSATE RESISTANCE BIOTYPES

Note: Appropriate testing is critical in order to determine if a weed is resistant to glyphosate. Contact your Ragan and Massey, Inc. representative to determine if resistance has been confirmed to any particular weed biotype in your area, or visit on the internet [www.weedscience.org](http://www.weedscience.org). For more information see the "ANNUAL WEEDS RATE SECTION" and "PERENNIAL WEEDS RATE SECTION" of this label.

Since the occurrence of new glyphosate resistant weeds cannot be determined until after product use and scientific confirmation, Ragan and Massey, Inc. 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 are recommended to 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 escaping weeds including resistant biotypes before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.

## 7.0

## MIXING

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

**NOTE:** REDUCED RESULTS MAY OCCUR IF WATER CONTAINING SOIL IS USED, SUCH AS VISIBLY MUDDY WATER OR WATER FROM PONDS AND DITCHES THAT IS NOT CLEAR.

### 7.1 MIXING WITH WATER

This product mixes readily with water. Mix spray solutions of this product as follows: Fill the mixing or spray tank with the desired amount of water. Add the recommended amount of this product near the end of the filling process and mix well. Use caution to avoid siphoning back into the carrier source. Use approved anti-back-siphoning devices where required by state or local regulations. During mixing and application, foaming of the spray solution may occur. To prevent or minimize foam, avoid the use of mechanical agitators, terminate by-pass and return lines at the bottom of the tank and, if needed, use an approved anti-foam or de-foaming agent.

### 7.2 TANK MIXING PROCEDURE

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

1. Place a 20 to 35-mesh screen or wetting basket over filling port.
2. Through the screen, fill the spray tank one-half full with water and start agitation.
3. If ammonium sulfate is used add it slowly through the screen into the tank. Continue agitation. Ensure that dry ammonium sulfate is completely dissolved in the spray tank before adding other products.
4. If a wettable powder is used, make a slurry with the water carrier, and add it SLOWLY through the screen into the tank. Continue agitation.

5. If a flowable formulation is used, premix one part flowable with one part water. Add diluted mixture SLOWLY through the screen into the tank. Continue agitation.
6. If an emulsifiable concentrate formulation is used, premix one part emulsifiable concentrate with two parts water. Add diluted mixture slowly through the screen into the tank. Continue agitation.
7. Continue filling the spray tank with water and add the required amount of this product near the end of the filling process.
8. Add individual formulations to the spray tank as follows: wettable powder, flowable, emulsifiable concentrate, drift control additive and water soluble liquid.  
Maintain good agitation at all times until the contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed.

Keep by-pass line 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.

Always predetermine the compatibility of labeled tank mixtures of this product with water carrier by mixing small proportional quantities in advance.

Refer to the "TANK MIXING" section of "PRODUCT INFORMATION" for additional precautions.

### 7.3

### MIXING FOR HAND-HELD SPRAYERS

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

Desired Volume	Amount of This Product					
	1/2%	1%	1 1/2%	2%	5%	10%
1 Gal	2/3 oz	1 1/3 oz	2 oz	2 2/3 oz	6 1/2 oz	13 oz
25 Gal	1 pt	1 qt	1 1/2 qt	2 qt	5 qt	10 qt
100 Gal	2 qt	1 gal	1 1/2 gal	2 gal	5 gal	10 gal

2 tablespoons = 1 fluid ounce

For use in knapsack sprayers, it is suggested that the specified amount of this product be mixed with water in a larger container. Fill sprayer with the mixed solution.

### 7.4

#### SURFACTANTS

Additional surfactants labeled for use with herbicides may be used. Do not reduce application rates of this herbicide when adding surfactants. Read and carefully observe cautionary statements and other information appearing on the additives label.

### 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, particularly when tank mixed with certain residual herbicides on annual and perennial weeds. The equivalent rate of ammonium sulfate in a liquid formulation may also be used.

Ensure that ammonium sulfate is completely dissolved in the spray tank before adding herbicides. Thoroughly rinse the spray system with clean water after use to reduce corrosion.

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

### 7.6

#### COLORANTS OR DYES

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

### 7.7

#### DRIFT CONTROL ADDITIVES

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

**NOTE:** The use of drift control additives can affect spray coverage which may result in reduced 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 sprayer, floaters, pick-up sprayers, spray coupes and other ground broadcast equipment.
- **Hand-Held or High-Volume Spray Equipment** - Knapsack and 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 which produce a spray consisting of a narrow range of droplet sizes.

\*This product is not registered in California or Arizona for use in mistblowers.

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

### 8.1

#### AERIAL EQUIPMENT

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT EXCEPT UNDER CONDITIONS AS SPECIFIED WITHIN THIS LABEL. FOR AERIAL APPLICATION IN CALIFORNIA AND ARKANSAS, REFER TO INSTRUCTIONS SPECIFIC TO THOSE STATES.

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

Use the specified rates of this herbicide in 3 to 15 gallons of water per acre unless otherwise specified on this label. Unless otherwise specified, do not exceed 1 quart per acre. Aerial applications of this product may be made in annual cropping conventional tillage systems, fallow and reduced tillage

systems and preharvest applications. Refer to the individual use area sections of this label for volumes and application rates.

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

#### AERIAL SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most 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 must be observed.

#### INFORMATION ON 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 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 higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. 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 parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.
- **Boom Length** - For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.
- **Application Height** - Applications must not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

#### SWATH ADJUSTMENT

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

#### WIND

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

#### TEMPERATURE AND HUMIDITY

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

#### TEMPERATURE INVERSIONS

Applications must not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This

cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a 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 pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

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 ARE MOST SUSCEPTIBLE. The maintenance of an organic coating (paint), which meets aerospace specification MIL-C-38413, may prevent corrosion.

#### FOR AERIAL APPLICATION IN CALIFORNIA ONLY

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

1. In fallow and reduced tillage systems prior to the emergence or transplanting of labeled crops.
2. In alfalfa and pasture renovation applications.
3. Over-the-top applications in Roundup Ready® corn and cotton.
4. Preharvest in alfalfa, corn, cotton, wheat, Roundup Ready® corn and Roundup Ready® cotton.

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

When tank mixing this product with 2,4-D for aerial applications, only 2,4-D amine formulations may be used. This tank mixture may be used for fallow and reduced tillage systems and alfalfa and pasture renovation applications only.

DO NOT EXCEED A MAXIMUM RATE OF 2 QUARTS PER ACRE OF THIS PRODUCT WHEN MAKING APPLICATIONS BY AIR IN FALLOW AND REDUCED TILLAGE SYSTEMS AND ALFALFA AND PASTURE RENOVATION APPLICATIONS.

DO NOT EXCEED A MAXIMUM RATE OF 1 QUART PER ACRE OF THIS PRODUCT WHEN MAKING APPLICATIONS BY AIR IN ALFALFA, CORN, COTTON, WHEAT, ROUNDUP READY® CORN AND ROUNDUP READY® COTTON PRIOR TO HARVEST. THIS RESTRICTION ALSO APPLIES TO OVER-THE-TOP APPLICATIONS IN ROUNDUP READY® CORN AND COTTON.

#### Aerial Equipment

Use the specified rates of this product in 3 to 15 gallons of water per acre.

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

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

## FOR AERIAL APPLICATION IN FRESNO COUNTY, CALIFORNIA

(Only From February 15 through March 31 Only)

### Applicable Area:

The area contained inside the following boundaries within Fresno County, California.

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

### Use Information:

Always read and follow the label directions and precautionary statements for all products used in the aerial application.

Observe the following directions to minimize off-site movement during aerial application of this product. Minimization of off-site movement is the responsibility of the grower, Pest Control Advisor and aerial applicator.

### Written Recommendations:

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

### Aerial Applicator Training and Equipment:

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

### Applications at Night:

Do not apply this product by air earlier than 30 minutes prior to sunrise and/or later than 30 minutes after sunset without prior permission from the Fresno County Agricultural Commissioner.

Note: For aerial application from April 1 through February 14, refer to the "For Aerial Application in California Only" section of this label.

### FOR AERIAL APPLICATION IN ARKANSAS ONLY

AVOID DRIFT. DO NOT APPLY INTO STILL AIR WHERE THERE IS A TEMPERATURE INVERSION LAYER LOW ENOUGH FOR FINE SPRAY PARTICLES TO BECOME SUSPENDED AND MOVE OUTSIDE THE TARGET AREA WHEN THE INVERSION LAYER MOVES. DO NOT APPLY WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITION THAT FAVORS DRIFT. DRIFT IS LIKELY TO CAUSE DAMAGE TO ANY VEGETATION CONTACTED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.

Use the specified rate of this product in 3 to 15 gallons of water per acre. Use sufficient carrier volume and appropriate equipment set-up to form droplets large enough to avoid drift potential. Coarse droplets in the 300 to 500 (VMD) micron range are recommended.

Applications should typically be made with the nozzle release point at 8 to 15 feet above the top of the target plants unless a greater height is required for aircraft safety. The distance of the outermost nozzles on the boom must not exceed 75% of the length of the wingspan or rotor. In many cases, reducing this distance to 65% of the length of the wingspan or rotor will improve drift control without affecting the swath width.

Nozzles must always discharge backward parallel with the air stream and never discharge downwards more than 45 degrees on fixed wing aircraft or forward of the prevailing airflow on rotary winged aircraft. Avoid the use of nozzles with wide-angle discharge.

Do not apply this product when wind speeds are in excess of 10 miles per hour.

Do not apply when there is a low-level inversion where fine spray particles could be suspended in still air and move outside the target area when the inversion layer moves. These conditions may occur when wind speeds are less than 2 mph.

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

1. Do not apply within 100 feet of any desirable vegetation or crops.
2. If wind up to 5 miles per hour is blowing toward desirable vegetation or crops, do not apply within 500 feet upwind of the desirable vegetation or crops.
3. Winds blowing from 5 to 10 miles per hour toward desirable vegetation or crops will likely require buffer zones in excess of 500 feet.

### 8.2 GROUND BROADCAST EQUIPMENT

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

### 8.3 HAND-HELD AND HIGH-VOLUME EQUIPMENT

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

### 8.4 SELECTIVE EQUIPMENT

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

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

Contact of the herbicide solution with desirable vegetation may result in damage or destruction. Applicators used above desirable vegetation should be adjusted so that the lowest spray stream or wiper contact point is at least 2 inches above the desirable vegetation. Droplets, mist, foam or splatter of the herbicide solution settling on desirable vegetation may result in discoloration, stunting or destruction.

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

### Shielded and Hooded Applicators

When applied under the conditions described in the following paragraphs for shielded and hooded applications, this product at recommended rates will control those weeds listed in the "ANNUAL WEEDS RATE TABLE" and



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

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

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

These procedures will reduce the potential for crop injury:

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

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

**EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF HERBICIDE WITH DESIRABLE VEGETATION.**

#### **WIPER APPLICATORS**

When applied under the conditions described in the following paragraphs, this product **CONTROLS** many weeds, including volunteer corn, Texas panicum, common rye, shattercane, sicklepod, Spanish needles and bristly starbur, and **SUPPRESSES** many weeds including Florida beggarweed, Bermuda grass, hemp dogbane, dogfennel, guineagrass, johnsongrass, milkweed, silverleaf nightshade, redroot pigweed, giant ragweed, smutgrass, sunflower, Canada thistle, musk thistle, vaseygrass & velvetleaf.

## **9.0**

### **ANNUAL & PERENNIAL CROPS (Alphabetical)**

This section is organized alphabetically by crop category. There may be several labeled crops listed in a crop category.

SEE THE INDIVIDUAL CROP CATEGORIES FOR SPECIFIC INSTRUCTIONS, PREHARVEST INTERVALS, AND ADDITIONAL PRECAUTIONS AND RESTRICTIONS.

See the “ROUNDUP READY CROPS” section of this label for instructions for treating Roundup Ready crops.

#### **TYPES OF APPLICATIONS**

Chemical fallow, Pre-plant fallow beds, Pre-plant, Pre-emergence, At Planting, Hooded Sprayers in Row-Middles, Shielded Sprayers in Row-Middles, Wiper Applications in Row-Middles, and Post-Harvest Treatments.

Additional application types may be specified or allowed in individual Crop Categories.

#### **USE INSTRUCTIONS**

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

Post-directed hooded sprayers and wiper equipment capable of preventing all crop contact with herbicide solutions may be used in mulched or un-mulched row middles after crop establishment. Where specifically noted below, wipers may also be used above certain crops to control tall weeds. Refer to the “SELEC-

Wiper applicators are devices that physically wipe appropriate amounts of this product directly onto the weed.

Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting desirable vegetation. Operate this equipment at ground speeds no greater than 5 mph. Performance may be improved by reducing speed in areas of heavy weed infestations to ensure adequate wiper saturation. Better results may be obtained if 2 applications are made in opposite directions.

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

Do not use wiper equipment when weeds are wet.

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

Do not add surfactant to the herbicide solution.

**For Rope or Sponge Wick Applicators** - Mix 1 gallon of this product in 2 gallons of water to prepare a 33 percent solution. Apply this solution to weeds listed above in this section.

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

#### **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 when using injection systems.

#### **8.6 CDA EQUIPMENT**

The rate of this product applied per acre by vehicle-mounted CDA equipment must not be less than the amount specified in this label when applied by conventional broadcast equipment. For vehicle-mounted CDA equipment, apply 3 to 20 gallons of water per acre.

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

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

TIVE EQUIPMENT” section of this label for essential precautions when using hooded sprayers or wipers to avoid crop injury caused by leakage of spray mists or dripping onto crops. Crop injury is possible with these applications and shall be the sole responsibility of the applicator.

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

**PRECAUTIONS**

- Avoid contact of herbicide with foliage, green shoots or stems, bark, exposed roots (including those emerging from plastic mulch), or fruit of crops because severe injury or destruction may result.
- Apply before seed germination in coarse sandy soils to further minimize the risk of injury.

**RESTRICTIONS**

- Unless otherwise specified in this product’s labeling, treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest.
- In crops where spot treatments are allowed, do not treat more than 10 percent of the total field to be harvested. The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside the target area for the same reason.
- When making pre-emergence and at planting applications, applications must be made before crop emergence to avoid severe crop injury. Broadcast applications made at emergence will result in injury or death to emerged seedlings.
- Post-harvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop.
- For broadcast post-emergent treatments, do not harvest or feed treated vegetation for 8 weeks following application, unless otherwise specified.

<b>9.1 CEREAL CROPS</b>		
<b>LABELED CROPS:</b> Barley, Buckwheat, Millet (Pearl & Proso), Oats, Rice, Rye, Quinoa, Teff, Teosinte, Triticale, Wheat (All), Wild rice.		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 9.0 Pre-Plant, Pre-Emergence, At-Planting	This product may be applied before, during or after planting of cereal crops. Applications must be made prior to emergence of the crop.	Do not treat rice fields or levees when the field contains floodwater.
Red Rice Control (prior to planting rice)	Apply 1.5 quarts of this product in 5 to 10 gallons of water per acre. Flush fields prior to application to obtain uniform germination and stand of red rice. Make application when the majority of the red rice plants are in the 2-leaf stage and no more than 4 inches tall. Red rice plants with less than 2 true leaves may only be partially controlled.	Avoid spraying during low humidity conditions, as reduced control may result. <b>DO NOT TREAT RICE FIELDS OR LEVEES WHEN THE FIELDS CONTAIN FLOOD WATER.</b> <b>DO NOT RE-FLOOD TREATED FIELDS FOR 8 DAYS FOLLOWING APPLICATION.</b>
Spot treatment (except rice)	This product may be applied as a spot treatment in cereal crops. Apply this product before heading in small grains.	Do not treat more than 10 percent of the total field area to be harvested. The crop receiving spray in the treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.
Over the Top Wiper applications (Feed barley & wheat only)	Wiper applications may be used in wheat. To control common rye or cereal rye, apply after the weeds have headed and achieved maximum growth, when the rye is at least 6 inches above the wheat crop.	Allow at least 35 days between application and harvest. Do not use roller applicators.
Pre-harvest (Feed barley & wheat only)	This product provides weed control when applied prior to harvest of wheat. Apply after the hard-dough stage of grain (30% or less grain moisture) and at least 7 days prior to harvest. Wheat stubble may be grazed immediately after harvest.  This product may be applied using either aerial or ground spray equipment. For ground applications, apply this product in 10 to 20 gallons of water per acre. For aerial applications, apply this product in 3 to 10 gallons of water per acre.	Do not apply more than 1 quart of this product per acre. Do not apply to wheat or barley grown for seed, as a reduction in germination or vigor may occur. Allow 7 days between application and harvest or grazing.
Post-harvest	This product may be applied after harvest of cereal crops. Higher rates may be required for control of large weeds which were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.	For any crop not listed on this label, applications must be made at least 30 days prior to planting the next crop. Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.

## 9.2

## CORN (Non-Roundup Ready)

**LABELLED CROPS:** Field corn, Seed corn, Silage corn, Sweet corn and Popcorn

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS																																	
<p>See Section 9.0 Pre-plant, Pre-emergence, At-planting</p>	<p>This product may be applied before, during or after planting corn. Applications must be made prior to emergence of the crop.</p> <p><b>TANK MIXTURES:</b> Apply these tank mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre.</p> <table border="0"> <tr> <td>2,4-D</td> <td>Distinct</td> <td>Harness Xtra</td> </tr> <tr> <td>Aim</td> <td>Dual Magnum</td> <td>5.6L</td> </tr> <tr> <td>Atrazine</td> <td>Dual II Magnum</td> <td>Lariat</td> </tr> <tr> <td>Axiom</td> <td>Epic</td> <td>Intro</td> </tr> <tr> <td>Balance</td> <td>Frontier/</td> <td>Linex/Lorox</td> </tr> <tr> <td>Bicep Magnum</td> <td>Outlook</td> <td>Marksman</td> </tr> <tr> <td>Bicep II</td> <td>Fultime</td> <td>Micro-Tech</td> </tr> <tr> <td>Magnum</td> <td>Guardsman/</td> <td>Prowl</td> </tr> <tr> <td>Bullet</td> <td>Leadoff</td> <td>Python</td> </tr> <tr> <td>Degree</td> <td>Harness</td> <td>Simazine</td> </tr> <tr> <td>Degree Xtra</td> <td>Harness Xtra</td> <td>Topnotch</td> </tr> </table> <p>For difficult to control annual weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signal grass up to 2 inches tall and Pennsylvania smartweed up to 6 inches tall, apply this product at 2 pints per acre in these tank mixtures. For other labeled weeds, apply 1.5 to 2 pints of this product per acre when weeds are less than 6 inches tall, 2 to 3 pints when weeds are over 6 inches tall. When using nitrogen solutions as the carrier, use rate may need to be increased for acceptable weed control.</p>	2,4-D	Distinct	Harness Xtra	Aim	Dual Magnum	5.6L	Atrazine	Dual II Magnum	Lariat	Axiom	Epic	Intro	Balance	Frontier/	Linex/Lorox	Bicep Magnum	Outlook	Marksman	Bicep II	Fultime	Micro-Tech	Magnum	Guardsman/	Prowl	Bullet	Leadoff	Python	Degree	Harness	Simazine	Degree Xtra	Harness Xtra	Topnotch	<p>Applications of 2,4-D or dicamba must be made at least 7 days prior to planting corn.</p> <p>For Southern states, do not apply in nitrogen solutions to tough-to-control grasses such as barnyardgrass, fall panicum, broadleaf signalgrass, annual ryegrass and any perennial weeds. The area covered by this recommendation includes from Route 50 South in Illinois and Indiana and the following states: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, New Jersey, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.</p>
2,4-D	Distinct	Harness Xtra																																	
Aim	Dual Magnum	5.6L																																	
Atrazine	Dual II Magnum	Lariat																																	
Axiom	Epic	Intro																																	
Balance	Frontier/	Linex/Lorox																																	
Bicep Magnum	Outlook	Marksman																																	
Bicep II	Fultime	Micro-Tech																																	
Magnum	Guardsman/	Prowl																																	
Bullet	Leadoff	Python																																	
Degree	Harness	Simazine																																	
Degree Xtra	Harness Xtra	Topnotch																																	
<p>Spot treatment</p>	<p>For spot treatments, apply this product prior to silking of corn.</p>	<p>Do not treat more than 10 percent of the total field area to be harvested. The crop receiving spray in the treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.</p>																																	
<p>Hooded sprayers</p>	<p>This product may be used through hooded sprayers for weed control between the rows of corn. Only hooded sprayers that completely enclose the spray pattern may be used. See additional instructions for the use of hooded sprayers in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.</p>	<p>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 1 quart of this product per acre for each application and no more than 3 quarts per acre per year for hooded sprayer applications.</p>																																	
<p>Pre-harvest</p>	<p>Make applications at 35 percent grain moisture or less. Ensure that maximum kernel fill is complete and the corn is physiologically mature (black layer formed). For ground applications, apply up to 3 quarts of this product per acre. For aerial applications, apply up to 2 quarts of this product per acre.</p>	<p>Allow a minimum of 7 days between application and harvest. It is not recommended that corn grown for seed be treated because a reduction in germination or vigor may occur.</p>																																	
<p>Post-harvest</p>	<p>This product may be applied after harvest of corn. Higher rates may be required for control of large weeds which were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.</p>	<p>Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.</p>																																	

## 9.3

## COTTON

## LABELED CROPS: Cotton (non-Roundup Ready)

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 9.0 Pre-plant, Pre-emergence, At-planting	This product may be applied before, during or after planting cotton.	Applications must be made prior to emergence of the crop.
Hooded sprayer, Selective equipment	This product may be applied through hooded sprayers, shielded applicators or wiper applicators in cotton.	See the "SELECTIVE EQUIPMENT" part of the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information on proper use and calibration of this equipment. Allow at least 7 days between application and harvest.
Spot treatment	For spot treatments, apply this product prior to boll opening of cotton.	Do not treat more than 10 percent of the total field area to be harvested. The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.
Pre-harvest	<p>This product provides weed control and cotton regrowth inhibition when applied prior to harvest of cotton. For weed control, apply at rates given in the annual, perennial and woody brush tables. Apply 1 pint to 2 quarts of this product per acre for cotton regrowth inhibition.</p> <p>Up to 2 quarts of this product may be applied using either aerial or ground spray equipment. Apply after sufficient bolls have developed to produce the desired yield of cotton. Applications made prior to this time could affect maximum yield potential.</p> <p><b>TANK MIXTURES:</b> This product may be tank mixed with DEF® 6, Folex®, Ginstar or Prep™ to provide additional enhancement of cotton leaf drop.</p>	<p>Allow at least 7 days between application and harvest.</p> <p>Do not apply to cotton grown for seed, as a reduction in germination or vigor may occur.</p> <p>THE USE OF ADDITIVES OTHER THAN THOSE LISTED ON THIS LABEL, FOR PRE-HARVEST APPLICATION TO COTTON IS PROHIBITED.</p>

## 9.4

## FALLOW SYSTEMS

**LABELED CROPS:** This product may be applied during the fallow period prior to planting or emergence of any crop on this label.

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Chemical Fallow	<p>This product may be applied during the fallow period prior to planting or emergence of any crop listed on this label.</p> <p>This product may be used as a substitute for tillage to control annual weeds in fallow fields. Also, broadcast or spot treatments will control or suppress many perennial weeds in fallow fields. Ground or aerial application equipment may be used. Tank mixtures with 2,4-D and dicamba may be used. Applications up to 2 quarts per acre may be made by aerial application in fallow sites where there is sufficient buffer to prevent injury due to drift onto adjacent crops.</p>	
Pre-plant Fallow Beds	<p>This product may be applied to fallow beds prior to planting or emergence of any crop listed on this label. This product will control weeds listed in the annual, perennial and woody brush tables.</p> <p><b>TANK MIXTURES:</b>            In addition, 12 fluid ounces of this product plus 2 to 3 oz of Goal® 2XL (or generic equivalent) per acre will control the following weeds with the maximum height or length indicated:</p> <p>3" - common cheeseweed, chickweed, groundsel;            6" - London rocket, shepherdspurse.</p> <p>16 fluid ounces of this product plus 2 to 3 oz of Goal® 2XL (or generic equivalent) per acre will control the following weeds with the maximum height or length indicated:</p> <p>6" - common cheeseweed, groundsel, marestail (<i>Coryza canadensis</i>);            12" - chickweed, London rocket, shepherdspurse.</p>	<p>For any crop not listed on this label, applications must be made at least 30 days prior to planting.</p> <p><b>DO NOT APPLY DICAMBA TANK MIXTURES BY AIR IN CALIFORNIA.</b></p> <p>Refer to the specific product labels for crop rotation restrictions and cautionary statements of all products used in tank mixtures.</p> <p>Some crop injury may occur if dicamba is applied within 45 days of planting.</p>
Aid-to-Tillage	<p>This product may be used in conjunction with tillage practices in fallow systems or pre-plant to labeled crops to control downy brome, cheat, volunteer wheat, tansy mustard and foxtail. Apply 12 fluid ounces of this product in 3 to 10 gallons of water per acre. Make applications before weeds are 6 inches in height. Application must be followed by conventional tillage practices no later than 15 days after treatment and before regrowth occurs.</p>	<p>Allow at least 1 day after application before tillage.</p> <p>Tank mixtures with residual herbicides may result in reduced performance.</p>

## 9.5

## GRAIN SORGHUM (Milo)

## LABELED CROPS: Grain Sorghum (Milo)

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS									
See Section 9.0 Pre-Plant, Pre-Emergence, At-Planting	<p>This product may be applied alone or in tank mixture before, during or after planting grain sorghum. Applications must be made prior to emergence of the crop.</p> <p><b>TANK MIXTURES:</b> Apply these tank mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre.</p> <table border="0"> <tr> <td>Atrazine</td> <td>Dual II Magnum</td> <td>Micro-Tech</td> </tr> <tr> <td>Bicep II Magnum</td> <td>Lariat</td> <td>Milo-Pro</td> </tr> <tr> <td>Bullet</td> <td>Lasso</td> <td></td> </tr> </table> <p>For difficult-to-control annual weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 2 pints per acre in these tank mixtures. For other labeled annual weeds, apply 1.5 to 2 pints of this product per acre when weeds are less than 6 inches tall, and 2 to 3 pints when weeds are over 6 inches tall. When using nitrogen solutions as the carrier, the use rate may need to be increased for acceptable weed control.</p>	Atrazine	Dual II Magnum	Micro-Tech	Bicep II Magnum	Lariat	Milo-Pro	Bullet	Lasso		<p>For spot treatment, do not treat more than 10 percent of the total field area to be harvested. The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.</p> <p>For wiper applicators, allow at least 40 days between application and harvest.</p> <p>Do not use roller applicators.</p> <p>Do not feed or graze treated milo fodder.</p> <p>Do not ensile treated vegetation.</p>
Atrazine	Dual II Magnum	Micro-Tech									
Bicep II Magnum	Lariat	Milo-Pro									
Bullet	Lasso										
Spot Treatment, Over-the-Top Wiper Applications	<p>This product may be applied as a spot treatment in grain sorghum. Make spot treatments before heading of milo.</p> <p>This product may be applied with wiper applicators to control or suppress the weeds listed under "WIPER APPLICATORS" in the "SELECTIVE EQUIPMENT" section of this label.</p>										
Hooded Sprayers	<p>This product may be used through hooded sprayers for weed control between the rows of milo. Only hooded sprayers that completely enclose the spray pattern may be used. See additional instruction for the use of hooded sprayers in the "APPLICATIONS EQUIPMENT AND TECHNIQUES" section of this label.</p> <p>Crop injury may occur when the foliage of treated weeds comes into direct contact with leaves of the crop. Do not apply this product when the leaves of the crop are growing in direct contact with weeds to be treated. Droplets, mist, foam or splatter of the herbicide solution may contact the crop and cause discoloration, stunting or destruction.</p>	<p>Milo must be at least 12 inches tall, measured without extending leaves. Treat before milo sends tillers between the drill rows. If such tillers are contacted with the spray solution, the main plant may be killed. Contact of this product in 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 milo forage or fodder following applications of this product through hooded sprayers.</p> <p>Do not apply more than 1 quart of this product per acre per application and no more than 3 quarts per acre for hooded sprayer applications.</p>									
Pre-harvest	<p>Make applications at 30% grain moisture or less.</p> <p>The use of this product for pre-harvest grain sorghum (milo) is not registered in California.</p> <p>As with other herbicides that cause sudden plant death, avoid pre-harvest applications of this product to milo infected with charcoal rot as lodging can occur.</p>	<p>Do not apply more than 2 quarts of this product per acre. Allow a minimum of 7 days between application and harvest of sorghum.</p> <p>It is not recommended that sorghum grown for seed be treated, as a reduction in germination or vigor may occur.</p>									
Post-harvest	<p>This product may be applied after harvest of grain sorghum. Higher rates may be required for control of large weeds which were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.</p> <p>This product may be applied to grain sorghum (milo) stubble following harvest to suppress or control regrowth. Apply 1 quart of this product per acre for control, or 1.5 pints of this product per acre for suppression.</p>	<p>Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.</p>									

## 9.6

## HERBS AND SPICES

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

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 9.0	See Section 9.0 USE INSTRUCTIONS	<p>This product could cause crop injury.</p> <p>When applying this product prior to transplanting or direct-seeding crops into plastic mulch, care must be taken to remove product residues from the plastic prior to planting. Residual product can be removed by a single 0.5-inch application of water, either by natural rainfall or via a sprinkler system. Care should be taken to ensure that the washwater flushes off the plastic mulch and does not enter transplant holes. Applications made at emergence will result in injury or death to emerged seedlings. For some crops below, it is recommended to make applications 3 days before transplanting or planting.</p>
Over-the-Top Wiper Application, Spot Treatment (Peppermint and Spearmint only)	<p>This product may be applied as a spot treatment or over the top of peppermint or spearmint with wiper applications in spearmint and peppermint. Apply spot treatments on a spray-to-wet basis with hand-held equipment, such as backpack sprayers, pump-up pressure sprayers, hand-guns, hand-wands or any other hand-held or motorized spray equipment used to direct the spray solution to a limited area.</p> <p>In wiper applications, the applicator should be adjusted so that the wiper contact point is at least 2 inches above the crop. Weeds should be a minimum of 6 inches taller than the crop.</p>	<p>Allow at least 7 days between application and harvest. Further applications may be made in the same area at 30-day intervals.</p> <p>In spot treatment applications, no more than 10 percent of the total field area to be harvested should be treated at one time. Crop sprayed in treated area will be killed. Take care not to spray or allow spray to drift outside the target area to avoid unwanted crop destruction for wiper applications, contact of the herbicide solution with the crop may result in discoloration, stunting, or destruction.</p>

## 9.7

## OIL SEED CROPS

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

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 9.0	<p>This product may be applied before, during or after planting oil seed crops listed in this section. Broadcast applications must be made prior to crop emergence. Wiper applications or hooded sprayers may be used between the rows once the crop is established.</p> <p><b>TANK MIXTURES:</b> For sunflowers, a tank mixture with Prowl may be applied before, during or after planting in conventional tillage systems, into a cover crop, established sod or in previous crop residue.</p>	<p>For use with canola, do not apply more than 2 quarts of this product per acre.</p> <p>For use with sunflowers, do not apply more than 1 quart of this product per acre as a single pre-plant or pre-emergence application per year.</p> <p>Do not feed or graze sunflower forage following application of this product.</p>
Pre-Harvest (Sunflower & safflower)	<p>This product provides weed control when applied as a harvest aid to a physiologically mature crop prior to harvest of sunflower or safflower.</p> <p>For safflower, apply when seed has lost its opaque character, approximately 20 to 30 days after the end of flowering of the secondary branches.</p> <p>For sunflower, apply when the backsides of sunflower heads are yellow and bracts are turning brown and seed moisture content is less than 35%.</p>	<p>Allow a minimum of 7 days between treatment and harvest or livestock feeding.</p> <p>Apply no more than 3 quarts of this product at a pre-harvest timing to safflower.</p> <p>Apply no more than 1 quart of this product at a pre-harvest timing to sunflower.</p>
Post-Harvest (Sunflower & safflower)	<p>This product may be applied after harvest of safflower or sunflower. Higher rates may be required for control of large weeds, which are growing in the crops at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.</p>	<p>Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation. Applications must be made at least 30 days prior to planting any crop not listed on this product's label booklet.</p>



**LABELED CROPS:** Soybeans (non-Roundup Ready)

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS																																	
<p>See Section 9.0 Pre-Plant, Pre-Emergence, At-Planting</p>	<p>This product may be applied before, during or after planting soybeans. Applications must be made prior to emergence of the crop.</p> <p>Refer to table below for tank mixtures that may be applied before, during or after planting in conventional tillage systems, into a cover crop, established sod or in previous crop residue.</p> <p>This product may be tank-mixed with 2,4-D or 2,4-DB. See the 2,4-D label for intervals between application and planting.</p> <p>For difficult-to-control weeds such as fall panicum, barnyardgrass, crabgrass, shattercane and broadleaf signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 2 pints per acre in those tank mixtures. For other labeled annual weeds, apply 1.5 to 2.0 pints of this product per acre when weeds are less than 6 inches tall, and 2 to 3 pints when weeds are over 6 inches tall.</p> <p><b>TANK MIXES:</b></p> <table border="0"> <tr> <td>Aim</td> <td>Flexstar</td> <td>Prowl</td> </tr> <tr> <td>Assure II</td> <td>Frontline/ Outlook</td> <td>Pursuit</td> </tr> <tr> <td>Authority</td> <td>Fusion</td> <td>Pursuit Plus</td> </tr> <tr> <td>Boundary</td> <td>Gauntlet</td> <td>Reflex</td> </tr> <tr> <td>Canopy</td> <td>Intrro</td> <td>Sceptor</td> </tr> <tr> <td>Canopy XL</td> <td>Linex</td> <td>Sencor/Lexone</td> </tr> <tr> <td>Command</td> <td>Lorox/Lunuron</td> <td>Squadron</td> </tr> <tr> <td>Domain</td> <td>Lorox Plus</td> <td>Steel</td> </tr> <tr> <td>Dual</td> <td>Magnum</td> <td>Valor</td> </tr> <tr> <td>Dual II Magnum</td> <td>Micro Tech</td> <td></td> </tr> <tr> <td>Firstrate</td> <td></td> <td></td> </tr> </table>	Aim	Flexstar	Prowl	Assure II	Frontline/ Outlook	Pursuit	Authority	Fusion	Pursuit Plus	Boundary	Gauntlet	Reflex	Canopy	Intrro	Sceptor	Canopy XL	Linex	Sencor/Lexone	Command	Lorox/Lunuron	Squadron	Domain	Lorox Plus	Steel	Dual	Magnum	Valor	Dual II Magnum	Micro Tech		Firstrate			<p>The tank mix recommendations in this section are not registered in California</p>
Aim	Flexstar	Prowl																																	
Assure II	Frontline/ Outlook	Pursuit																																	
Authority	Fusion	Pursuit Plus																																	
Boundary	Gauntlet	Reflex																																	
Canopy	Intrro	Sceptor																																	
Canopy XL	Linex	Sencor/Lexone																																	
Command	Lorox/Lunuron	Squadron																																	
Domain	Lorox Plus	Steel																																	
Dual	Magnum	Valor																																	
Dual II Magnum	Micro Tech																																		
Firstrate																																			
<p>Spot treatment</p>	<p>For spot treatments, apply this product prior to initial pod set in soybeans.</p>	<p>Do not treat more than 10 percent of the total field area to be harvested. The crop receiving spray in treated area will be killed. Take care to avoid drift or spray outside target area for the same reason.</p>																																	
<p>Pre-harvest</p>	<p>This product provides weed control when applied prior to harvest of soybeans.</p> <p>Apply at rates given in the annual, perennial and woody brush tables.</p> <p>This product may be applied using either aerial or ground spray equipment.</p> <p>Apply after pods have set and lost all green color. Care should be taken to avoid excessive seed shatter loss due to ground application equipment.</p>	<p>Do not apply more than 5 quarts per acre of this product for pre-harvest applications.</p> <p>Do not apply more than 2 quarts per acre of this product by air.</p> <p>Allow a minimum of 7 days between application and harvest of soybeans.</p> <p>Do not graze or harvest treated hay or fodder for livestock feed within 25 days of last pre-harvest application. (If the application rate is 1 quart per acre or lower, the grazing restriction is reduced to 14 days after the last pre-harvest application.)</p> <p>Do not apply to soybeans grown for seed as a reduction in germination or vigor may occur.</p>																																	

(continued)

<b>9.8 SOYBEANS</b> <i>(continued)</i>		
<b>LABELED CROPS:</b> Soybeans (non-Roundup Ready)		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Selective equipment	<p>This product may be applied through shielded applicators, hooded sprayers, wiper applicators or sponge bars in soybeans.</p> <p>See the "SELECTIVE EQUIPMENT" part of the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information on proper use and calibration of this equipment.</p>	Allow at least 7 days between application and harvest.

<b>9.9 SUGARCANE</b>		
<b>LABELED CROPS:</b> Sugarcane		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 9.0 Pre-plant, Pre-emergence, At-planting	This product may be applied in or around sugarcane fields or in fields prior to the emergence of plant cane.	Do not apply to vegetation in or around ditches, canals or ponds containing water to be used for irrigation.
Spot Treatment	This product may be applied as a spot treatment in sugarcane. For control of volunteer or diseased sugarcane, make a 1 percent solution of this product in water and spray to wet the foliage of vegetation to be controlled. Volunteer or diseased sugarcane should have at least 7 new leaves.	Avoid spray contact with healthy cane plants since severe damage or destruction may result. Do not feed or graze treated sugarcane foliage following application.
Fallow treatments	<p>This product may be used as a replacement for tillage in fields that are lying fallow between sugarcane crops. This product may also be used to remove the last stubble of ratoon cane. For removal of last stubble of ratoon cane, apply 4 to 5 quarts of this product in 10 to 40 gallons of water per acre to new growth having at least 7 new leaves.</p> <p>Ground or aerial application equipment may be used. Applications up to 3 quarts per acre may be made by aerial application in fallow sites where there is sufficient buffer to prevent injury due to drift onto adjacent crops. Tank mixtures with 2,4-D and dicamba may be used.</p>	Allow 7 or more days after application before tillage.
Hooded sprayers	<p>This product may be used through hooded sprayers for weed control between the rows of sugarcane. See Section 8.0 for "APPLICATION EQUIPMENT &amp; TECHNIQUES" for additional use instructions.</p> <p>Minimize the potential for spray particles to escape from under the hood by operating the sprayer at appropriate ground speeds, nozzle pressures and wind speeds. Operation on rough or sloping ground may result in spray particles escaping from the hood.</p> <p>When applying to sugarcane that is grown on raised beds, ensure that the hood is designed to completely enclose the spray. If necessary, extend the front and rear flaps of the hoods to reach the ground in furrows between the rows.</p>	<p>Do not allow treated weeds to come into contact with the crop.</p> <p>Droplets, mist, foam or splatter of the herbicide solution settling on the crop may result in discoloration, stunting or destruction.</p> <p>Such damage shall be the sole responsibility of the applicator.</p>

*(continued)*

## LABELED CROPS: Sugarcane

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
<p>FOR AID IN SUGARCANE RIPENING (FLORIDA, HAWAII, LOUISIANA, PUERTO RICO AND TEXAS)</p>	<p>This product is a foliar-applied plant growth regulator to hasten ripening and increase the level of sucrose in sugarcane. It is effective in both low and high-tonnage sugarcane.</p> <p>When applied as directed under the conditions described, this product will hasten ripening and extend the period of high sucrose level in sugarcane.</p> <p>As a result of leaf desiccation, improved trash burn can be expected.</p> <p>Most of the sucrose increase is concentrated in the top nodes of the treated cane stalk. In order to recover the maximum sugar where topping is practiced during harvest, top at the base of the fourth leaf.</p> <p>Prior to application, consult your state sugarcane authority or local Ragan and Massey, Inc. representative regarding the degree of sucrose response anticipated from the variety of sugarcane to be treated. Do not plant subsequent crops in treated fields other than the following for 30 days after application: alfalfa or other forage legumes, beans (all types), corn (all types), cotton, melons (all types), pasture grasses, peanuts, potatoes (Irish or sweet), sorghum (milo), soybeans, squash (all types) or wheat.</p> <p><b>APPLICATION RATES:</b> Use the following application rates and timing instructions according to the State in which the sugarcane is grown.</p> <p><b>NOTE:</b> Use the higher rate within the specified range when treating sugarcane under adverse ripening conditions or when less responsive varieties are to be treated.</p> <p><b>FLORIDA</b> - Apply 5 to 12 fluid ounces of this product per acre 3 to 6 weeks before harvest of LAST RATTON CANE ONLY.</p> <p><b>HAWAII</b> - Apply 9 to 21 fluid ounces of this product per acre 4 to 10 weeks before harvest.</p> <p><b>LOUISIANA</b> - Apply 3.5 to 12 fluid ounces of this product per acre 3 to 7 weeks before harvest of RATOON CANE ONLY.</p> <p><b>PUERTO RICO</b> - Apply 5 fluid ounces of this product per acre 3 to 5 weeks before harvest of RATOON CANE ONLY.</p> <p><b>TEXAS</b> - Apply 5 to 12 fluid ounces of this product per acre 3 to 5 weeks before harvest of RATOON CANE ONLY.</p>	<p>Application of this product may initiate development of shooting eyes. This product may not increase the sucrose content of sugarcane under conditions of good nature ripening. Within 2 to 3 weeks after application, this product may produce a slight yellowing to pronounced browning and drying of leaves, and a shortening of upper internodes. Spindle death may occur.</p> <p>Rainfall within 6 hours after application may reduce effectiveness.</p> <p>Application not recommended for sugarcane grown for seed, as a reduction in germination or vigor may occur.</p> <p>Do not feed or graze treated sugarcane forage following application.</p> <p>Do not apply for enhanced ripening to any crops other than sugarcane. Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences.</p>

**9.10**

**VEGETABLE CROPS**

**NOTE:** THIS "VEGETABLE CROPS" SECTION GIVES DIRECTIONS THAT APPLY TO ALL LISTED VEGETABLE CROPS WITHIN SECTION 9.10 GROUPED ALPHABETICALLY BELOW. SEE THE INDIVIDUAL CROP CATEGORIES FOR SPECIFIC INSTRUCTIONS, PREHARVEST INTERVALS, PRECAUTIONS AND RESTRICTIONS.

**TYPES OF APPLICATIONS:** Chemical Fallow, Preplant Fallow Beds, Preplant, Preemergence, Prior to Transplanting Vegetables, At-Planting, Hooded Sprayers in Row Middles, Shielded Sprayers in Row Middles, Wiper Applications in Row Middles, and Post Harvest, Directed Applications (Non-Bearing Ginseng), Over-the-top Wiper Applications (Rutabagas Only).

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

Avoid contact of herbicide with foliage, green shoots or stems, bark or exposed roots (including those emerging from plastic mulch), or fruit of crops because severe injury or destruction may result. When making pre-emergence and at planting applications, applications must be made before crop emergence to avoid severe crop injury. Apply before seed germination in coarse sandy soils to further minimize the risk of injury. In crops with vines, hooded sprayer, shielded sprayer and wiper applications to row middles should be made prior to vine development otherwise severe injury or destruction may result. Unless otherwise specified in this product's labeling, treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest. Post-harvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop. See "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for additional information.

<b>9.10.1 BRASSICA VEGETABLES</b>		
<b>LABELED CROPS:</b> Broccoli, Broccoli (raab), Brussels sprouts, Cabbage, Cabbage (Chinese), Cabbage (Chinese mustard), Cauliflower, Cavalo broccolo, Chinese broccoli (gai lon), Chinese cabbage (bok choy & napa), Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard Spinach, Rape greens		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 9.10	See Section 9.10	See Section 9.10

<b>9.10.2 BULB VEGETABLES</b>		
<b>LABELED CROPS:</b> Garlic, Great-headed garlic, Leek, Onion (dry bulb & green), Shallot, Welsh onion, Shallot		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 9.10	See Section 9.10	See Section 9.10

<b>9.10.3 CUCURBIT VEGETABLES &amp; FRUITS</b>		
<b>LABELED CROPS:</b> Chayote (fruit), Chinese waxgourd, Citron melon, Cucumber, Gherkin, Gourds, Gourds (edible including hyotan, cucuzza, hechima, Chinese okra), Melons (All), Momordica spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber), Muskmelon (cantaloupe, casaba, crenshaw, golden pershaw, honeydew, honey ball, mango melon & Persian, pineapple, Santa Claus, snake), Pumpkin, Summer Squash (including crook-neck, scallop, straightneck, vegetable marrow, zucchini), Winter squash (including butternut, calabaza, hubbard, acorn, spaghetti), Watermelon		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 9.10	See Section 9.10	For Cantaloupe, Casaba melon, Crenshaw melon, Cucumber, Gherkin, Gourds, Honeydew melon, Honey ball melon, Mango melon, Melons (all), Muskmelon, Persian melon, Pumpkin, Squash (summer & winter), AND Watermelon, allow at least 3 days between application and planting.

9.10.4 LEAFY VEGETABLES		
<b>LABELLED CROPS:</b> Amaranth (Chinese spinach), Arrugula (roquette), Beet greens, Cardoon, Celery, Celery (Chinese), Celtuze, Chaya, Chervil, Chrysanthemum (edible leaved), Chrysanthemum (Garland), Corn salad, Cress (garden & upland), Dandelion, Dock (sorrel), Dokudami, Endive (escarole), Fennel (Florence), Gow kee, Lettuce (head & leaf), Orach, Parsley, Purslane (garden & winter), Radicchio (red chicory), Rhubarb, Spinach (All), Swiss Chard, Watercress (upland), Water Spinach		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 9.10	See Section 9.10	For Watercress, avoid application within 3 days prior to seeding and during the period between seeding and emergence to minimize the risk of injury.

9.10.5 FRUITING VEGETABLES		
<b>LABELLED CROPS:</b> Eggplant, Ground cherry ( <i>Physalis</i> spp.), Pepino, Pepper (includes bell, chili, cooking, pimento, sweet), Tomatillo, Tomato		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 9.10	See Section 9.10	For Eggplant, Ground cherry, Pepino, Pepper (all), Tomatillo and Tomato, allow at least 3 days between application and planting. For Tomato, hooded or shielded sprayer applications in row middles are not recommended.

9.10.6 LEGUME VEGETABLES (succulent or dried)		
<b>LABELLED CROPS:</b> Bean ( <i>Lupinus</i> : includes grain lupin, sweet lupin, white lupin, and white sweet lupin), Bean ( <i>Phaseolus</i> : includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean), Bean ( <i>Vigna</i> : includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean), Broad bean (fava), Chickpea (garbanzo), Guar, Jackbean, Lablab bean, Lentil, Pea ( <i>Pisum</i> : 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 APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 9.10	See Section 9.10	See Section 9.10
Pre-harvest broadcast spray (Dry beans)	This product may be applied as an over the top broadcast spray to control labeled weeds prior to the harvest of dry beans. Apply up to 32 fluid ounces in 3 to 20 gallons of water per acre at the hard dough stage of the legume seed (30 percent grain moisture or less). Either ground broadcast or aerial applications may be made.	Apply at least 7 days before harvest for Dry Beans. Apply at least 7 days before harvest for Dry Peas, Lentils & Chickpeas. Only one application per year may be made; do not combine a pre-harvest spray with a spot treatment on the same crop area. Pre-harvest application is not recommended for dry beans, dry peas, lentils & chickpeas grown for seed, as a reduction in germination or vigor may occur. Do not feed treated vines and hay from these crops to livestock. Do not apply this product through any type of irrigation system. Do not treat field (feed) peas, since these are considered to be grown as live-stock feed.
Pre-harvest broadcast spray (Dry Peas, Lentils & Chickpeas)	This product may be applied as an over the top broadcast spray to control labeled weeds prior to the harvest of dry peas, lentils, and chickpeas. Apply up to 64 fluid ounces in 3 to 20 gallons of water per acre at the hard dough stage of the legume seed (30 percent grain moisture or less). Either ground broadcast or aerial applications may be made.	

(continued)

**9.10.6****LEGUME VEGETABLES (succulent or dried) (continued)**

**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, blackeyed pea, catjang, Chinese longbean, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean), Broad bean (fava), Chickpea (garbanzo), Guar, Jackbean, Lablab bean, Lentil, 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 APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Spot treatment (Dry beans, Dry Peas, Lentils, Chickpeas)	This product may be applied as spot treatment to control troublesome weeds such as Canada thistle, quack-grass, mayweed (dog fennel), and milkweed in dry beans. Apply up to 26 fluid ounces in 10 to 20 gallons of water through ground spray equipment or use a 2 percent solution in a handheld sprayer. For best results, applications should be made at or beyond the bud stage of growth. The crop receiving spray in treated areas will be killed.	Apply at least 14 days before harvest. Only one application per year may be made; do not combine a pre-harvest spray with a spot treatment on the same crop area. Do not feed treated vines and hay from these crops to livestock. Do not apply this product through any type of irrigation system. Do not treat field cowpeas, since these are considered to be grown as live-stock feed.

**9.10.7****ROOT & TUBER VEGETABLES**

**LABELED CROPS:** Arracacha, Arrowroot, Artichoke (Chinese & Jerusalem), Beet (garden), Burdock, Canna, Carrot, Cassava (bitter & sweet), Celeriac, Chayote (root), Chervil, Chicory, Chufa, Dasheen, Galangal, Ginger, Ginseng, Horseradish, Leren, Kava, Parsley, Parsnips, Potato (Irish), Radish, Radish (Oriental), Rutabaga, Salsify, Salsify (Black & Spanish), Skirret, Sweet potato, Tanier, Tumeric, Turnip, Wasabi, Yacon, Yams, Yam bean, Yam (True)

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 9.10	See Section 9.10	See Section 9.10
Direct Application (Non-bearing Ginseng)	This product may be used for general weed control in established non-bearing ginseng. Applications may be made with boom equipment, CDA, shielded sprayers, hand-held and high volume wands, lances, and orchard guns or with wiper application equipment.	Extreme care must be exercised to avoid contact of herbicide solution, spray, drift or mist with foliage or green bark of trunk, branches, suckers, fruit or other parts of desirable plants. Contact of this product with other than matured brown bark can result in serious crop damage. Applications must be made at least one year prior to harvest.
Over-the-Top Wiper Application (Rutabaga Only)	Wiper applicators may be used over-the-top of rutabagas.	Allow at least 14 days between application and harvest of rutabagas.

## 9.11

## MISCELLANEOUS CROPS

**LABELED CROPS:** Aloe vera, Asparagus, Bamboo shoots, Globe artichoke, Okra, Peanut (ground nut), Pineapple, Strawberry, Sugar Beet (non-Roundup Ready)

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 9.10	See Section 9.10	<p>Avoid contact of herbicide with foliage, green shoots or stems. Bark, exposed roots (including those emerging from plastic mulch), or fruit of crops because severe injury or destruction may result. When making pre-emergence and at planting applications, applications must be made before crop emergence to avoid serious crop injury. Apply before seed germination in coarse sandy soils to further minimize the risk of injury. In crops with vines, hooded sprayer, shielded sprayer and wiper applications to row middles should be made prior to vine development otherwise severe injury or destruction may result.</p> <p>Unless otherwise specified in this product's labeling, treatments with selective equipment including wipers and hooded sprayers must be made at least 14 days prior to harvest.</p> <p>Post harvest or fallow applications must be made at least 30 days prior to planting any non-labeled crop.</p>
Weed control, Site preparation	This product may be applied for general weed control or for site preparation prior to planting or transplanting crops listed in this section.	<p>When applying this product prior to transplanting or direct-seeding crops into plastic mulch, care must be taken to remove residues of this product from the plastic prior to transplanting. Residues can be removed by 0.5 inch natural rainfall or by applying water via a sprinkler system. Care should be taken to insure that the wash water flushes off the plastic mulch and does not enter transplant holes. Applications made at emergence will result in injury or death to emerged seedlings.</p> <p>Do not apply within a week before the first asparagus spears emerge. Do not feed or graze treated pineapple forage following application.</p>
Spot treatment (Asparagus)	This product may be applied immediately after cutting, but prior to the emergence of new spears.	<p>Do not treat more than 10 percent of the total field area to be harvested.</p> <p>Do not harvest within 5 days of treatment.</p>
Post-harvest (Asparagus)	This product may be applied after the last harvest and all spears have been removed. If spears are allowed to re-grow, delay application until ferns have developed. Delayed treatments should be applied as a directed or shielded spray in order to avoid contact of the spray with ferns, stems or spears.	Direct contact of the spray with the asparagus may result in serious crop injury. Select and use recommended types of spray equipment for post-emergence postharvest applications. A directed spray is any application where the spray pattern is aligned in such a way as to avoid direct contact of the spray with the crop. A shielded spray is any application where a physical barrier is positioned and maintained between the spray and the crop to prevent contact of spray with the crop.

**NOTE:** THIS SECTION GIVES DIRECTIONS THAT APPLY TO ALL LISTED TREE, VINE & SHRUB CROPS WITHIN SECTION 10 CROP GROUPS. INDIVIDUAL CROPS MAY HAVE MORE SPECIFIC INSTRUCTIONS, PRE-HARVEST INTERVALS, PRECAUTIONS AND RESTRICTIONS.

**TYPES OF APPLICATIONS:** Pre-plant (Site Preparation) Broadcast Sprays, General weed control, Middles (between rows of trees, vines or shrubs), Strips (within rows of trees, vines or shrubs), Selective Equipment (shielded sprayers, wiper treatments), Directed Sprays, Spot Treatments, Perennial Grass Suppression, Cut Stump.

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

#### USE INSTRUCTIONS:

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

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

#### PRECAUTIONS:

- Extreme care must be exercised to avoid contact of herbicide solution, spray, drift or mist with foliage or green bark of trunk, branches, suckers, fruit or other part of the trees, canes and vines.
- Avoid applications when recent pruning wounds or other mechanical injury has occurred.
- Contact of this product other than matures brown bark can result in serious crop damage or destruction.
- For applications in strips (within rows of trees), only selective equipment (directed sprays, hooded sprayers, shielded applicators, or wipers) should be used to minimize the potential for leakage or drift of herbicide sprays onto crop.

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

#### RESTRICTIONS:

- Only wipers or shielded applicators capable of preventing all contact with crop may be used.
- Only shielded or directed sprayers may be used in crops with potential for crop contact, and then only where there is sufficient clearance.
- For berry crops, hooded or shielded sprayers must be fully enclosed including top, sides, front and back.
- Allow a minimum of 3 days between applications and transplanting.

#### Middles (between rows of trees, vines or bushes)

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

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

#### Strips (in rows of trees, vines or bushes)

**TANK MIXTURES:** This product may be applied in rows of tree or vine crops and may also be tank mixed with the following products (or generic equivalent).

DEVIRINOL® 50 DF	KROVAR® II	SIM-TROL® 4L
DIREX® 4L	PROWL®	SOLICAM® DF
GOAL® 2XL	PRINCEP® CALIBER 90	SURFLAN® AS
KARMEX® DF	SIMAZINE 4L	SURFLAN® 75W
KROVAR® I	SIMAZINE 80W	

Do not apply these tank mixtures in Puerto Rico.

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

#### PERENNIAL GRASS SUPPRESSION

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

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

For suppression of Kentucky bluegrass covers, apply 6 fluid ounces of this product per acre. Do not add ammonium sulfate.

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

For suppression of vegetative growth and seedhead inhibition of bahiagrass for approximately 45 days, apply 6 fluid ounces of this product in 10 to 25 gallons of water per acre. Apply 1 to 2 weeks after full green-up or after mowing to a uniform height of 3 to 4 inches. This application must be made prior to seedhead emergence.

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

For burndown of bermudagrass, apply 1 to 2 quarts of this product in 3 to 20 gallons of water per acre. Use this treatment only if reduction of the bermudagrass stand can be tolerated. When burndown is required prior to harvest, allow at least 21 days to ensure sufficient time for burndown to occur.

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



CUT STUMPS (Tree crops)		
<p><b>LABELED CROPS:</b>  <b>Citrus Trees:</b> Calamondin, Chironja, Citron, Citrus hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin (Tangerine), Orange (all), Pummelo, Tangelo, Tangor.  <b>Fruit Trees:</b> Apple, Apricot, Cherry (sweet, sour), Crabapple, Loquat, Mayhaw, Nectarine, Olive, Peach, Pear, Plum/Prune (all), Quince.  <b>Nut Trees:</b> Almond, Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory Nut, Macadamia, Pecan, Pistachio, Walnut (black, English).</p>		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Suitable Hand-held Equipment	<p>Cut stump applications of this product may be made during site preparation or site renovation, prior to transplanting tree crops. This product will control regrowth of cut stumps and resprouts of many types of tree species, some of which are listed below.</p> <p>Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut trees or resprouts close to the soil surface. Apply a 50 to 100 percent solution of this product to the freshly cut surface immediately after cutting. Delays in application may result in reduced performance. For best results, applications should be made during periods of active growth and full leaf expansion.</p>	<p>DO NOT MAKE CUT STUMP APPLICATIONS WHEN THE ROOTS OF ADJACENT DESIRABLE TREES MAY BE GRAFTED TO THE ROOTS OF THE CUT STUMP. INJURY RESULTING FROM ROOT GRAFTING MAY OCCUR IN ADJACENT TREES.</p> <p>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 stem/ trees when one or more trees sharing common roots are treated.</p>

10.1 BERRY CROPS		
<p><b>LABELED CROPS:</b> Blackberry (including bingleberry, black satin berry, boysenberry, Cherokee blackberry, chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, hullberry, juneberry, lavacaberry, lowberry, lucretiaberry, marionberry, nectarberry, olallie berry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, and youngberry), Blueberry, Cranberry, Currant, Elderberry, Gooseberry, Huckleberry, Loganberry, Rasperry (Black, Red), Salal</p>		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 10.0	See Section 10.0	<p>Do not permit herbicide solution to contact desirable vegetation, including green shoots, canes or foliage.</p> <p>Allow a minimum of 30 days between last application and harvest of cranberries.</p> <p>For other small fruits and berries, allow a minimum of 14 days between last application and harvest.</p> <p>Do not make directed sprays within the cranberry bush areas prior to berry harvest.</p>
Spot Treatment (Cranberry production)	<p>May be used to control weeds growing in dry ditches (interior and perimeter) of cranberry production areas. Handheld sprayers or other appropriate application equipment listed under "APPLICATION EQUIPMENT AND TECHNIQUES" in this label may be used. Drop water level to remove standing water in ditches prior to application. In hand-held sprayers, use 1 to 2 percent solution of this product. Spray to wet vegetation, not to run-off.</p> <p>For treatments after draw down of water in dry ditches, allow 2 or more days after treatment before reintroduction of water to achieve maximum weed control.</p> <p>Apply this product within 1 day after draw down to ensure application to actively growing weeds.</p>	<p>Allow a minimum of 30 days between last application and harvest of cranberries.</p> <p>Do not apply this material through irrigation system.</p> <p>Do not make applications by air.</p> <p>Do not apply directly to water. Use nozzles that emit medium- to large-sized droplets to minimize drift in order to avoid crop injury.</p>

(continued)

10.1 BERRY CROPS (continued)		
<b>LABELED CROPS:</b> Blackberry (including bingleberry, black satin berry, boysenberry, Cherokee blackberry, chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, hullberry, juneberry, lavacaberry, lowberry, lucretiaberry, marionberry, nectarberry, ollalie berry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, and youngberry), Blueberry, Cranberry, Currant, Elderberry, Gooseberry, Huckleberry, Loganberry, Rasperry (Black, Red), Salal		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Post-harvest (Cranberry Production)	Make applications only after cranberries have been harvested to control weeds growing within the field. Best results will be obtained if applications are made to vines that appear dormant (after they have turned red). Hand-held sprayers, wipers or other appropriate application equipment listed under "APPLICATION EQUIPMENT AND TECHNIQUES" in this label may be used. If using hand-held sprayers, use a 0.5 to 1 percent solution of this product. Spray to wet vegetation, not to run off. If using hand-held boom sprayers, apply 2 to 4 quarts of this product per acre.	Do not treat more than 10 percent of the total bog. Allow a minimum of 6 months after the last application and next harvest of cranberries. Do not apply this product through the irrigation system. Do not make applications by air. Do not apply directly to water. Even though vines appear dormant, contact of the herbicide solution with desirable vegetation may result in damage or severe plant injury. Cranberry plants that are directly sprayed may be killed.

10.2 CITRUS		
<b>LABELED CROPS:</b> Calamondin, Chironja, Citron, Citrus Hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Orange (All), Pummelo, Satsuma Mandarin, Tangelo (ugli), Tangor		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 10.0	<b>Florida and Texas only:</b> For burn down or control of the weeds listed below, apply the recommended rates of this product in 3 to 40 gallons of water per acre. Where weed foliage is dense, use 10 to 30 gallons of water per acre. For goatweed, apply 2 to 3 quarts of this product per acre. Apply in 20 to 30 gallons of water per acre when plants are actively growing. Use 2 quarts per acre when plants are less than 8 inches tall and 3 quarts per acre when plants are greater than 8 inches tall. If goatweed is greater than 8 inches tall, the addition of Krovar® II or Karmex® may improve control. Refer to the individual product labels for specific crops, rates, geographic restrictions and precautionary statements.	Allow a minimum of 1 day between last application and harvest. For citron groves apply as directed sprays only.

Perennial weeds: S=Suppression B=Burndown PC=Partial Control C=Control

Weed Species	This Product Rate Per Acre			
	1 QT	2 QT	3 QT	5 QT
Bermudagrass	B	-	PC	C
Guineagrass				
Texas and Florida Ridge	B	C	C	C
Florida Flatwoods	-	B	C	C
Paragrass	B	C	C	C
Torpedograss	S	-	PC	C

<b>10.3 MISCELLANEOUS TREE FOOD CROPS</b>		
<b>LABELLED CROPS:</b> Cactus (fruits & pads), Palm (heart, leaves), Palm (oil)		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 10.0	See Section 10.0	See Section 10.0

<b>10.4 NON-FOOD TREE CROPS</b>		
<b>LABELLED CROPS:</b> Pine, Poplar, Eucalyptus, Christmas Trees, Other Non-food Tree Crops.		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 10.0	See Section 10.0	See Section 10.0
Directed sprays, Spot treatments, Wiper applications	This product may be used as a post-directed spray and spot treatment around established poplar, eucalyptus, Christmas Trees and other non-food tree crops.	Care must be exercised to avoid contact of spray drift or mist with foliage or green bark of established Christmas trees and other pine trees. Desirable plants may be protected from the spray solution by using shields or coverings made of cardboard or other impermeable material. THIS PRODUCT IS NOT RECOMMENDED FOR USE AS AN OVER-THE-TOP BROADCAST SPRAY IN CHRISTMAS TREES AND OTHER PINE TREES.
Site Preparation	This product may be used prior to planting non-food tree crops.	Precautions should be taken to protect non-target plants during site preparation applications.
Directed Spray (Eucalyptus and Poplar Production)	This product can be used around established eucalyptus and poplar trees to control undesirable vegetation. Use a 1 to 2 percent spray solution to control herbaceous weeds in eucalyptus farms. Use a 2 percent spray solution for control of undesirable woody brush and trees. For "hard-to-control" weeds, use a 5 to 10 percent spray solution. Avoid contact of spray, drift, or mist with foliage, green bark or non-woody surface roots of plants.	AVOID HERBICIDE CONTACT WITH DESIRABLE VEGETATION. Desirable vegetation contacted by the herbicide solution may be injured or controlled. This includes foliage, fruit, or green stems.
Wiper Application (Eucalyptus and Poplar Production)	This product may be used through wick or other suitable wiper applicators for control or partial control of grass and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label. For wick applicators, mix 1 gallon of this product with 2 gallons water to make a 33% solution. For wiper systems that can handle thicker solutions, such as force-fed systems, a 33 to 100% solution may be used. For best results, ensure that the herbicide solution is allowed to contact the maximum amount of leaf surface. As weed densities increase, decrease equipment speed to allow sufficient herbicide flow to wet all weed surfaces contacted. Weeds not contacted will be unaffected.	

<b>10.5 POME FRUIT</b>		
<b>LABELLED CROPS:</b> Apple, Crabapple, Loquat, Mayhaw, Pear (including oriental pear), Quince		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 10.0	See Section 10.0	Allow a minimum of 1 day between last application and harvest in pome fruits.

10.6 STONE FRUIT		
<b>LABELED CROPS:</b> Apricot, Cherry (Sweet, Tart), Nectarine, Olive, Peach, Pear, Plum/Prune (All types), Plumcot		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 10.0	See Section 10.0	Allow a minimum of 17 days between last application and harvest in stone fruit crops. For olive groves, apply as directed sprays only.
<p><b>RESTRICTIONS ON APPLICATION EQUIPMENT:</b> For cherries, any application equipment listed in this section may be used in all states. Any application equipment listed in this section may be used in apricots, nectarines, peaches and plums/prunes growing in Arizona, California, Colorado, Idaho, Kansas, Kentucky, New Jersey, North Dakota, Oklahoma, Oregon, Texas, Utah and Washington, except for peaches grown in the states specified in the following paragraph. In all other states, use wiper equipment only. For Peaches grown in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee only, apply with a shielded boom sprayer or shielded wiper applicator, which prevents any contact of this product with the foliage or bark of trees. Apply no later than 90 days after first bloom. Applications made after this time may result in severe damage. Remove suckers and low hanging limbs at least 10 days prior to application. Avoid application near trees with recent pruning wounds or other mechanical injury. Apply only near trees that have been planted in the orchard for 2 years or more. EXTREME CARE MUST BE TAKEN TO ENSURE NO PART OF THE PEACH TREE IS CONTACTED.</p>		

10.7 TREE NUTS		
<b>LABELED CROPS:</b> Almond, Beechnut, Betelnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Coconut, Filbert (Hazelnut), Hickory nut, Macadamia, Pecan, Pine nut, Pistachio, Walnut (Black, English)		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 10.0	See Section 10.0	Allow a minimum of 3 days between last application and harvest of tree nuts, except coconut. Allow 14 days between application and harvest in coconuts.

10.8 TROPICAL CROPS & SUBTROPICAL TREES & FRUITS		
<b>LABELED CROPS:</b> Ambarella, Atemoya, Avocado, Banana, Barbados Cherry (acerola), Biriba, Blimbe, Breadfruit, Cacao (cocoa) bean, Canistel, Carambola (starfruit), Cherimoya, Coffee, Custard apple, Dates, Durian, Feijoa, Figs, Governor's plum, Guava, Ila, Imbe, Imbu, Jaboticaba, Jackfruit, Longan, Lychee, Mamey apple, Mango, Mangosteen, Marmaladebox (genip), Mountain papaya, Papaya, Pawpaw, Plantain, Persimmon, Pomegranate, Pulasan, Rambutan, Rose apple, Sapodilla, Sapote (black, mamey, white), Spanish lime, Soursop, Star apple, Sugar apple, Surinam cherry, Tamarind, Tea, Ti (roots & leaves), Wax jambu		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 10.0	This product may be applied for general weed control or for site preparation prior to transplanting crops listed in this section. In coffee and banana, delay applications 3 months after transplanting to allow the new coffee or banana plant to become established.	Allow a minimum of 1 day between last application and harvest of banana, guava, papaya and plantain crops. Allow a minimum of 14 days between last application and harvest of any other tropical or subtropical tree fruit. Allow a minimum of 28 days between last application and harvest in coffee crops.

(continued)

**10.8****TROPICAL CROPS & SUBTROPICAL TREES & FRUITS** *(continued)*

**LABELED CROPS:** Ambarella, Atemoya, Avocado, Banana, Barbados Cherry (acerola), Biriba, Blimbe, Breadfruit, Cacao (cocoa) bean, Canistel, Carambola (starfruit), Cherimoya, Coffee, Custard apple, Dates, Durian, Feijoa, Figs, Governor's plum, Guava, Ilima, Imbe, Imbu, Jaboticaba, Jackfruit, Longan, Lychee, Mamey apple, Mango, Mangosteen, Marmaladebox (genip), Mountain papaya, Papaya, Pawpaw, Plantain, Persimmon, Pomegranate, Pulasan, Rambutan, Rose apple, Sapodilla, Sapote (black, mamey, white), Spanish lime, Soursop, Star apple, Sugar apple, Surinam cherry, Tamarind, Tea, Ti (roots & leaves), Wax jambu

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Bananacide (Banana only)	<p>This product may be used to destroy banana plants infected with the Banana Bunchy Top Virus as well as non-infected banana plants to establish disease free buffers around plantations. Remove all fruit from the plants within the treatment area prior to treatment. Inject 1/25 fluid ounce (1 ml) of this product's concentrate per 2 to 3 inches of pseudostem diameter. Make the injection at least one foot above ground, except for very small plants, which should be injected vertically into the top. Any subsequent regrowth must also be destroyed. All plants and mats (or units) adjacent (within a 4-foot radius) to a treated mat shall be mechanically destroyed.</p> <p>For control of the Banana Bunchy Top Virus, it is critical that the grower follow a strict control program involving monitoring for diseased plants, spraying to control the aphid vector, and destruction of all infected mats (or units). An infected plant may not show symptoms of the disease for up to 125 days, therefore it is critical that the entire mat (or unit) containing the diseased plant be destroyed immediately.</p>	<p>Do not apply more than 1/2 fluid ounce (15 mL) of this product's concentrate per mat (or units). Remove all fruit from plants and mats (or units) prior to treatment. Do not harvest any fruit or plant materials from treated mats (or units) following injection. Do not allow livestock to consume treated materials. Following transplant of new banana plants into treated areas, allow plants to become established for 3 months before applying this product for weed control.</p>

**10.9****VINE CROPS**

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

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
See Section 10.0	<p>Applications should not be made when green shoots, canes or foliage are in the spray zone.</p> <p>In the northeast and Great Lakes regions, applications must be made prior to the end of bloom stage of grapes to avoid injury, or make applications with shielded sprayers or wiper equipment.</p>	<p>Allow a minimum of 14 days between last application and harvest. Do not use selective equipment in kiwi.</p>

## 11.0

## PASTURE GRASSES, FORAGE LEGUMES &amp; RANGELANDS

11.1 ALFALFA, CLOVER, & OTHER FORAGE LEGUMES		
LABELED CROPS: Alfalfa, Clover, Kenaf, Kudzu, Lespedeza, Leucaena, Lupin, Sainfoin, Trefoil, Velvet bean, Vetch (all types)		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Pre-plant, Pre-emergence, At-Planting	This product may be applied before, during or after planting crops listed. Applications must be made prior to emergence of the crop.	If a single application is made at rates of 2 quarts per acre or less, no waiting period between treatment and feeding or grazing is required. If application rates greater than 2 quarts per acre are made, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.
Spot treatment, Over-the-Top Wiper applications (Alfalfa and Clover only)	This product may be applied as a spot treatment in alfalfa or clover. This product may be applied with wiper applicators to control or suppress the weeds listed under "WIPER APPLICATORS" in the "SELECTIVE EQUIPMENT" section of this label. Applications may be made in the same area at 30-day intervals.	For spot treatment and wiper applications, apply in areas where the movement of domestic livestock can be controlled. No more than one-tenth of any acre should be treated at one time. Remove domestic livestock before application and wait 14 days after application before grazing livestock or harvesting.
Dormant (Alfalfa Only)	This product will control or suppress many weeds including quackgrass, downy brome and cheatgrass in dormant alfalfa. Apply 8 to 12 ounces per acre of this product. Apply in the spring to alfalfa that is dormant. Applications should be made after spring temperatures have warmed enough to encourage resumption of weed growth, but prior to initiation of trifoliate leaf expansion of the alfalfa. Applications made after expansion of the first trifoliate leaf of the alfalfa will cause growth reduction and reduced crop yield. Slight discoloration of the alfalfa may occur, but the alfalfa will regreen and regrow under moist soil conditions as effects of this product wear off.	Do not use ammonium sulfate when spraying dormant alfalfa with this product. Do not use this product where a slight yield reduction in the first cutting of alfalfa cannot be tolerated. Do not make more than one application per year. Allow 36 hours after application before grazing livestock or harvesting. Application of this product can cause crop injury. Any crop injury is the sole responsibility of the applicator.
Pre-harvest (Alfalfa Only)	This product may be used in declining alfalfa stands or any stand of alfalfa where crop destruction is acceptable. This application will severely injure or destroy the stand of alfalfa. This product will control annual and perennial weeds including quackgrass, when applied prior to the harvest of alfalfa. Use up to 1 quart of this product per acre. Applications may be made at any time of the year. For control of quackgrass, apply in the spring, late summer or fall when quackgrass is actively growing. Treatments for quackgrass must be followed by deep tillage for complete control.	Make only one application to an existing stand of alfalfa per year. Do not apply more than 2 quarts of this product per acre as a pre-harvest treatment. Do not use for alfalfa grown for seed, as a reduction in germination or vigor may occur. The treated crop and weeds can be harvested and fed to livestock after 36 hours.
Renovation	This product may be applied as a broadcast spray to existing stands of alfalfa, clover, and other labeled forage legumes. Labeled crops may be planted into the treated area.	Remove domestic livestock before application. If application rates of 2 quarts per acre or less are used wait 36 hours after application before grazing or harvesting. If application rates greater than 2 quarts per acre are used, wait 8 weeks after application before grazing or harvesting.

11.2 CONSERVATION RESERVE PROGRAM (CRP)		
LABELED CROPS: Conservation Reserve Program (CRP) Acres		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Renovation (rotating out of CRP), Site preparation	This product may be used to prepare CRP land for crop production. Refer to Federal, state or local use guides for CRP renovation recommendations.  For any crop not listed in the "CROPS" sections of this label applications must be made at least 30 days prior to planting.	Some stunting of CRP perennial grasses will occur if broadcast applications are made when plants are not dormant.  Do not apply more than 3 quarts per acre per year onto CRP grasses.
Post-emergence Weed control in Dormant Acres, Over-the-Top Wiper Application	This product may be used to suppress competitive growth and seed production of undesirable vegetation in CRP acres. Such applications may be made with wiper application equipment or as a broadcast or spot treatment to dormant CRP grasses. For selective applications with broadcast spray equipment, apply 12 to 16 fluid ounces of this product per acre in early spring before desirable CRP grasses, such as crested and tall wheatgrass, break dormancy and initiate green growth. Late fall applications can be made after desirable perennial grasses have reached dormancy.	

11.3 GRASS or TURFGRASS SEED PRODUCTION		
LABELED CROPS: Any grass (Gramineae family) except corn, sorghum, sugarcane and those listed under "CEREAL CROPS"		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Pre-plant, Pre-emergence, Renovation, Site preparation	This product may be applied before, during, or after planting or for renovation of turf or forage grass areas grown for seed production.  Applications must be made prior to the emergence of the crop to avoid injury.  For maximum control of existing vegetation, delay planting to determine if any regrowth from escaped underground plant parts occurs. Where repeat treatments are necessary, sufficient regrowth must be attained prior to application. For warm-season grasses, such as bermudagrass, summer or fall applications provide best control.	Do not disturb soil or underground plant parts before treatment. Tillage or renovation techniques such as vertical mowing, coring or slicing should be delayed for 7 days after application to allow proper translocation into underground plant parts.  If application rates total 3 quarts per acre or less, no waiting period between treatment and feeding or livestock grazing is required.  If the rate is greater than 3 quarts per acre, remove domestic livestock and wait 8 weeks following application before grazing or harvesting.
Shielded Sprayer	Apply 1 to 3 quarts of this product as a broadcast spray in 10 to 20 gallons of total spray volume per acre. Uniform planting in straight rows aid in shielded sprayer applications. Best results are obtained when the grass seed crop is small enough to easily pass by or through the protective shields.	Contact of this product in any manner to any vegetation to which treatment is not intended may cause damage. Grower assumes all responsibility for crop losses from misapplication.
Over-the-Top Wiper Applications	This product may be applied with wiper applicators to control or suppress the weeds listed under "WIPER APPLICATORS" in the "SELECTIVE EQUIPMENT" section of this label.	Contact of the herbicide solution with desirable vegetation may result in damage or destruction. Applicators should be adjusted so that the wiper contact point is at least 2 inches above the desirable vegetation. Weeds should be a minimum of 6 inches above the desirable vegetation. Better results may be obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. This may occur in dense clumps, severe infestations, or when weed height varies so that not all weeds are contacted. In these instances, repeat treatments may be necessary. Better results may be obtained if 2 applications are made in opposite directions.

(continued)

11.3 GRASS or TURFGRASS SEED PRODUCTION <i>(continued)</i>		
LABELED CROPS: Any grass (Gramineae family) except corn, sorghum, sugarcane and those listed under "CEREAL CROPS"		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Spot treatments	Use a 1- to 1.5 percent solution	Apply this product prior to heading of grasses. The crop receiving the spray in the treated area will be killed. Take care to avoid drift or spray outside of the target area for the same reason.
Creating Rows in Annual Ryegrass	Use 16 to 32 fluid ounces of this product per acre. Use the higher rate when the ryegrass is greater than 6 inches tall. Best results are obtained when applications are made before the ryegrass reaches 6 inches in height.	Set nozzle height to allow the establishment of the desired row spacing while preventing spray droplets, spray fines, or drift to contact the ryegrass plants not treated. Use of low-pressure nozzles, or drop nozzles designed to target the application over a narrow band are recommended. Grower assumes all responsibility for crop losses from misapplication.

11.4 PASTURES		
LABELED CROPS: Any grass (Gramineae family) except corn, sorghum, sugarcane and those listed under "CEREAL CROPS". Including Bahiagrass, Bermudagrass, Bluegrass, Brome, Fescue, Guinea grass, Kikuyugrass, Orchardgrass, Pangola grass, Ryegrass, Timothy, Wheatgrass.		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Spot treatment, Over-the Top Wiper Applications	This product may be applied as a spot treatment or with wiper applicators in pastures. Applications may be made in the same area at 30-day intervals.	For spot treatments or wiper application methods using rates of 3 quarts per acre or less, the entire field or any portion of it may be treated. When spot treatment or wiper applications are made using rates above 3 quarts per acre, no more than 10 percent of the total pasture may be treated at any one time. To achieve maximum performance, remove domestic livestock before application and wait 7 days after application before grazing livestock or harvesting.
Pre-plant, Pre-emergence, Pasture renovation, Stand Removal	This product may be applied prior to planting or emergence of forage grasses. In addition, this product may be used to control perennial pasture species listed on this label prior to re-planting.	If application rates total 3 quarts per acre or less, no waiting period between treatment and feeding or livestock grazing is required. If the rate is greater than 3 quarts per acre, remove domestic livestock and wait 8 weeks following application before grazing or harvesting.
Chemical Mowing (Bermudagrass Pastures Prior To Spring Growth Or Immediately After First Cutting)	This product may be applied at 16 fluid ounces per acre to control the weeds listed below and most other winter annual grass and broadleaf weeds in established coastal bermudagrass pastures. Annual bluegrass, Cheat, Crabgrass, Henbit, Johnsongrass seedling, Little barley, Oats, Ryegrass, Sandbur field, Wheat, Wild mustard <u>Applications prior to spring growth:</u> Apply this product in the late winter or early spring but before new coastal bermudagrass growth begins in the spring. Applications to new growth can damage the bermudagrass. <u>Applications following the first cutting:</u> Apply this product after the first bermudagrass cutting when the bermudagrass has not yet begun to regrow. Applications made after regrowth has begun can damage the bermudagrass.	Application rates totaling 3 quarts per acre or less do not require a waiting period between treatment and feeding or livestock grazing. <b>NOTE: ONLY ONE APPLICATION PER YEAR MAY BE MADE TO ANY ONE FIELD. A SPRING APPLICATION PRIOR TO GROWTH AND AN APPLICATION FOLLOWING THE FIRST CUTTING MAY NOT BE MADE ON THE FIELD DURING THE SAME YEAR.</b>



**Colorado, Idaho, Iowa, Kansas, Montana, Nebraska, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming Only**

**Bromus Species:** This product may be used to treat downy brome (*Bromus tectorum*), Japanese brome (*Bromus japonicus*), soft chess (*Bromus mollis*) and cheatgrass (*Bromus secalinus*) found in industrial, rangeland and pasture sites. Apply 8 to 16 fluid ounces of product per acre on a broadcast basis. For best results, treatment should coincide with early seedhead emergence of the most mature plants. Delaying the application until this growth stage will maximize the emergence of other weedy grass flushes. Applications should be made to the same site each year until seed banks are depleted and the desirable perennial grasses are able to become reestablished on the site.

**Medusahead:** To treat medusahead, apply 16 fluid ounces of this product per acre as soon as plants are actively growing, and prior to the 4 leaf stage. Applications may be made in the fall or spring.

**Application Equipment and Techniques:** Applications may be made using ground or aerial equipment. Aerial applications for these uses may be made using fixed wing or helicopter equipment. For aerial applications, apply in 2 to 10 gallons of water per acre. For applications using ground equipment apply in 10 to 20 gallons of water per acre.

When applied as directed there are no grazing restrictions.

11.5 RANGELANDS		
LABELED CROPS: Rangeland (Perennial cool and warm season grass rangelands)		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Post-emergence	<p>This product will control or suppress many annual weeds growing in perennial cool and warm-season grass rangelands.</p> <p>Preventing viable seed production is key to the successful control and invasion of annual grassy weeds in rangelands. Follow-up applications in sequential years should eliminate most of the viable seeds.</p> <p>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.</p> <p>Apply 12 to 16 fluid ounces per acre to control or suppress many annual weeds growing in perennial cool and warm-season grass rangelands including downy brome, cheat grass, cereal rye and jointed goatgrass. Apply when most mature brome plants are in early flower and before the plants, including seedheads, turn color. Allowing for secondary weed flushes to occur in the spring following rain events further depletes the seed reserve and encourage perennial grass conversion on weedy sites. Fall applications are possible, and recommended, where spring moisture is usually limited and fall germination allows for good weed growth.</p> <p>For medusahead, apply 16 fluid ounces per acre at the 3-leaf stage. Delaying applications beyond this stage will result in reduced or unacceptable control. Fire may be useful in eliminating the thatch layer produced by slow decaying culms prior to application. Allow new growth to occur before spraying after a burn.</p>	<p>Do not use ammonium sulfate when spraying rangeland grasses with this product.</p> <p>Do not apply more than 3 quarts per acre per year.</p> <p>Slight discoloration of the desirable grasses may occur, but they will regreen and regrow under moist soil conditions as effects of this product wear off.</p>

## 11.6

## TURFGRASS SOD PRODUCTION

## LABELED CROPS: Turfgrass for Sod

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Pre-plant, Pre-emergence, Renovation, Site Preparation	<p>This product controls most existing vegetation prior to renovating turf grass areas or establishing turf grass grown for sod. Broadcast of hand-held equipment may be used to control sod remnants or other unwanted vegetation after sod is harvested. For maximum control of existing vegetation, delay planting or sodding to determine if any regrowth from escaped underground plant parts occurs. Where repeat treatments are necessary, sufficient regrowth must be attained prior to application. For warm-season grasses such as bermudagrass, summer or fall applications provide the best control. Where existing vegetation is growing under mowed turfgrass management, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the spray.</p> <p>Desirable turfgrasses may be planted following the above procedures.</p>	<p>If application rates total 3 quarts per acre or less, no waiting period between treatment and feeding or livestock grazing is required. If the rate is greater than 3 quarts per acre, remove domestic livestock and wait 8 weeks following application before grazing or harvesting.</p> <p>Do not disturb soil or underground plant before treatment. Tillage or renovation techniques such as vertical mowing, coring, or slicing should be delayed for 7 days after application to allow translocation into underground plant parts.</p>
Spot treatment	<p>Hand-held equipment may be used for spot treatment of unwanted vegetation growing in existing turf grass</p>	
Turfgrass Renovation for sod production	<p>This product controls most existing vegetation prior to renovating turfgrass areas or establishing turfgrass grown for seed or sod. For maximum control of existing vegetation, delay planting or sodding to determine if any regrowth from escaped underground plant parts occurs. Where repeat treatments are necessary, sufficient regrowth must be attained prior to application. For warm-season grasses such as bermudagrass, summer or fall applications provide the best control. Where existing vegetation is growing under mowed turfgrass management, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the spray.</p> <p>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 translocation into underground plant parts.</p> <p>Desirable turfgrass may be planted following the above procedures.</p> <p>Hand-held equipment may be used for spot treatment of unwanted vegetation growing in existing turfgrass. Broadcast or hand-held equipment may be used to control sod remnants or other unwanted vegetation after sod is harvested.</p>	<p>Do not feed or graze turfgrass grown for seed or sod production for 8 weeks following application.</p>

**Dormant applications**

This product may be used to control or partially control many winter annual weeds and tall fescue for effective release of dormant bermudagrass or bahiagrass. Treat only when turf is dormant and prior to spring greenup. This product may also be tank-mixed with Oust® for residual control. Tank mixtures of this product with Oust® may delay greenup.

For best results on winter annuals, treat when plants are in an early growth stage (below 6 inches in height) after most have germinated. For best results on tall fescue, treat when fescue is at or beyond the 4 to 6-leaf stage.

Apply 8 to 64 fluid ounces of this product per acre alone or in a tank mixture with 1/4 to 1 ounce per acre of Oust®. Apply the specified rates in 10 to 40 gallons of water per acre. Use only in areas where bermudagrass or bahiagrass are desirable ground covers and where some temporary injury or discoloration can be tolerated. To avoid delays in greenup and minimize injury, add no more than 1 ounce of Oust® per acre on bermudagrass and no more than 0.5 ounce of Oust® per acre on bahiagrass and avoid treatments when these grasses are in a semi-dormant condition.

**Actively growing bermudagrass**

This product may be used to control or partially control many annual and perennial weeds for effective release of actively growing bermudagrass. Apply 1 to 3 pints of this product in 10 to 40 gallons of spray solution per acre. Use the lower rate when treating annual weeds below 6 inches in height (or runner length). Use the higher rate as weeds increase in size or as they approach flower or seedhead formation. These rates will also provide partial control of the following perennial species:

Bahiagrass	Johnsongrass
Bluestem, silver	Trumpetcreeper
Fescue, tall	Vaseygrass

This product may be tank-mixed with Oust®. If tank-mixed, use no more than 1 to 2 pints of this product with 1 to 2 ounces of Oust® per acre. Use the lower rates of each product to control annual weeds less than 6 inches in height (or runner length) that are listed in this label and the Oust® label. Use the higher rates as annual weeds increase in size and approach the flower or seedhead stages. These rates will also provide partial control of the following perennial weeds:

Bahiagrass	Dock, curly	Poorjoe
Bluestem, silver	Dogfennel	Trumpetcreeper
Broomsedge	Fescue, tall	Vaseygrass
Dallisgrass	Johnsongrass	Vervain, blue

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

**Actively growing bahiagrass**

For suppression of vegetative growth and seedhead inhibition of bahiagrass for approximately 45 days, apply 6 fluid ounces of this product in 10 to 40 gallons of water per acre. Apply 1 to 2 weeks after full green-up or after mowing to a uniform height of 3 to 4 inches. This application must be made prior to seedhead emergence.

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

A tank mixture of this product plus Oust® may be used. Apply 6 fluid ounces of this product plus 0.25 ounce of Oust® per acre 1 to 2 weeks following an initial spring mowing. Make only one application per year.

**12.0****ROUNDUP READY® CROPS**

The following instructions include all applications which can be made onto the specified Roundup Ready crops during the complete cropping season. Do NOT combine these instructions with other recommendations made for crop varieties that do not contain the Roundup Ready gene, in the "ANNUAL AND PERENNIAL CROPS (ALPHABETICAL)" section of this label.

**THIS PRODUCT IS TO BE USED FOR POSTEMERGENCE APPLICATION ONLY ON CROP VARIETIES DESIGNATED AS CONTAINING A ROUNDUP READY GENE OR GLYPHOSATE TOLERANT GENE.**

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

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

**NOTE:** Roundup Ready seed, and the method of selectivity controlling weeds using glyphosate on a Roundup Ready crop, are protected under several U.S. Patents. A license to use Roundup Ready seed must be obtained prior to use.

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

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

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

See the "MIXING and APPLICATION EQUIPMENT AND TECHNIQUES" sections of this label for additional directions and restrictions on the application of this product.

Tank mixtures with other herbicides, insecticides, fungicides, micronutrients or fertilizers may result in reduced weed control or crop injury and are NOT recommended for over-the-top applications of this product unless otherwise noted in this product label.

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

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

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

12.1 ROUNDUP READY ALFALFA		
FOR POSTEMERGENCE APPLICATION ONLY ON ALFALFA VARIETIES DESIGNATED AS CONTAINING A ROUNDUP READY GENE.		
The Roundup Ready designation indicates that the alfalfa contains a patented gene, which provides tolerance to this product. Information on Roundup Ready alfalfa varieties may be obtained from your seed supplier or Ragan and Massey, Inc. representative. Roundup Ready crop varieties must be purchased from an authorized licensed seed supplier.		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Pre-plant, At-planting, Pre-emergence and Post-emergence	<p>This product will control many troublesome emerged weeds with over-the-top applications in Roundup Ready alfalfa.</p> <p>For ground applications with broadcast equipment, apply this product in 3 to 40 gallons of spray solution per acre. Carefully select proper nozzle and spray pressure to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.</p> <p><b>For aerial application:</b> Use the specified rates of this product in 3 to 15 gallons of spray solution per acre.</p> <p>A. New Stand Establishment (seeding year)</p> <p><u>Prior to First Cutting During New Stand Establishment:</u></p> <p>From emergence up to 4 trifoliolate leaves 2.0 quarts per acre</p> <p>From 5 trifoliolate leaves up to 5 days before first cutting 2.0 quarts per acre</p> <p><u>After First Cutting in Newly Established Stands:</u></p> <p>In-crop application, per cutting, up to 5 days before cutting 2.0 quarts per acre</p> <p>B. Established Stands (non-seeding year)</p> <p>In-Crop applications, per cutting, up to 5 days before cutting 2.0 quarts per acre</p> <p>During stand establishment, due to the biology and breeding constraints of alfalfa, up to 10% of the seedlings may not contain the Roundup Ready gene and will not survive after the first application of this product. To eliminate the undesirable effects of stand gaps created by the loss of plants not containing a Roundup Ready gene, a single application of at least 1.0 quart per acre of this product should be applied at or before the 3 to 4 trifoliolate growth stage.</p> <p>In both newly seeded and established stands, in order to maximize yield and quality potential of forage and hay, applications of this product should be made after weeds have emerged but before alfalfa growth or re-growth interferes with application spray coverage of the target weeds.</p> <p>In addition to those weeds listed in this product's label booklet, this product will suppress or control the parasitic weed, Dodder (<i>Cuscuta</i> spp.) in Roundup Ready alfalfa. Repeat applications may be necessary for complete control.</p>	<p>DO NOT EXCEED 2.0 QUARTS OF THIS PRODUCT PER ACRE WHEN MAKING APPLICATIONS BY AIR.</p> <p>Any single over-the-top application of this product should not exceed 2.0 quarts (64 fluid ounces) per acre. Sequential applications of this product should be at least 7 days apart.</p> <p>The combined total per year for all in-crop applications in newly established and established stands must not exceed 6.0 quarts (192 fluid ounces) per acre.</p> <p>Remove domestic livestock before application and wait a minimum of 5 days after last application before grazing, or cutting and feeding of Roundup Ready alfalfa forage and hay.</p>

(continued)

**12.1****ROUNDUP READY ALFALFA** *(continued)***FOR POSTEMERGENCE APPLICATION ONLY ON ALFALFA VARIETIES DESIGNATED AS CONTAINING A ROUNDUP READY GENE.**

The Roundup Ready designation indicates that the alfalfa contains a patented gene, which provides tolerance to this product. Information on Roundup Ready alfalfa varieties may be obtained from your seed supplier or Ragan and Massey, Inc. representative. Roundup Ready crop varieties must be purchased from an authorized licensed seed supplier.

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Over-the-top applications	This product may be applied post-emergence to Roundup Ready alfalfa from emergence until 5 days prior to cutting. Any single over-the-top applications of this product should not exceed 2.0 quarts per acre.	Sequential applications of this product should be at least 7 days apart. ATTENTION: Where Roundup Ready alfalfa is grown with a companion or cover crop, or is over seeded with a second species, over-the-top applications of this product will eliminate the non-Roundup Ready species. Tank mixtures with other herbicides, insecticides, or fungicides may result in crop injury or reduced weed control and are NOT recommended for over-the-top applications of this product.
<b>MAXIMUM ALLOWABLE APPLICATION RATES</b>		
Combined total per year for all applications, including pre-plant during year of establishment	7.75 quarts per acre	
Combined total per year for in-crop applications for newly established and established stands	6.0 quarts per acre	
Pre-plant, At-planting and Pre-emergence single applications	2.0 quarts per acre	

## 12.2

## ROUNDUP READY CANOLA (Spring Varieties)

**LABELED CROPS:** Roundup Ready spring canola is defined as those Roundup Ready canola varieties that are seeded in the spring and harvested in the fall and do not enter a winter dormancy period.

DO NOT USE THIS PRODUCT ON SPRING CANOLA WITH A ROUNDUP READY GENE PLANTED IN THE FOLLOWING STATES: ALABAMA, DELAWARE, FLORIDA, GEORGIA, KENTUCKY, MARYLAND, NEW JERSEY, NORTH CAROLINA, SOUTH CAROLINA, TENNESSEE, VIRGINIA AND WEST VIRGINIA, EXCEPT FOR USES IN WILDLIFE FOOD PLOTS THAT WILL NOT BE FOR HUMAN OR LIVESTOCK FOOD

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Pre-plant, At-Planting, Pre-emergence	This product may be applied before, during or after planting Roundup Ready spring canola.	Maximum quantity of this product that may be applied for all pre-plant, at-planting and pre-emergence applications combined is 2 quarts per season.
Post-emergence (In-crop)	<p>This product may be applied post-emergence to Roundup Ready spring canola from emergence through the 6-leaf stage of development. Applications made during bolting or flowering may result in crop injury and yield loss. To maximize yield potential, make applications early to eliminate competing weeds.</p> <p><u>Single Application</u> - Apply 11 to 16 fluid ounces of this product per acre no later than the 6-leaf stage for the control of annual weeds. Avoid overlapping applications as this may result in temporary yellowing, delayed flowering, and or growth reduction. Similar crop injury may result when applications of more than 11 fluid ounces per acre are applied after the 4-leaf stage.</p> <p><u>Sequential Application</u> - Apply 11 fluid ounces of this product per acre to 1- to 3-leaf canola followed by a sequential application at a minimum interval of 10 days, but no later than the 6-leaf stage. Sequential applications are recommended for early emerged annual weeds and perennial weeds such as Canada thistle and quackgrass, or when multiple applications are needed for adequate weed control.</p>	<p>No more than two in-crop (over-the-top) broadcast applications may be made from crop emergence through the 6-leaf stage of development and the total of all in-crop applications should not exceed 22 fluid ounces of this product per acre.</p> <p>Allow a minimum of 60 days between last application and canola harvest.</p>
MAXIMUM ALLOWABLE APPLICATION RATES		
Total of all Pre-plant, At-Planting, Pre-emergence applications	2 quarts per acre	
Total of all In-crop applications from emergence to 6-leaf stage	1 quart per acre	

12.3 ROUNDUP READY CANOLA (Fall & Winter Varieties)		
<b>LABELLED CROPS:</b> Roundup Ready winter canola is defined as those Roundup Ready canola varieties that are seeded in early fall and harvested the following spring or summer. Winter canola varieties are intended to enter a cold period dormancy in the winter.		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Pre-plant, At-Planting, Pre-emergence	This product may be applied before, during or after planting Roundup Ready winter canola.	Maximum quantity of this product that may be applied for all pre-plant, at-planting and pre-emergence applications combined is 2 quarts per acre per season.
Post-emergence (In-crop)	<p>This product may be applied to Roundup Ready winter canola varieties from emergence to canopy closure in the fall and prior to bolting in the spring. Applications made during or after bolting may result in crop injury and yield loss. To maximize yield potential, make applications early to eliminate competing weeds.</p> <p>Some weeds with multiple germination times, or suppressed (stunted) weeds, or weeds that have overwintered may require sequential applications of this product for control. The second application should be made after some re-growth has occurred and at least 60 days after a previous application of this product.</p> <p><u>Single Application</u> - Apply 22 to 32 fluid ounces of this product per acre in the fall. Applications in the fall should be made when weeds are small and actively growing. Use the higher rate in the recommended range when weed densities are high, when weeds have overwintered or when weeds become large and well established. Applications of greater than 16 fluid ounces per acre prior to the 6-leaf stage may result in reduced crop growth in the fall. Avoid overlaps. Spray overlaps may result in temporary yellowing and/or growth reduction.</p> <p><u>Sequential Applications</u> - Apply 16 to 32 fluid ounces of this product per acre to 2-leaf or larger canola in the fall, followed by a sequential application at the same rate and at a minimum interval of 60 days, but before bolting in the spring. Sequential applications are recommended for early emerging annual weeds and winter emerging weeds such as downy brome, jointed goatgrass and ryegrass, and for weeds that have overwintered. This product will control or suppress most of perennial weeds. For some perennial weeds, sequential applications may be required to reduce competition with the crop.</p>	<p>No more than two over-the-top broadcast applications may be made from crop emergence up to the onset of bolting, and the total in-crop application must not exceed 2 quarts of this product per acre. Applications of greater than 24 fluid ounces per acre prior to the 6-leaf stage may result in reduced crop growth in the fall.</p> <p>Allow a minimum of 60 days between last application and harvest of canola grain.</p> <p>No waiting period is required between application and open grazing of livestock.</p>
MAXIMUM ALLOWABLE APPLICATION RATES		
Total of all Pre-plant, At-Planting, Pre-emergence applications		2 quarts per acre
Total of all In-crop applications from emergence to canopy closure or prior to bolting in the spring		2 quarts per acre

12.4 ROUNDUP READY CORN																				
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS																		
Pre-plant, Pre-emergence, At-Planting	<p>This product may be applied alone or in a tank-mixture before, during or after planting corn.</p> <p><b>TANK MIXTURES:</b> This product may be tank mixed with Bullet, Degree, Degree Xtra, Harness, Harness Xtra, Harness Xtra 5.6L, Lariat, Lasso or Micro-Tech at 50 to 100 percent of labeled rate. Refer to the specific product label and observe all precautions and limitations on the label for any pre-emergence herbicide application, including application timing restrictions, soil restrictions, minimum re-cropping interval and rotational guidelines — the more restrictive requirements apply.</p> <p><b>NOTE:</b> For maximum weed control, a post-emergence (in-crop) application of this product should be applied following the use of less than labeled rates of the pre-emergence residual products listed above.</p>	See Section 12.0																		
Post-emergence (In-crop)	<p>This product may be applied post-emergence to Roundup Ready corn from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 30 inches, whichever comes first.</p> <p>When applied as directed, this product controls labeled annual grass and broadleaf weeds in Roundup Ready corn. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more applications of this product. The post-emergent application of 24 to 32 fluid ounces per acre of this product should be made before the weeds reach a height and/or density that the weeds become competitive with the crop, generally 4 inch tall weeds or less.</p> <p>This product may be applied alone as a post-emergence in-crop application to provide control of emerged weeds listed on this label. If new flushes of weeds occur, a sequential application of this product at 24 to 32 fluid ounces per acre will control the labeled grasses and broadleaf weeds.</p> <p><b>TANK MIXTURES:</b> This product may be applied in tank mixture with Bullet, Degree, Degree Xtra, Harness, Harness Xtra, Harness Xtra 5.6L, and Micro-Tech at 50 to 100 percent of labeled rate. This product may be applied in tank mixture with Permit and Atrazine at labeled rates. Refer to the specific product label and observe all precautions and limitations on the label for all products used in tank mixtures, including application timing restrictions, soil restrictions, minimum re-cropping interval and rotational guidelines — the more restrictive requirements apply.</p> <table border="0"> <thead> <tr> <th><u>Tank Mix Partner</u></th> <th><u>Maximum Height of Corn for Application</u></th> </tr> </thead> <tbody> <tr> <td>Degree</td> <td></td> </tr> <tr> <td>Degree Xtra</td> <td></td> </tr> <tr> <td>Harness</td> <td>11 inches</td> </tr> <tr> <td>Harness Xtra</td> <td></td> </tr> <tr> <td>Harness Xtra 5.6L</td> <td></td> </tr> <tr> <td>Bullet*</td> <td>5 inches</td> </tr> <tr> <td>Micro-Tech*</td> <td></td> </tr> <tr> <td>Atrazine</td> <td>12 inches</td> </tr> </tbody> </table> <p>*Bullet and Micro-Tech are not registered for use as a post-emergence application in Texas.</p>	<u>Tank Mix Partner</u>	<u>Maximum Height of Corn for Application</u>	Degree		Degree Xtra		Harness	11 inches	Harness Xtra		Harness Xtra 5.6L		Bullet*	5 inches	Micro-Tech*		Atrazine	12 inches	<p>See the "ROUNDUP READY CROPS" section of this label for precautionary instructions for use in Roundup Ready crops.</p> <p>Single in-crop applications of this product are not to exceed 1 quart per acre.</p> <p>Sequential in-crop applications of this product from emergence through the V8 stage or 30 inches must not exceed 2 quarts per acre per growing season.</p> <p>Allow a minimum of 10 days between in-crop applications of this product.</p> <p>Allow a minimum of 50 days between application of this product and harvest of corn forage.</p>
<u>Tank Mix Partner</u>	<u>Maximum Height of Corn for Application</u>																			
Degree																				
Degree Xtra																				
Harness	11 inches																			
Harness Xtra																				
Harness Xtra 5.6L																				
Bullet*	5 inches																			
Micro-Tech*																				
Atrazine	12 inches																			

(continued)



<b>12.4 ROUNDUP READY CORN</b> <i>(continued)</i>		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Post-emergence With Drop Nozzles	For Roundup Ready corn from emergence through the V8 stage (8 leaves with collars) or until corn height reaches 30 inches, whichever comes first, this product may be applied over-the-top broadcast or with drop nozzles. When corn height is 24 to 30 inches (free standing), for optimum spray coverage and weed control drop nozzles are recommended. For corn heights 30 to 48 inches (free standing), apply this product only using ground application equipment with drop nozzles adjusted to avoid spraying into the whorls of the corn plants.	Single in-crop applications of this product should not exceed 32 fluid ounces per acre. The maximum combined total of multiple in-crop applications from emergence through the 48-inch stage is 64 fluid ounces per acre. If this product is applied to whorls of corn, plant injury and yield reduction can occur.
Pre-Harvest	In Roundup Ready corn, up to 1 quart per acre of this product can be applied pre-harvest. Make applications at 35 percent grain moisture or less. Ensure that maximum kernel fill is complete and the corn is physiologically mature (black layer formed).	Allow a minimum of 7 days between application and harvest.
Post-Harvest	This product may be applied after harvest of corn. Higher rates may be required for control of large weeds that were growing in the crop at the time of harvest. Tank mixtures with 2,4-D or dicamba may be used.	Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.
MAXIMUM ALLOWABLE APPLICATION RATES		
Combined total per year for all applications		8 quarts per acre
Pre-plant, Pre-emergence, At-Planting applications		5 quarts per acre
Total in-crop applications from emergence through the V8 stage or 30 inches		2 quarts per acre
Maximum pre-harvest application rate after maximum kernel fill is complete and the crop is physiologically mature (black layer formation) until 7 days before harvest		1 quart per acre

<b>12.5 ROUNDUP READY COTTON</b>		
ATTENTION: USE OF THIS PRODUCT IN ACCORDANCE WITH LABEL DIRECTIONS IS EXPECTED TO RESULT IN NORMAL GROWTH OF ROUNDUP READY COTTON, HOWEVER, VARIOUS ENVIRONMENTAL CONDITIONS, AGRONOMIC PRACTICES AND OTHER FACTORS MAKE IT IMPOSSIBLE TO ELIMINATE ALL RISKS ASSOCIATED WITH THIS PRODUCT, EVEN WHEN APPLICATIONS ARE MADE IN CONFORMANCE WITH THE LABEL SPECIFICATIONS. IN SOME CASES, THESE FACTORS CAN RESULT IN BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS.		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Pre-plant, Pre-emergence, At-planting	This product may be applied before, during or after planting cotton.	See the "ROUNDUP READY CROPS" section of this label for general precautionary instructions for use in Roundup Ready crops.

*(continued)*

## 12.5

## ROUNDUP READY COTTON (continued)

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

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Post-emergence (Over-the-Top)	<p>This product may be applied by aerial or ground application equipment at rates up to 1 quart per acre per application post-emergence to Roundup Ready cotton from the ground cracking stage until the 4-leaf (node) stage of development (until the fifth true leaf reaches the size of a quarter). Over-the-top applications made after the 4-leaf (node) stage of development may result in boll loss, delayed maturity and/or yield loss.</p> <p><b>Salvage Treatment</b> - This treatment may be used after the 4-leaf stage of development and should only be used where weeds threaten to cause the loss of the crop. One quart per acre may be applied either as an over-the-top application or as a post-directed treatment sprayed higher on the cotton plants and over the weeds.</p> <p><b>NOTE:</b> SALVAGE TREATMENTS WILL RESULT IN SIGNIFICANT BOLL LOSS, DELAYED MATURITY AND/OR YIELD LOSS. NO MORE THAN ONE SALVAGE TREATMENT SHOULD BE USED PER GROWING SEASON.</p>	<p>See the "ROUNDUP READY CROPS" section of this label for general precautionary instructions for use in Roundup Ready crops. The combined total application of this product from cotton emergence until harvest must not exceed 6 quarts per acre.</p> <p>NO MORE THAN TWO OVER-THE-TOP BROADCAST APPLICATIONS MAY BE MADE FROM CROP EMERGENCE THROUGH THE 4-LEAF (NODE) STAGE OF DEVELOPMENT. NO MORE THAN TWO APPLICATIONS SHOULD BE MADE FROM THE 5-LEAF STAGE THROUGH LAYBY. SEQUENTIAL IN CROP OVER-THE-TOP OR POST-DIRECTED APPLICATIONS OF THIS PRODUCT MUST BE AT LEAST 10 DAYS APART AND COTTON MUST HAVE AT LEAST TWO NODES OF INCREMENTAL GROWTH BETWEEN APPLICATIONS. ALLOW A MINIMUM OF 7 DAYS BETWEEN APPLICATION AND HARVEST.</p>
Selective Equipment	<p>This product may be applied using precision post-directed or hooded sprayers at rates up to 1 quart per acre per application to Roundup Ready cotton through layby. At this stage, post-directed equipment should be used which directs the spray to the base of the cotton plants. Contact of the spray with cotton leaves should be avoided to the maximum extent possible. To minimize spray onto the leaves of the cotton plants, place nozzles in a low position directing a horizontal spray pattern under the cotton leaves to contact weeds in the row, and maintain low spray pressure (less than 30 psi). For best results, make applications while weeds are small (less than 3 inches).</p>	<p>See the "SELECTIVE EQUIPMENT" part of the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information on proper use and calibration of this equipment.</p>
Pre-harvest	<p>This product may be applied for pre-harvest annual and perennial weed control as a broadcast treatment to Roundup Ready cotton after 20 percent boll crack. Up to 2 quarts of this product may be applied using either aerial or ground spray equipment.</p> <p><b>TANK MIXTURES:</b> This product may be tank mixed with DEF™ 6, Folex™, Ginstar, or Prep™ (or generic equivalents).</p> <p><b>NOTE:</b> This product will not enhance the performance of these harvest aids when applied to Roundup Ready cotton.</p>	<p>Allow a minimum of 7 days between application and harvest of cotton.</p> <p>Do not apply this product to cotton grown for seed, as a reduction in germination or vigor may occur.</p> <p>REFER TO MANUFACTURER'S LABELS FOR USE OF ADDITIVES (such as surfactants, stickers and spreaders) FOR PRE-HARVEST APPLICATION TO COTTON.</p>
<b>MAXIMUM ALLOWABLE APPLICATION RATES</b>		
Combined total per year for all applications	8 quarts per acre	
Pre-plant, Pre-emergence, At-Planting applications	5 quarts per acre	
Total in-crop applications from ground cracking to layby	4 quarts per acre	
Maximum pre-harvest application rate	2 quarts per acre	

## 12.6

## ROUNDUP READY® FLEX COTTON

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

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Pre-plant, Pre-emergence, At-planting	This product may be applied before, during or after planting Roundup Ready Flex cotton. Always plant into a weed free seedbed. In no-till and stale seedbed systems, always burn down existing weeds before cotton emerges.	See the "ROUNDUP READY CROPS" section of this label for general precautionary instructions for use in Roundup Ready crops.
Post-emergence (Over-the-Top)	<p>When applied in accordance with this label, this product will control labeled annual grasses and broadleaf weeds in Roundup Ready Flex cotton. To maximize yield potential spray cotton early to eliminate competing weeds. Many perennial weeds will be controlled or suppressed with one or more applications of this product.</p> <p>In general, an initial application of 1.0 quart per acre on 1 to 3 inch tall annual grass and broadleaf weeds is recommended. This product may be applied by ground application equipment at rates up to 1.5 quarts per acre per application post-emergence to Roundup Ready Flex cotton. In addition to broadcast applications, post-directed equipment may be used to achieve weed coverage.</p> <p><b>NOTE:</b> For specific rates of application and instructions, refer to the "ANNUAL WEEDS" and "PERENNIAL WEEDS RATE SECTION" in the label booklet for this product.</p>	<p>The maximum rate for any single in-crop application of this product is 1.5 quart per acre made using ground application equipment.</p> <p>In-crop application rates above 1.0 quart per acre made alone or with the addition of other crop chemical products containing surfactant may cause a crop response including leaf speckling or leaf necrosis.</p> <p>Except for pre-harvest use, do not exceed a maximum rate of 1.0 quart per acre of this product when making applications by air.</p> <p>Between layby and 60 percent open bolls, the maximum combined total rate of this product that may be applied is 2.0 quarts per acre.</p> <p>The maximum combined total of all applications made from crop emergence through 60 percent open bolls must not exceed 6.0 quarts per acre.</p> <p>Application after 10th leaf or 10th node may result in plant injury and yield loss.</p>
Pre-harvest	<p>This product may be applied for pre-harvest annual and perennial weed control as a broadcast treatment to Roundup Ready Flex cotton after 60 percent boll crack. Up to 2.0 quarts of this product may be applied using either aerial or ground spray equipment.</p> <p><b>NOTE:</b> This product will not enhance the performance of harvest aids when applied to Roundup Ready Flex cotton.</p>	<p>Allow a minimum of 7 days between application and harvest of cotton. Do not apply this product to cotton grown for seed, as a reduction in germination or vigor may occur.</p> <p>THE USE OF ADDITIVES, OTHER THAN THOSE LISTED ON THIS LABEL, FOR PREHARVEST APPLICATION TO COTTON IS PROHIBITED.</p>
<b>MAXIMUM ALLOWABLE APPLICATION RATES</b>		
Combined total per year for all applications (Calculate the combined rate to be used for all pre-plant, in-crop and pre-harvest applications)		8.0 quarts per acre
Pre-plant, At-planting, Pre-emergence applications		5.0 quarts per acre
Total in-crop applications from ground cracking to 60 percent open bolls		6.0 quarts per acre
Maximum allowed from 60 percent bolls open to 7 days prior to harvest		2.0 quarts per acre

## 12.7

## ROUNDUP READY SOYBEANS

THE USE OF THIS PRODUCT FOR IN-CROP APPLICATIONS OVER ROUNDUP READY SOYBEANS MAY NOT BE PRACTICED IN CALIFORNIA.

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Pre-plant, Pre-emergence, At-Planting	This product may be applied before, during or after planting soybeans.	See the "ROUNDUP READY CROPS" section of this label for general precautionary instructions for use in Roundup Ready crops.
Post-emergence (In-Crop)	<p>When applied as directed, this product will control labeled annual grasses and broadleaf weeds in Roundup Ready soybeans. Applications of this product can be made in Roundup Ready soybeans from emergence (cracking) throughout flowering. Refer to the "ANNUAL WEEDS RATE TABLE" in this label for rate directions for specific annual weeds, in general, an initial application of 1 quart per acre on 2- to 8-inch tall weeds is recommended. Weeds will generally be 2 to 8 inches tall, 2 to 5 weeks after planting. If the initial application is delayed and weeds are larger, apply a higher specified rate of this product. This product may be used up to 2 quarts per acre in any single in-crop application for control of annual weeds and where heavy weed densities exist.</p> <p>A 1- to 2-quarts per acre rate (single or multiple applications) of this product will control or suppress perennial weeds such as: bermudagrass, Canada thistle, common milkweed, field bindweed, hemp dogbane, horsenettle, marehail (horseweed), nutsedge, quackgrass, rhizome johnsongrass, redvine, trumpet creeper, swamp smartweed and wirestem muhly. For best results, allow perennial weed species to achieve at least 6 inches of growth before spraying with this product.</p> <p>Under adverse growing conditions such as drought, hail, wind damage or a poor soybean stand that slows or delays canopy closure, a sequential application of this may be necessary to control late flushes of weeds. IN THE SOUTHERN STATES, A SEQUENTIAL APPLICATION OF THIS PRODUCT WILL BE REQUIRED TO CONTROL NEW FLUSHES OF WEEDS IN THE ROUNDUP READY SOYBEAN CROP. To control giant ragweed, it is recommended that 1 quart per acre of this product be applied when the weed is 8 to 12 inches tall to increase control and possibly avoid the need for a sequential application.</p>	The combined total application from crop emergence through harvest must not exceed 3 quarts per acre. The maximum rate for any single in-crop application is 2 quarts per acre. The maximum combined total of this product that can be applied during flowering is 2 quarts per acre.
Pre-Harvest	This product provides weed control when applied prior to harvest of soybeans. Up to 1 quart per acre of this product can be applied by aerial or ground application.	Care should be taken to avoid excessive seed shatter loss due to ground application equipment. Allow a minimum of 14 days between final application and harvest of soybean grain or feeding of soybean grain, forage or hay.
Post-Harvest	This product may be applied after harvest of Roundup Ready soybeans. 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.	
<b>MAXIMUM ALLOWABLE APPLICATION RATES</b>		
Combined total per year for all applications		8 quarts per acre
Pre-plant, Pre-emergence, At-Planting applications		5 quarts per acre
Total in-crop applications from cracking throughout flowering		3 quarts per acre
Maximum pre-harvest application rate		1 quart per acre

**12.8****ROUNDUP READY® SUGAR BEETS**

The Roundup Ready designation indicates that the sugar beet contains a patented gene, which provides tolerance to this product. Information on Roundup Ready sugarbeet may be obtained from your seed supplier or Ragan and Massey, Inc. representative. Roundup Ready crop varieties must be purchased from an authorized licensed seed supplier.

Do NOT combine these instructions with other recommendations made for crop varieties that do not contain a Roundup Ready gene listed in the "ANNUAL AND PERENNIAL CROPS (Alphabetical)" sections of this product label booklet.

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Pre-plant, At-Planting, Pre-emergence	This product may be applied before, during or after planting of Roundup Ready sugar beets.	Maximum quantity of this product that may be applied for all pre-plant, at-planting and pre-emergence applications combined is 5.0 quarts per acre per season.
Post-emergence (In-crop)	This product may be applied over the top of Roundup Ready sugar beets for control of annual grasses and broadleaf weeds from emergence to 30 days prior to harvest. To maximize yield potential, spray sugar beets early to eliminate competing weeds. Up to 4 sequential applications of this product may be made with at least 10 days between applications. This product will control or suppress most perennial weeds. For some perennial weeds, repeat applications may be required to eliminate crop competition throughout the growing season.	The combined total application from crop emergence through harvest must not exceed 4.5 quarts per acre. The maximum rate for any single application between emergence to the 8 leaf stage is 1.5 quarts per acre. The maximum rate for any single application between the 8-leaf stage and canopy closure is 1.0 quart per acre. Allow a minimum of 30 days between last application and sugar beet harvest. For any crop NOT listed in the "CROPS" section of this label booklet, applications must be at least 30 days prior to planting.
<b>MAXIMUM ALLOWABLE APPLICATION RATES</b>		
Combined total per year for all application		8.0 quarts per acre
Pre-plant, Pre-emergence applications		5.0 quarts per acre
Emergence to 8 leaf stage		2.5 quarts per acre
Between 8 leaf stage and canopy closure		2.0 quarts per acre

### 13.0

## NON-CROP USES AROUND THE FARMSTEAD

13.1 WEED CONTROL & TRIM-AND-EDGE																																						
<b>LABELLED SITES:</b> Non-crop Areas including building foundations, along and in fences, in dry ditches and canals, along ditchbanks, farm roads, shelter-belts, prior to landscape plantings and equipment storage areas.																																						
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS																																				
Any suitable application equipment described in Section 8.0 of this label	<p>This product may be used to control annual weeds, perennials weeds and woody brush which are found in any part of the farmstead.</p> <p><b>TANK MIXTURES:</b> This product may be tank mixed with the following products (or generic equivalents). Refer to these product labels for approved farmstead sites and application rates. For annual weeds, use 1 quart per acre of this product when weeds are less than 6 inches tall and 1.5 quarts per acre when weeds are greater than 6 inches tall. For perennial weeds, apply 2 to 5 quarts per acre in these tank mixes.</p> <p>For tank mixtures with these products through backpack sprayers, hand-guns or other high-volume spray-to-wet applications, see the "HAND-HELD AND HIGH VOLUME EQUIPMENT" section of this label for specified rates.</p> <table border="0"> <tr> <td>2,4-D</td> <td>Krovar DF</td> <td>Ronstar 50 WP</td> </tr> <tr> <td>Arsenal</td> <td>Oust</td> <td>Sahara</td> </tr> <tr> <td>Barricade 65 WG</td> <td>Pendulum</td> <td>Simazine</td> </tr> <tr> <td>Diuron</td> <td>3.3 EC</td> <td>Surflan</td> </tr> <tr> <td>Elar</td> <td>Pendulum WDG</td> <td>Vanquish</td> </tr> <tr> <td>Endurance</td> <td>Plateau</td> <td></td> </tr> <tr> <td>Escort</td> <td>Princep DF</td> <td></td> </tr> <tr> <td>Karmex DF</td> <td>Princep Liquid</td> <td></td> </tr> </table> <p>For control or partial control of the following perennial weeds, apply 1 to 2 quarts of this product plus 2 to 4 ounces of Oust® per acre.</p> <table border="0"> <tr> <td>Bahiagrass</td> <td>Dock, curly</td> <td>Poorjoe</td> </tr> <tr> <td>Bermudagrass</td> <td>Dogfennel</td> <td>Quackgrass</td> </tr> <tr> <td>Broomsedge</td> <td>Fescue, tall</td> <td>Vaseygrass</td> </tr> <tr> <td>Dallisgrass</td> <td>Johnsongrass</td> <td>Vervain, blue</td> </tr> </table>	2,4-D	Krovar DF	Ronstar 50 WP	Arsenal	Oust	Sahara	Barricade 65 WG	Pendulum	Simazine	Diuron	3.3 EC	Surflan	Elar	Pendulum WDG	Vanquish	Endurance	Plateau		Escort	Princep DF		Karmex DF	Princep Liquid		Bahiagrass	Dock, curly	Poorjoe	Bermudagrass	Dogfennel	Quackgrass	Broomsedge	Fescue, tall	Vaseygrass	Dallisgrass	Johnsongrass	Vervain, blue	This product plus dicamba tank mixtures may not be applied by air in California
2,4-D	Krovar DF	Ronstar 50 WP																																				
Arsenal	Oust	Sahara																																				
Barricade 65 WG	Pendulum	Simazine																																				
Diuron	3.3 EC	Surflan																																				
Elar	Pendulum WDG	Vanquish																																				
Endurance	Plateau																																					
Escort	Princep DF																																					
Karmex DF	Princep Liquid																																					
Bahiagrass	Dock, curly	Poorjoe																																				
Bermudagrass	Dogfennel	Quackgrass																																				
Broomsedge	Fescue, tall	Vaseygrass																																				
Dallisgrass	Johnsongrass	Vervain, blue																																				

13.2 GREENHOUSE/SHADEHOUSE		
<b>LABELLED USES:</b>		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Spot Spray, Directed Spray	This product may be used to control weeds in and around greenhouses and shadehouses.	Air circulation fans must be turned off during application. Desirable vegetation should not be present during application.

13.3 CHEMICAL MOWING		
LABELED USES: Farm Ditches and Other Parts of Farmsteads		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Any suitable application equipment described in Section 8.0 of this label	This product will suppress perennial grasses listed in this section to serve as a substitute for mowing. Use 8 fluid ounces of this product per acre when treating tall fescue, fine fescue, orchardgrass or quackgrass covers. Use 6 fluid ounces of this product per acre when treating Kentucky bluegrass. Use 16 fluid ounces of this product when treating bermudagrass. Use 64 fluid ounces of this product when treating torpedograss or paragrass. Apply treatments in 10 to 20 gallons of spray solution per acre.	Use only in areas where some temporary injury or discoloration of perennial grasses can be tolerated.

13.4 CUT STUMPS														
LABELED USES: Cut Stumps (on any non-crop site listed on this label)														
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS												
Suitable Hand-Held Equipment	<p>This product will control regrowth of cut stumps and resprouts of many types of woody brush and tree species, some of which are listed below. Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut trees or resprouts close to the soil surface. Apply a 50 to 100 percent solution of this product to the freshly-cut surface immediately after cutting. Delays in application may result in reduced performance. For best results, applications should be made during periods of active growth and full leaf expansion.</p> <table border="0"> <tr> <td>Alder</td> <td>Pepper, brazilian</td> <td>Sweetgum</td> </tr> <tr> <td>Eucalyptus</td> <td>Pine, Austrian</td> <td>Tan oak</td> </tr> <tr> <td>Madrone</td> <td>Reed, giant</td> <td>Willow</td> </tr> <tr> <td>Oak</td> <td>Salt cedar</td> <td></td> </tr> </table>	Alder	Pepper, brazilian	Sweetgum	Eucalyptus	Pine, Austrian	Tan oak	Madrone	Reed, giant	Willow	Oak	Salt cedar		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.
Alder	Pepper, brazilian	Sweetgum												
Eucalyptus	Pine, Austrian	Tan oak												
Madrone	Reed, giant	Willow												
Oak	Salt cedar													

13.5 HABITAT MANAGEMENT		
LABELED USES: Habitat Restoration & Maintenance, Wildlife Food Plots		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Any suitable application equipment described in Section 8.0 of this label	<p>This product may be used to control exotic and other undesirable vegetation in habitat management and natural areas including rangeland and wildlife refuges. Applications can be made to allow recovery of native plant species, prior to planting desirable native species, and for similar broad spectrum vegetation control requirements in habitat management areas.</p> <p>Spot treatments can be made to selectively remove unwanted plants for habitat maintenance and enhancement.</p> <p>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.</p>	If tillage is needed to prepare a seedbed, wait 7 days after application before tillage to allow translocation into underground plant parts.

14.1 FORESTRY SITE PREPARATION														
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS												
Boom Sprayers, Shielded Boom Sprayers, High-Volume Off-Center Nozzles, Hand-Held Equipment, And Similar Equipment	<p>This product is recommended for the control or partial control of woody brush, trees and herbaceous weeds in forestry. This product may be used in preparing or establishing wildlife openings with these sites and maintaining logging roads.</p> <p>This product may be used in site preparation prior to planting any tree species, including Christmas trees, eucalyptus, hybrid tree cultivars and silvicultural nursery sites.</p> <p>Use the higher specified rates of this product within the specified range for control or partial control of woody brush, trees and hard-to-control perennial herbaceous weeds. For best results, apply to actively growing woody brush and trees after full leaf expansion and before fall color and leaf drop. Increase rates within the specified range for control of perennial herbaceous weeds any time after emergence and before seedheads, flowers or berries appear.</p> <p>Use the lower rates of this product within the specified range for control of annual herbaceous weeds and actively growing perennial herbaceous weeds after seedheads, flowers or berries appear. Apply to the foliage of actively growing annual herbaceous weeds any time after emergence.</p> <p><b>TANK MIXTURES:</b>            Tank mixtures of this product may be used to increase the spectrum of vegetation controlled. When tank mixing, read and carefully observe the label claims, cautionary statements and all information on the labels of all products used. Use according to the restrictive precautionary statements for each product in the mixture.</p> <p><b>NOTE:</b> For forestry site preparation, make sure the tank-mix product is approved for use prior to planting the desired species. Observe planting interval restrictions.</p> <p>Any specified rate of this product may be used in a tank mix with the following products (or generic equivalents) for forestry site preparation.</p> <table border="0"> <tr> <td>Arsenal</td> <td>Oust or Oust XP</td> <td>Escort or Escort</td> </tr> <tr> <td>Applicators</td> <td>Chopper</td> <td>XP</td> </tr> <tr> <td>Concentrate</td> <td>Garlon 4A</td> <td>Landmark XP</td> </tr> <tr> <td>Garlon 3A</td> <td>Westar</td> <td></td> </tr> </table> <p>For control of herbaceous weeds, use the lower specified tank mixture rates. For control of dense stands or tough-to-control woody brush and trees, use the higher specified rates.</p>	Arsenal	Oust or Oust XP	Escort or Escort	Applicators	Chopper	XP	Concentrate	Garlon 4A	Landmark XP	Garlon 3A	Westar		<p>Do not apply this product as an over-the-top broadcast spray for forestry conifer or hardwood release unless otherwise specified on this label.</p>
Arsenal	Oust or Oust XP	Escort or Escort												
Applicators	Chopper	XP												
Concentrate	Garlon 4A	Landmark XP												
Garlon 3A	Westar													



## 14.2

## NONCROP AREAS &amp; INDUSTRIAL SITES

**LABELLED USES:** Non-crop areas including airports, apartment complexes, Christmas tree farms, commercial sites, Conservation Reserve Program (CRP) areas, ditch banks, dry ditches, dry canals, fencerows, golf courses, greenhouses, industrial sites, landscape areas, lumber yards, manufacturing sites, municipal sites, natural areas, office complexes, ornamentals, parks, parking areas, pastures, petroleum tank farms and pumping installations, plant nurseries, public areas, railroads, rangeland, recreational areas, residential areas, rights-of-way, roadsides, schools, sod or turf seed farms, sports complexes, storage areas, substations, turfgrass areas, utility sites, warehouse areas, and wildlife management areas.

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS																																																
<p>This product may be applied with any suitable application equipment described in Section 8.0 of this label</p>	<p>This product may be used to trim-and-edge around objects in non-crop sites, for spot treatment of unwanted vegetation and to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. This product may be used prior to planting an areas to ornamentals, flowers, turfgrass (sod or seed), or prior to laying asphalt or beginning construction projects.</p> <p>Repeated applications of this product may be used, as weeds emerge, to maintain bare ground.</p> <p><b>TANK MIXTURES:</b> This product may be tank mixed with the following products (or generic equivalents) provided that the specific product is registered for use on the target site. Refer to these product labels for approved sites and application rates. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used. Use according to the most restrictive precautionary statements for each product in the mixture.</p> <p>User is responsible for ensuring that the mixture product's label allows the specific applications.</p> <table border="0"> <tr> <td>2,4-D</td> <td>Gallery 75DF</td> <td>Plateau™</td> </tr> <tr> <td>Arsenal™</td> <td>Garlon™ 3A</td> <td>Poast</td> </tr> <tr> <td>Atrazine</td> <td>Garlon 4</td> <td>Ronstar™ 50 WP</td> </tr> <tr> <td>Barricade™</td> <td>Goal 2XL</td> <td>Simazine</td> </tr> <tr> <td>65WG</td> <td>Krovar™ I DF</td> <td>Surflan™ AS</td> </tr> <tr> <td>Certainty</td> <td>Landmark II MP</td> <td>Surflan WDG</td> </tr> <tr> <td>Crossbow L</td> <td>Landmark II</td> <td>Telar™ DF</td> </tr> <tr> <td>Dicamba*</td> <td>Oust</td> <td>Transline</td> </tr> <tr> <td>Diuron</td> <td>Oust XP</td> <td>Velpar DF</td> </tr> <tr> <td>Endurance™</td> <td>Outrider</td> <td>Velpar L</td> </tr> <tr> <td>Escort™</td> <td>Pendimethalin</td> <td></td> </tr> <tr> <td>Escort XP</td> <td></td> <td></td> </tr> </table> <p>When applied as a tank mixture for bare ground, this product provides control of the emerged annual weeds and control or partial control of emerged perennial weeds, woody brush and trees.</p> <p>For control or partial control of the following perennial weeds, apply 1 to 2 quarts of this product plus 2 to 4 ounces of Oust or Oust XP per acre.</p> <table border="0"> <tr> <td>Bahiagrass</td> <td>Dock, curly</td> <td>Poorjoe</td> </tr> <tr> <td>Bermudagrass</td> <td>Dogfennel</td> <td>Quackgrass</td> </tr> <tr> <td>Broomsedge</td> <td>Fescue, tall</td> <td>Vaseygrass</td> </tr> <tr> <td>Dallisgrass</td> <td>Johnsongrass</td> <td>Vervain, blue</td> </tr> </table>	2,4-D	Gallery 75DF	Plateau™	Arsenal™	Garlon™ 3A	Poast	Atrazine	Garlon 4	Ronstar™ 50 WP	Barricade™	Goal 2XL	Simazine	65WG	Krovar™ I DF	Surflan™ AS	Certainty	Landmark II MP	Surflan WDG	Crossbow L	Landmark II	Telar™ DF	Dicamba*	Oust	Transline	Diuron	Oust XP	Velpar DF	Endurance™	Outrider	Velpar L	Escort™	Pendimethalin		Escort XP			Bahiagrass	Dock, curly	Poorjoe	Bermudagrass	Dogfennel	Quackgrass	Broomsedge	Fescue, tall	Vaseygrass	Dallisgrass	Johnsongrass	Vervain, blue	<p>* This product plus dicamba tank mixtures may not be applied by air in California.</p>
2,4-D	Gallery 75DF	Plateau™																																																
Arsenal™	Garlon™ 3A	Poast																																																
Atrazine	Garlon 4	Ronstar™ 50 WP																																																
Barricade™	Goal 2XL	Simazine																																																
65WG	Krovar™ I DF	Surflan™ AS																																																
Certainty	Landmark II MP	Surflan WDG																																																
Crossbow L	Landmark II	Telar™ DF																																																
Dicamba*	Oust	Transline																																																
Diuron	Oust XP	Velpar DF																																																
Endurance™	Outrider	Velpar L																																																
Escort™	Pendimethalin																																																	
Escort XP																																																		
Bahiagrass	Dock, curly	Poorjoe																																																
Bermudagrass	Dogfennel	Quackgrass																																																
Broomsedge	Fescue, tall	Vaseygrass																																																
Dallisgrass	Johnsongrass	Vervain, blue																																																

14.3 INJECTION & FRILL (Woody Brush & Trees)												
LABELED SITES: Woody brush & Trees in non-crop areas												
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS										
Injection or Frill Applications	<p>Apply this product using suitable equipment which must penetrate into the living tissue. Apply the equivalent of 1 mL of this product per each 2 to 3 inches of trunk diameter at breast height (DBH). This is best achieved by applying a 50 to 100 percent concentration of this product either to a continuous frill around the tree or as cuts evenly spaced around the tree below all branches. As tree diameter increases in size, better results are achieved by applying diluted material to a continuous frill or more closely spaced cuttings.</p> <p>For best results, application should be made during periods of active growth and after full leaf expansion. This product will control many species, some of which are listed below:</p> <table border="0"> <tr> <td><u>Control</u></td> <td><u>Partial Control</u></td> </tr> <tr> <td>Oak</td> <td>Black gum</td> </tr> <tr> <td>Poplar</td> <td>Dogwood</td> </tr> <tr> <td>Sweetgum</td> <td>Hickory</td> </tr> <tr> <td>Sycamore</td> <td>Maple, red</td> </tr> </table>	<u>Control</u>	<u>Partial Control</u>	Oak	Black gum	Poplar	Dogwood	Sweetgum	Hickory	Sycamore	Maple, red	<p>Avoid application techniques that allow runoff to occur from frilled or cut areas in species that exude sap freely. In species such as this, make the frill or cuts at an oblique angle to produce a cupping effect and use a 100 percent concentration of this product.</p>
<u>Control</u>	<u>Partial Control</u>											
Oak	Black gum											
Poplar	Dogwood											
Sweetgum	Hickory											
Sycamore	Maple, red											

14.4 HOLLOW STEM INJECTION		
LABELED SITES: Hollow-stem plants growing in any non-crop site specified on this label.		
TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Hand-Held Injection Devices That Deliver Specified Amounts Of This Product	<p>For control of the following hollow-stem plants, use the application rates below:</p> <p><b>Japanese Knotweed, <i>Polygonum cuspidatum</i></b> Inject 5 mL per stem of this product between second and third internode.</p> <p><b>Bohemian Knotweed, <i>Polygonum bohemicum</i></b> Inject 5 mL per stem of this product between the second and third internode.</p> <p><b>Giant Hogweed, <i>Heracleum mantegazzianum</i></b> Inject one leaf cane per plant 12 inches above the root crown with 5 mL of a 5% v/v solution of this product.</p> <p><b>Poison Hemlock, <i>Conium maculatum</i></b> Inject one leaf cane per plant 10 to 12 inches above the root crown with 5 mL of a 5% v/v solution of this product.</p> <p><b>Field horsetail, <i>Equisetum arvense</i></b> Inject one segment above the root crown with 0.5 mL per stem of this product. Use a small syringe that calibrates to this rate.</p> <p><b>Canada Thistle, <i>Cirsium arvense</i></b> Cut 8 to 9 of the tallest plants at bud stage in a clump with clippers. Use a cavity needle that is pushed into the stem center and then slowly removed as 0.5 mL per stem of this product is injected into the stem.</p>	<p>The combined total for all treatments must not exceed 7 quarts of this product per acre. At 5 mL per stem, 7 quarts should treat approximately 1300 stems per acre.</p>

## 14.5

## ORNAMENTALS, PLANT NURSERIES &amp; CHRISTMAS TREES

**LABELED SITES:** Plant Nurseries, Christmas Tree farms & other non-food tree production sites

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Post-Directed, Trim-and-Edge	<p>This product may be used as a post-directed spray around established woody ornamental species (including arborvitae, azalea, boxwood, crabapple, eucalyptus, euonymus, fir, Douglas fir, jojoba, hollies, lilac, magnolia, maple, oak, poplar, privet, pine, spruce and yew, growing in plant nurseries, on Christmas tree farms, or on other non-food tree production sites), or to trim and edge around trees, buildings, sidewalks, roads, potted plants and other objects in a production setting.</p> <p>Apply at a concentration specified by Section 15.0 or Section 16.0 or Section 17.0 appropriate to the species of weed to be controlled.</p> <p>Desirable plants may be protected from the spray solution by using shields or coverings made of cardboard or other impermeable material.</p>	<p>UNLESS OTHERWISE DIRECTED, THIS PRODUCT IS NOT RECOMMENDED FOR USE AS AN OVER-THE-TOP BROADCAST SPRAY IN ORNAMENTALS AND CHRISTMAS TREES.</p> <p>Care must be taken to avoid contact of spray, drift of mist with foliage or green bark of desirable ornamental species.</p>
Site Preparation	<p>This product may be used prior to planting any tree, shrub or vine, including Christmas tree species, in a nursery or production setting.</p>	
Wiper Application	<p>This product may be used through wick or other suitable wiper applicators to control or partially control undesirable vegetation around established trees, shrubs or vines. See the "SELECTIVE EQUIPMENT" section of this label for further information about the proper use of wiper applicators.</p>	

**14.6****PARKS, RECREATIONAL & RESIDENTIAL AREAS****LABELED SITES:** Around Trees, Fences, Paths, Driveways, Around Buildings, Patios, Sidewalks, Flower Beds, Around Shrubs and other Ornamental Plants

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS
Trim-and-Edge, Spot Treatment	<p>This product may be used to eliminate unwanted weeds growing in areas listed above.</p> <p>Use suitable hand held equipment for directed spraying according to instructions in Section 7.3 "MIXING FOR HAND-HELD SPRAYERS".</p> <p>If necessary, use cardboard or plastic to shield desirable plants.</p> <p>Do not use for spot weed control in lawns since desirable lawn grass will also be killed.</p>	<p>Spray only when air is calm.</p> <p>Care must be taken to avoid contact of spray, drift of mist with foliage or green bark of desirable ornamental species.</p>
Site Preparation, Lawn Renovation	<p>This product may be used prior to planting an area to ornamentals, flowers, turfgrass (sod or seed), lawn renovation or prior to laying asphalt or beginning construction projects.</p> <p>Apply using suitable broadcast or directed spray equipment.</p> <p>For lawn renovation, thorough coverage is necessary to kill all weeds and old lawn.</p> <p>For best results, apply when daytime temperatures are at least 60°F. Do not mow for 7 days before or after treatment.</p> <p>7 days after application, soil may be tilled, fertilized and seeded.</p>	

**LABELED SITES:** Railroad Rights-of-Way, Railroad Ballast areas

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS																											
Boom Sprayers, Shielded Boom Sprayers, High-Volume Off-Center Nozzles, Hand-Held Equipment	<p>All of the instructions in the "NONCROP AREAS AND INDUSTRIAL SITES" section apply to railroads.</p> <p>This product may be used to maintain bare ground on railroad ballast and shoulders. Repeat applications of this product may be used, as weeds emerge, to maintain bare ground. This product may be used to control tall-growing weeds to improve line-of-sight at railroad crossings and reduce the need for mowing along rights-of-way. For crossing applications, up to 80 gallons of spray solution per acre may be used.</p> <p><b>TANK MIXTURES:</b>            This product may be tank mixed with the following products (or generic equivalent) for ballast, shoulder, spot, bare ground and crossing treatments provided that the specific product is registered for use on such sites. Refer to these product labels for approved non-crop sites and application rates. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used. Use according to the most restrictive precautionary statements for each product in the mixture.</p> <table border="0"> <tr> <td>2,4-D</td> <td>GARLON® 3A</td> <td>SAHARA®</td> </tr> <tr> <td>ARSENAL®</td> <td>GARLON® 4A</td> <td>SPIKE®</td> </tr> <tr> <td>DICAMBA</td> <td>HYVAR® X</td> <td>TELAR®</td> </tr> <tr> <td>DIURON</td> <td>KROVAR® I DF</td> <td>VELPAR®</td> </tr> <tr> <td>ESCORT®</td> <td>OUST®</td> <td></td> </tr> </table> <p><b>Brush control</b>            This product may be used to control woody brush and trees on railroad rights-of-way. Apply 4 to 10 quarts of this product per acre as a broadcast spray, using boom-type or boomless nozzles. Up to 80 gallons of spray solution per acre may be used. Apply a 3/4 to 2 percent solution of this product when using high-volume spray-to-wet applications. Apply a 5 to 10 percent solution of this product when using low volume directed sprays for spot treatment. This product may be mixed with the following products (or generic equivalent) for enhanced control of woody brush and trees:</p> <table border="0"> <tr> <td>ARSENAL®</td> <td>KRENITE</td> <td>TRANSLINE</td> </tr> <tr> <td>ESCORT®</td> <td>TELARK DF</td> <td>VANQUISH</td> </tr> <tr> <td>GARLON® 3A</td> <td>TORDON® K</td> <td>VELPAR</td> </tr> <tr> <td>GARLON® 4A</td> <td>TORDON 22K</td> <td></td> </tr> </table>	2,4-D	GARLON® 3A	SAHARA®	ARSENAL®	GARLON® 4A	SPIKE®	DICAMBA	HYVAR® X	TELAR®	DIURON	KROVAR® I DF	VELPAR®	ESCORT®	OUST®		ARSENAL®	KRENITE	TRANSLINE	ESCORT®	TELARK DF	VANQUISH	GARLON® 3A	TORDON® K	VELPAR	GARLON® 4A	TORDON 22K		<p>Observe application precautions in Section 8.0.</p> <p>Avoid application to non-target plants due to drift, overspray or runoff.</p>
2,4-D	GARLON® 3A	SAHARA®																											
ARSENAL®	GARLON® 4A	SPIKE®																											
DICAMBA	HYVAR® X	TELAR®																											
DIURON	KROVAR® I DF	VELPAR®																											
ESCORT®	OUST®																												
ARSENAL®	KRENITE	TRANSLINE																											
ESCORT®	TELARK DF	VANQUISH																											
GARLON® 3A	TORDON® K	VELPAR																											
GARLON® 4A	TORDON 22K																												

**LABELED SITES:** Roadside Rights of Way areas (including Shoulders, Guardrails and Signposts)

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS																					
Boom Sprayers, Shielded Boom Sprayers, High-Volume Off-Center Nozzles, Hand-Held Equipment, And Similar Equipment	<p>All the instructions in the "NONCROP AREAS AND INDUSTRIAL SITES" section apply to roadsides.</p> <p>This product may be used on road shoulders, under guardrails and around signposts and other objects along roadsides that may be obstacles to mowing.</p> <p><b>TANK MIXTURES:</b>            This product may be tank-mixed with the following products (or generic equivalent) for shoulder, guardrail, spot and bare ground treatments:</p> <table border="0"> <tr> <td>2,4-D</td> <td>PENDULUM®</td> <td>RONSTAR® 50</td> </tr> <tr> <td>BANVEL®</td> <td>3.3 EC</td> <td>WP</td> </tr> <tr> <td>DIURON</td> <td>PENDULUM®</td> <td>SAHARA®</td> </tr> <tr> <td>ENDURANCE®</td> <td>WDG</td> <td>SIMAZINE</td> </tr> <tr> <td>ESCORT®</td> <td>PRINCEP® DF</td> <td>SURFLAN®</td> </tr> <tr> <td>KROVAR® I DF</td> <td>PRINCEP®</td> <td>TELAR®</td> </tr> <tr> <td>OUST®</td> <td>LIQUID</td> <td>VANQUISH®</td> </tr> </table> <p>See the "NONCROP AREAS AND INDUSTRIAL SITES" section of this label for general instructions for tank mixing.</p>	2,4-D	PENDULUM®	RONSTAR® 50	BANVEL®	3.3 EC	WP	DIURON	PENDULUM®	SAHARA®	ENDURANCE®	WDG	SIMAZINE	ESCORT®	PRINCEP® DF	SURFLAN®	KROVAR® I DF	PRINCEP®	TELAR®	OUST®	LIQUID	VANQUISH®	<p>Observe application precautions in Section 8.0.</p> <p>Avoid application to non-target plants due to drift, overspray or runoff.</p>
2,4-D	PENDULUM®	RONSTAR® 50																					
BANVEL®	3.3 EC	WP																					
DIURON	PENDULUM®	SAHARA®																					
ENDURANCE®	WDG	SIMAZINE																					
ESCORT®	PRINCEP® DF	SURFLAN®																					
KROVAR® I DF	PRINCEP®	TELAR®																					
OUST®	LIQUID	VANQUISH®																					
Spot treatment	<p>This product may be used as a spot treatment to control unwanted vegetation growing along roadsides.</p>																						

**LABELLED SITES:** Electrical Power, Pipeline and Telephone, Rights-Of-Way, and in Other Sites Associated With These Rights-Of-Way, Including Substations, Roadsides, Railroads Or Similar Rights-Of-Way That Run In Conjunction With Utilities.

TYPES OF APPLICATIONS	USE INSTRUCTIONS	PRECAUTIONS, RESTRICTIONS																														
<p>Boom Sprayers, Shielded Boom Sprayers, High-Volume Off-Center Nozzles, Hand-Held Equipment, And Similar Equipment</p>	<p>This product may be used in utility sites and substations to control unwanted vegetation and to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. This product may be used prior to planting a utility site to ornamentals, flowers, turfgrass (sod or seed), or beginning construction projects.</p> <p>Repeated applications of this product may be used, as weeds emerge, to maintain bare ground.</p> <p>This product can also be used when preparing or establishing wildlife openings within these sites, maintaining access roads and for side trimming along utility rights-of-way.</p> <p>For control of herbaceous weeds, use the lower recommended tank mixture rates. For control of dense stands of tough-to-control woody brush and trees, use the higher recommended rates.</p> <p><b>TANK MIXTURES:</b> Tank mixtures of this product may be used to increase the spectrum of control for herbaceous weeds, woody brush and trees. This product may be tank mixed with the following products or generic equivalent. Refer to these products' labels for approved non-crop sites and application rates. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used. Use according to the most restrictive precautionary statements for each product in the mixture.</p> <p>User is responsible for ensuring that the mixture product's label allows the specific application when tank mixing with a single generic active ingredient listed below.</p> <table border="0"> <tr> <td>2,4-D<sup>1</sup></td> <td>Garlon 4<sup>3</sup></td> <td>Sahara</td> </tr> <tr> <td>Arsenal</td> <td>Krenite</td> <td>Simazine<sup>1</sup></td> </tr> <tr> <td>Atrazine<sup>1</sup></td> <td>Krovar 1 DF</td> <td>Surflan AS</td> </tr> <tr> <td>Barricade 65WG</td> <td>Oust</td> <td>Surflan WDG</td> </tr> <tr> <td>Dicamba<sup>1</sup></td> <td>Oust XP</td> <td>Telar DF</td> </tr> <tr> <td>Diuron<sup>1</sup></td> <td>Outrider</td> <td>Transline</td> </tr> <tr> <td>Endurance</td> <td>Pendimethalin<sup>1</sup></td> <td>Vanquish</td> </tr> <tr> <td>Escort</td> <td>Plateau</td> <td>Velpar DF</td> </tr> <tr> <td>Escort XP</td> <td>Princep</td> <td>Velpar L</td> </tr> <tr> <td>Garlon 3A<sup>2</sup></td> <td>Ronstar 50WP</td> <td></td> </tr> </table> <p><sup>1</sup> Tank mixtures with product containing this generic active ingredient may be made provided the specific product is registered for the use.</p> <p><sup>2</sup> Ensure that Garlon 3A is thoroughly mixed with water according to label directions before adding this product. Have spray mixture agitating at the time this product is added to avoid spray incompatibility problems.</p> <p><sup>3</sup> For side trimming treatments, it is recommended that this product be used alone or in a tank mixture with Garlon 4.</p>	2,4-D <sup>1</sup>	Garlon 4 <sup>3</sup>	Sahara	Arsenal	Krenite	Simazine <sup>1</sup>	Atrazine <sup>1</sup>	Krovar 1 DF	Surflan AS	Barricade 65WG	Oust	Surflan WDG	Dicamba <sup>1</sup>	Oust XP	Telar DF	Diuron <sup>1</sup>	Outrider	Transline	Endurance	Pendimethalin <sup>1</sup>	Vanquish	Escort	Plateau	Velpar DF	Escort XP	Princep	Velpar L	Garlon 3A <sup>2</sup>	Ronstar 50WP		<p>Observe application precautions in Section 8.0.</p> <p>Avoid application to non-target plants due to drift, overspray or runoff.</p>
2,4-D <sup>1</sup>	Garlon 4 <sup>3</sup>	Sahara																														
Arsenal	Krenite	Simazine <sup>1</sup>																														
Atrazine <sup>1</sup>	Krovar 1 DF	Surflan AS																														
Barricade 65WG	Oust	Surflan WDG																														
Dicamba <sup>1</sup>	Oust XP	Telar DF																														
Diuron <sup>1</sup>	Outrider	Transline																														
Endurance	Pendimethalin <sup>1</sup>	Vanquish																														
Escort	Plateau	Velpar DF																														
Escort XP	Princep	Velpar L																														
Garlon 3A <sup>2</sup>	Ronstar 50WP																															

## 15.0

## ANNUAL WEEDS RATE TABLES ALPHABETICALLY BY SPECIES

WATER CARRIER VOLUMES OF 3 TO 10 GALLONS PER ACRE FOR GROUND APPLICATIONS AND 3 TO 5 GALLONS PER ACRE FOR AERIAL APPLICATIONS ARE RECOMMENDED.

- Apply to actively growing annual weeds. Annual weeds are generally easiest to control when they are small.
- Older, mature (hardened) annual weed species may require higher rates even if they meet the size requirements.
- Do not tank mix with soil residual herbicides when using these rates unless otherwise specified.

- For weeds that have been mowed, grazed or cut, allow regrowth to occur prior to treatment.
- This product may be used up to 48 fluid ounces per acre where heavy weed densities exist.

**ANNUAL WEEDS RATE TABLE**

WEED SPECIES	APPLICATION RATE (fluid ounces/acre)				
	16	24	32	40	48
	Maximum height/length (in inches)				
Ammannia, purple	3"	6"	12"	-	18"
Annoda, spurred	-	2"	3"	5"	8"
Barley	18"	18"+	-	-	-
Barnyardgrass	-	3"	6"	7"	9"
Bassia, fivehook	-	-	6"	-	-
Beggarweed, Florida	-	5"	8"	-	-
Bittercress	12"	20"	-	-	-
Bluegrass, annual	10"	-	-	-	-
Bluegrass, bulbous	6"	-	-	-	-
Brome, downy <sup>1,2</sup>	6"	12"	-	-	-
Brome, Japanese	6"	12"	24"	-	-
Browntop panicum	6"	8"	12"	-	24"
Buckwheat, wild <sup>3</sup>	-	1"	2"	-	-
Burcucumber	-	6"	12"	-	18"
Buttercup	12"	20"	-	-	-
Carolina geranium	-	-	4"	-	9"
Carpetweed	-	6"	12"	-	-
Cheat <sup>2</sup>	6"	20"	-	-	-
Chervil	20"	-	-	-	-
Chickweed	-	12"	18"	-	-
Cocklebur	12"	18"	24"	-	36"
Copperleaf, hophornbeam	-	2"	4"	-	6"

(continued)

**ANNUAL WEEDS RATE TABLE (continued)**

WEED SPECIES	APPLICATION RATE (fluid ounces/acre)				
	16	24	32	40	48
	Maximum height/length (in inches)				
Copperleaf, Virginia	-	2"	4"	-	6"
Coreopsis, plains	-	6"	12"	-	18"
Corn, Volunteer	6"	12"	20"	-	-
Corn speedwell	12"	-	-	-	-
Crabgrass	3"	6"	12"	-	-
Crowfootgrass	-	-	6"	-	12"
Cutleaf evening primrose	-	-	3"	-	6"
Devilsclaw (unicorn plant)	-	3"	6"	-	-
Dwarf dandelion	12"	-	-	-	-
Eastern mangrass	8"	12"	-	-	-
Eclipta	-	4"	8"	12"	-
Fall panicum	4"	-	6"	-	12"
Falsedandelion	-	20"	-	-	-
Falseflax, smallseed	12"	-	-	-	-
Fiddleneck	-	6"	12"	-	-
Field pennycress	6"	12"	-	-	-
Filaree	-	-	6"	-	12"
Fleabane, annual	6"	20"	-	-	-
Fleabane, hairy ( <i>Coryza bonariensis</i> )	-	-	6"	-	10"
Fleabane, rough	3"	6"	12"	-	-
Florida pusley	-	-	4"	-	6"

(continued)



ANNUAL WEEDS RATE TABLE (continued)

WEED SPECIES	APPLICATION RATE (fluid ounces/acre)				
	16	24	32	40	48
	Maximum height/length (in inches)				
Foxtail, giant, bristly, yellow	6"	12"	20"	-	-
Foxtail, Carolina	10"	-	-	-	-
Foxtain, green	12"	-	-	-	-
Goatgrass, jointed	6"	12"	-	-	-
Goosegrass	-	3"	6"	-	12"
Grain sorghum (milo)	6"	12"	20"	-	-
Groundcherry	-	3"	6"	-	9"
Groundsel, common	-	6"	10"	-	-
Hemp sesbania	-	2"	4"	6"	8"
Henbit	-	-	6"	-	12"
Horseweed/ Marestail ( <i>Coryza canadensis</i> )	-	6"	12"	-	18"
Itchgrass	6"	8"	12"	-	18"
Jimsonweed	-	-	12"	-	18"
Johnsongrass, seedling	6"	12"	18"	-	24"
Junglerice	-	3"	6"	7"	9"
Knotweed	-	-	6"	-	12"
Kochia <sup>4</sup>	-	3" to 6"	12"	-	-
Lambsquarters	-	6"	12"	-	20"
Little barley	6"	12"	-	-	-
London rocket	6"	-	24"	-	-
Mayweed	-	2"	6"	12"	18"
Morningglory ( <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"	-	-

(continued)

ANNUAL WEEDS RATE TABLE (continued)

WEED SPECIES	APPLICATION RATE (fluid ounces/acre)				
	16	24	32	40	48
	Maximum height/length (in inches)				
Nightshade, black	-	4"	6"	-	12"
Nightshade, hairy	-	4"	6"	-	12"
Oats	3"	6"	18"	-	-
Pigweed	-	12"	18"	24"	-
Prickly lettuce	-	6"	12"	-	-
Purslane	-	-	3"	-	6"
Ragweed, common	-	6"	12"	-	18"
Ragweed, giant	-	6"	12"	-	18"
Red rice	-	-	4"	-	-
Rye, volunteer/ cereal <sup>2</sup>	6"	18"	18"+	-	-
Ryegrass	-	-	6"	-	12"
Sandbur, field	6"	12"	-	-	-
Sandbur, longspine	6"	12"	-	-	-
Shattercane	6"	12"	20"	-	-
Shepherdspurse	6"	12"	-	-	-
Sicklepod	-	2"	4"	-	8"
Signalgrass, broadleaf	-	3"	6"	7"	9"
Smartweed, ladysthumb	-	-	6"	-	9"
Smartweed, Pennsylvania	-	-	6"	-	9"
Sowthistle, annual	-	-	6"	-	12"
Spanishneedles	-	-	6"	-	12"
Speedwell, purslane	12"	-	-	-	-
Sprangletop	6"	12"	20"	-	-
Spurge, prostrate	-	6"	12"	-	-
Spurge, spotted	-	6"	12"	-	-
Spurry, umbrella	6"	-	-	-	-
Stinkgrass	-	12"	-	-	-

(continued)

**ANNUAL WEEDS RATE TABLE** (continued)

WEED SPECIES	APPLICATION RATE (fluid ounces/acre)				
	16	24	32	40	48
	Maximum height/length (in inches)				
Sunflower	12"	18"	-	-	-
Swinecress	-	5"	12"	-	-
Teaweed/Prickly sida	-	2"	4"	-	6"
Texas panicum	6"	8"	12"	-	24"
Thistle, Russian <sup>5</sup>	-	6"	12"	-	-
Velvetleaf	-	-	6"	-	12"
Virginia pepperweed	-	18"	-	-	-
Waterhemp	-	-	6"	-	12"
Wheat <sup>2</sup>	6"	12"	18"	-	-
Wheat (overwintered)	-	6"	12"	-	18"
Wild oats	3"	6"	18"	-	-
Wild proso millet	-	6"	12"	-	18"
Witchgrass	-	12"	-	-	-
Woolly cupgrass	-	6"	12"	-	-
Yellow rocket	-	12"	20"	-	-

- For control of downy brome in no-till systems, use 24 fluid ounces per acre.
- Performance is better if application is made before this weed reaches the boot stage of growth.
- Use 24 fluid ounces per acre of this product to control wild buckwheat in the cotyledon to 2-leaf stage.  
Use 32 fluid ounces per acre to control 2- to 4-leaf wild buckwheat. For improved control of wild buckwheat over 2 inches in size, use sequential treatments of 32 fluid ounces followed by 32 fluid ounces of this product per acre.
- Do not treat Kochia in the button stage.
- Control of Russian thistle may vary based on environmental conditions and spray coverage. Whenever possible, a tank mixture with 2,4-D as described below may improve control.

**15.1 ANNUAL WEEDS -  
Water Carrier Volumes of 10 to 40 Gallons per Acre**

Apply 1 to 2 quarts of this product per acre. Use 1 quart per acre if weeds are less than 6 inches tall and 1.5 quarts per acre if weeds are 6 to 12 inches tall and 2 quarts per acre if weeds are greater than 12 inches tall.

These rates will provide control of weeds listed in the annual weed control tables when water carrier volumes are 10 to 40 gallons per acre for ground applications. Older, mature (hardened) annual weed species may require higher rates even if they meet the size requirements.

**15.2 ANNUAL WEEDS -  
Tank Mixtures with 2,4-D or Dicamba or Picloram 22K**

12 to 16 fluid ounces of this product plus 0.25 pounds a.i. of Dicamba or 0.5 pounds a.i. of 2,4-D per acre or 1 to 2 fluid ounces of Picloram 22K per acre will control the following weeds with the maximum height or length indicated:

6" - prickly lettuce, marestalk/horseweed (*Conyza canadensis*), morning-glory (*Ipomoea* spp.), Kochia (dicamba only); Wild buckwheat (Picloram 22K only)

12" - cocklebur, lambsquarters, pigweed, Russian thistle (2,4-D only).

16 fluid ounces of this product plus 0.5 pounds a.i. of 2,4-D per acre will control the following weeds when they are a maximum height or length of 6 inches: common ragweed, giant ragweed, Pennsylvania smartweed, and velvetleaf.

Refer to the specific product labels for crop rotation restrictions and cautionary statements of all products used in tank mixtures. Some crop injury may occur if dicamba or Picloram 22K is applied within 45 days of planting. DO NOT APPLY DICAMBA TANK MIXTURES BY AIR IN CALIFORNIA.

**15.3 ANNUAL WEEDS -  
Hand-Held or High-Volume Equipment**

For control of weeds listed in the "ANNUAL WEEDS RATE TABLE", apply a 0.5 percent solution of this product to weeds less than 6 inches in height or runner length. Apply prior to seedhead formation in grass or bud formation in broadleaf weeds. For annual weeds over 6 inches tall, or unless otherwise specified, use a 1 percent solution.

For best results, use a 2 percent solution on harder-to-control perennials, such as bermudagrass, dock, field bindweed, hemp dogbane, milkweed and Canada thistle.

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

**15.4 ANNUAL WEEDS -  
Tank Mixtures with Atrazine for Fallow  
and Reduced Tillage Systems**

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

24 to 28 fluid ounces of this product plus 1 to 2 pounds of atrazine per acre will control the following weeds: Barnyardgrass (requires 28 ounces for control), Downy brome, Green foxtail, Lambsquarters, Prickly lettuce, Tansy mustard, Pigweed, Field sandbur, Stinkgrass, Russian thistle, Volunteer wheat, Witchgrass and Kochia (add 1/8 pound of dicamba for control).

## 16.0

## PERENNIAL WEEDS RATE TABLE (ALPHABETICALLY BY SPECIES)

Apply to actively growing perennial weeds.

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

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.

Do not treat when weeds are under drought stress as good soil moisture is necessary for active growth.

For hand-held sprayers, prepare the desired volume of spray solution by mixing the amount of this product in water as shown in the following table:

### Spray Solution

Desired Volume	Amount of This Product					
	1/2%	1%	1 1/2%	2%	5%	10%
1 Gal	2/3 oz	1 1/3 oz	2 oz	2 2/3 oz	6 1/2 oz	13 oz
25 Gal	1 pt	1 qt	1 1/2 qt	2 qt	5 qt	10 qt
100 Gal	2 qt	1 gal	1 1/2 gal	2 gal	5 gal	10 gal

2 tablespoons = 1 fluid ounce

WEED SPECIES	RATE (QT/A)	WATER VOL. (GPA)	HAND-HELD % SOLUTION	COMMENTS
Alfalfa	1 - 2	3 - 10	2%	Make applications 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. Applications should be followed with deep tillage at least 7 days after treatment but before soil freeze-up.
Alligatorweed	4	3 - 20	1.5%	Partial control. Apply when most of the plants are in bloom. Repeat applications will be required to maintain control.
Anise (fennel)	-	-	1 - 2%	Apply as a spray-to-wet treatment. Optimum results are obtained when plants are treated at the bud to full-bloom stage of growth.
Bahiagrass	3 - 5	3 - 20	2%	Apply when most plants have reached the early head stage.
Bentgrass	1.5	10 - 20	2%	For suppression in grass seed production areas. For ground applications only. Ensure entire crown area has resumed growth prior to a fall application. Bentgrass should have at least 3 inches of growth. Tillage prior to treatment should be avoided. Tillage 7 to 10 days after application is recommended for best results.
Bermudagrass	3 - 5	3 - 20	2%	For control, apply 5 quarts of this product per acre. For partial control, apply 3 quarts per acre. Treat when bermudagrass is actively growing and seedheads are present. Retreatment may be necessary to maintain control.
Bermudagrass, water (knotgrass)	1 - 1.5	5 - 10	2%	Apply 1.5 quarts of this product in 5 to 10 gallons of water per acre. Apply when water bermudagrass is 12 to 18 inches in length. Allow 7 or more days before tilling, flushing or flooding the field. Fall applications only: Apply 1 quart of this product in 5 to 10 gallons of water per acre. Fallow fields should be tilled prior to application. Apply prior to frost on water bermudagrass that is 12 to 18 inches in length. This product is not registered in California for use on water bermudagrass.

(continued)

**PERENNIAL WEEDS RATE TABLE** *(continued)*

WEED SPECIES	RATE (QT/A)	WATER VOL. (GPA)	HAND-HELD % SOLUTION	COMMENTS
Bindweed, field	0.5 - 5	3 - 20	2%	<p>Do not treat when weeds are under drought stress as good soil moisture is necessary for active growth.</p> <p>For control, apply 4 to 5 quarts of this product per acre west of the Mississippi River and 3 to 4 quarts east of the Mississippi River. Apply when the weeds are at or beyond full bloom. For best results, apply in late summer or fall. Fall treatments must be applied before a killing frost.</p> <p>Also for control, apply 2 quarts of this product plus 0.5 pounds a.i. of Banvel® in 10 to 20 gallons of water per acre. Do not apply by air.</p> <p>For suppression on irrigated agricultural land, apply 1 to 2 quarts of this product plus 1 pound a.i. of 2,4-D in 10 to 20 gallons of water per acre with ground equipment only. Applications 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. The use of at least one irrigation will promote active bindweed growth.</p> <p>For suppression, apply 16 fluid ounces of this product plus 0.5 pound a.i. 2,4-D in 3 to 10 gallons of water per acre for ground applications and 3 to 5 gallons of water per acre for aerial applications. Apply by air in fallow and reduced tillage systems only. Applications should be delayed until maximum emergence has occurred and when vines are between 6 to 18 inches in length.</p> <p>In California only, apply 1 to 5 quarts of this product per acre. Actual rate needed for suppression or control will vary within this range depending on local conditions. For suppression on irrigated land where annual tillage is performed, apply 1 quart of this product in 3 to 10 gallons of water per acre. Apply to bindweed that has reached a length of 12 inches or greater. Allow maximum weed emergence and runner growth. Allow 3 or more days after application before tillage.</p>
Bluegrass, Kentucky	1 - 2	3 - 40	2%	<p>Apply 2 quarts of this product in 10 to 40 gallons of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 1 to 1.5 quarts of this product in 3 to 10 gallons of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height.</p>
Blueweed, Texas	3 - 5	3 - 40	2%	<p>Apply 4 to 5 quarts of this product per acre west of the Mississippi River and 3 to 4 quarts per acre east of the Mississippi River. Apply when plants are at or beyond full bloom. New leaf development indicates active growth. For best results, apply in late summer or fall. Fall treatments must be applied before a killing frost.</p>
Brackenfern	3 - 4	3 - 40	1 - 1.5%	<p>Apply to fully expanded fronds which are at least 18 inches long.</p>
Bromegrass, smooth	1 - 2	3 - 40	2%	<p>Apply 2 quarts of this product in 10 to 40 gallons of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 1 to 1.5 quarts of this product in 3 to 10 gallons of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height.</p>
Bursage, woolly-leaf	-	3 - 20	2%	<p>For control, apply 2 quarts of this product plus 1 pint of Banvel® per acre. For partial control, apply 1 quart of this product plus 1 pint of Banvel® per acre. Apply when plants are producing new active growth which has been initiated by moisture for at least 2 weeks and when plants are at or beyond flowering.</p>
Canarygrass, reed	2 - 3	3 - 40	2%	<p>For best results, apply when most plants have reached the boot-to-head stage of growth.</p>

*(continued)*

**PERENNIAL WEEDS RATE TABLE** *(continued)*

<b>WEED SPECIES</b>	<b>RATE (QT/A)</b>	<b>WATER VOL. (GPA)</b>	<b>HAND-HELD % SOLUTION</b>	<b>COMMENTS</b>
Cattail	3 - 5	3 - 40	2%	Apply when most plants have reached the early head stage.
Clover; red, white	3 - 5	3 - 20	2%	Apply when most plants have reached the early bud stage. Also for control, apply 16 to 32 fluid ounces of this product plus 1/2 to 1 pound of 2,4-D in 3 to 10 gallons of water per acre.
Cogongrass	3 - 5	10 - 40	2%	Apply when cogongrass is at least 18 inches tall in late summer or fall. Due to uneven stages of growth and the dense nature of vegetation preventing good spray coverage, repeat treatments may be necessary to maintain control.
Dallisgrass	3 - 5	3 - 20	2%	Apply when most plants have reached the early head stage.
Dandelion	3 - 5	3 - 40	2%	Apply when most plants have reached the early bud stage of growth. Also for control, apply 16 fluid ounces of this product plus 0.5 pound a.i. 2,4-D in 3 to 10 gallons of water per acre.
Dock, curly	3 - 5	3 - 40	2%	Apply when most plants have reached the early bud stage of growth. Also for control, apply 16 fluid ounces of this product plus 0.5 pound a.i. 2,4-D in 3 to 10 gallons of water per acre.
Dogbane, hemp	4	3 - 40	2%	Apply when most plants have reached the late bud to flower stage of growth. Following crop harvest or mowing, allow weeds to regrow to a mature stage prior to treatment. For best results, apply in late summer or fall. For suppression, apply 16 fluid ounces of this product plus 0.5 pound a.i. 2,4-D in 3 to 10 gallons of water per acre for ground applications and 3 to 5 gallons of water per acre for aerial applications. Delay applications until maximum emergence of dogbane has occurred.
Fescue (except tall)	3 - 5	3 - 20	2%	Apply when most plants have reached the early head stage.
Fescue, tall	1 - 3	3 - 40	2%	Apply 3 quarts of this product per acre when most plants have reached boot-to-early seedhead stage of development. Fall applications only: Apply 1 quart of this product in 3 to 10 gallons of water per acre. Apply to fescue in the fall when plants have 6 to 12 inches of new growth. A sequential application of 1 pint per acre of this product will improve long-term control and control seedlings germinating after fall treatments or the following spring.
Guineagrass	2 - 3	3 - 40	1%	Apply when most plants have reached at least the 7-leaf stage of growth. Ensure thorough coverage when using hand-held equipment.
Horsenettle	3 - 5	3 - 20	2%	Apply when most plants have reached the early bud stage.
Horseradish	4	3 - 40	1%	Apply when most plants have reached the late bud to flower stage of growth. For best results, apply in late summer or fall.
Iceplant	-	-	1.5 - 2%	Iceplant should be at or beyond the early bud stage of growth. Thorough coverage is necessary for best control.
Jerusalem artichoke	3 - 5	3 - 20	2%	Apply when most plants are in the early bud stage.

*(continued)*

**PERENNIAL WEEDS RATE TABLE** *(continued)*

WEED SPECIES	RATE (QT/A)	WATER VOL. (GPA)	HAND-HELD % SOLUTION	COMMENTS
Johnsongrass	0.5 - 3	3 - 40	1%	<p>In annual cropping systems apply 1 to 2 quarts of this product per acre. Apply 1 quart of this product in 3 to 10 gallons of water per acre. Use 2 quarts of this product when applying 10 to 40 gallons of water per acre. In non-crop, or areas where annual tillage (no-till) is not practiced, apply 2 to 3 quarts of this product in 10 to 40 gallons of water per acre.</p> <p>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 the 1 quart per acre rate.</p> <p>For burndown of Johnsongrass, apply 1 pint of this product in 3 to 10 gallons of water per acre before the plants reach a height of 12 inches. For this use, allow at least 3 days after treatment before tillage.</p> <p>Spot treatment (partial control or suppression) - Apply a 1 percent solution of this product when Johnsongrass is 12 to 18 inches in height. Coverage should be uniform and complete.</p>
Kikuyugrass	2 - 3	3 - 40	2%	Spray when most kikuyugrass is at least 8 inches in height (3 or 4-leaf stage of growth). Allow 3 or more days after application before tillage.
Knapweed	4	3 - 40	2%	Apply when most plants have reached the late bud to flower stage of growth. For best results, apply in late summer or fall.
Lantana	-	-	1 - 1.25%	Apply at or beyond the bloom stage of growth. Use the higher application rate for plants that have reached the woody stage of growth.
Lespedeza	3 - 5	3 - 20	2%	Apply when most plants have reached the early bud stage.
Milkweed, common	3	3 - 40	2%	Apply when most plants have reached the late bud to flower stage of growth.
Muhly, wirestem	1 - 2	3 - 40	2%	Use 1 quart of this product in 3 to 10 gallons of water per acre. Use 2 quarts of this product when applying 10 to 40 gallons of water per acre or in pasture, sod, or noncrop areas. Spray when the wirestem muhly is in 8 inches or more in height. Do not till between harvest and fall applications or in the fall or spring prior to spring applications. Allow 3 or more days after application before tillage.
Mullein, common	3 - 5	3 - 20	2%	Apply when most plants are in the early bud stage.
Napiergrass	3 - 5	3 - 20	2%	Apply when most plants are in the early head stage.
Nightshade, silverleaf	2	3 - 10	2%	Applications should be made when at least 60 percent of the plants have berries. Fall treatments must be applied before a killing frost.

*(continued)*

**PERENNIAL WEEDS RATE TABLE** *(continued)*

WEED SPECIES	RATE (QT/A)	WATER VOL. (GPA)	HAND-HELD % SOLUTION	COMMENTS
Nutsedge; purple, yellow	0.5 - 3	3 - 40	1 - 2%	<p>Apply 3 quarts of this product per acre or apply a 1 to 2 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 which have not germinated will not be controlled and may germinate following treatment. Repeat treatments will be required for long-term control of ungerminated tubers.</p> <p>Sequential applications: 1 to 2 quarts of this product in 3 to 10 gallons of water per acre will also provide control. Make applications when a majority of the plants are in the 3 to 5-leaf stage (less than 6 inches tall). Repeat this application, as necessary, when newly emerging plants reach the 3 to 5-leaf stage. Subsequent applications will be necessary for long-term control.</p> <p>For partial control of existing plants, apply 1 pint to 2 quarts of this product in 3 to 40 gallons of water per acre. Treat when plants have 3 to 5 leaves and most are less than 6 inches tall. Repeat treatments will be required to control subsequent emerging plants or regrowth of existing plants.</p>
Orchardgrass	1 - 2	3 - 40	2%	<p>Apply 2 quarts of this product in 10 to 40 gallons of water per acre when most plants have reached boot-to-early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 1 to 1.5 quarts of this product in 3 to 10 gallons of water per acre. Apply to actively growing plants when most have reached 4 to 12 inches in height.</p> <p>Orchardgrass sods going to no-till corn: Apply 1 to 1.5 quarts of this product in 3 to 10 gallons of water per acre. Apply to orchardgrass that is a minimum of 12 inches tall for spring applications and 6 inches tall for fall applications. Allow at least 3 days following application before planting. A sequential application of atrazine will be necessary for optimum results.</p>
Pampasgrass	-	-	1.5 - 2%	Pampasgrass should be at or beyond the boot stage of growth. Thorough coverage is necessary for best control.
Paragrass	3 - 5	3 - 20	2%	Apply when most plants are in the early head stage.
Phragmites	3 - 5	10 - 40	1 - 2%	For partial control. For best results, treat during late summer or fall months or when plants are actively growing and in full bloom. Treatment before or after this stage may lead to reduced control. Due to the dense nature of the vegetation, which may prevent good spray coverage or uneven stages of growth, repeat treatments may be necessary to maintain control. Visual control symptoms will be slow to develop.
Poison hemlock	-	-	1 - 2%	Apply as a spray-to-wet treatment. Optimum results are obtained when plants are treated at the bud to full-bloom stage of growth.
Pokeweed, common	1	3 - 40	2%	Apply to actively growing plants up to 24 inches tall.
Quackgrass	1 - 3	3 - 40	2%	<p>In annual cropping systems, or in pastures and sods followed by deep tillage: Apply 1 quart of this product in 3 to 10 gallons of water per acre. For 10 to 40 gallons of water per acre, apply 2 quarts of this product. Do not tank mix with residual herbicides when using the 1 quart rate. Spray when quackgrass is 6 to 8 inches in height. Do not till between harvest and fall applications or in fall or spring prior to spring application. Allow 3 or more days after application before tillage. In pastures or sods, use a moldboard plow for best results.</p> <p>In pastures, sods or noncrop areas where deep tillage does not follow application: Apply 2 to 3 quarts of this product in 10 to 40 gallons of water per acre when the quackgrass is greater than 8 inches tall.</p>

*(continued)*

**PERENNIAL WEEDS RATE TABLE** *(continued)*

<b>WEED SPECIES</b>	<b>RATE (QT/A)</b>	<b>WATER VOL. (GPA)</b>	<b>HAND-HELD % SOLUTION</b>	<b>COMMENTS</b>
Redvine	0.75 - 2	5 - 10	2%	For suppression, apply 24 fluid ounces of this product per acre at each of two applications 7 to 14 days apart or a single application of 2 quarts per acre. Apply specified rates in 5 to 10 gallons of water per acre. Apply in late September or early October to plants which are at least 18 inches tall and have been growing 45 to 60 days since the last tillage operation. Make applications at least 1 week before a killing frost.
Reed, giant	-	-	2%	Best results are obtained when applications are made in late summer to fall.
Ryegrass, perennial	1 - 3	3 - 40	1%	In annual cropping systems apply 1 to 2 quarts of this product per acre. Apply 1 quart of this product in 3 to 10 gallons of water per acre. Use 2 quarts of this product when applying 10 to 40 gallons of water per acre. In non-crop, or areas where annual tillage (no-till) is not practiced, apply 2 to 3 quarts of this product in 10 to 40 gallons water per acre.  For best results, apply when most plants have reached the boot-to-head stage of growth or in the fall prior to frost. Do not tank-mix with residual herbicides when using the 1 quart per acre rate.
Smartweed, swamp	3 - 5	3 - 40	2%	Apply when most plants have reached the early bud stage of growth. Also for control, apply 16 fluid ounces of this product plus 0.5 pound a.i. 2,4-D in 3 to 10 gallons of water per acre in the late summer or fall.
Sowthistle, perennial	2 - 3	3 - 40	2%	Apply when most plants are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late summer or fall, allow at least 4 weeks for initiation of active growth and rosette development prior to the application of this product. Fall treatments must be applied before a killing frost. Allow 3 or more days after application before tillage.
Spurge, leafy	-	3 - 10	2%	For suppression, apply 16 fluid ounces of this product plus 0.5 pound a.i. 2,4-D in 3 to 10 gallons of water per acre in the late summer or fall. If mowing has occurred prior to treatment, apply when most of the plants are 12 inches tall.
Starthistle, yellow	2	10 - 40	2%	Best results are obtained when applications are made during the rosette, bolting and early flower stages.
Sweet potato, wild	-	-	2%	Partial control. Apply to plants that are at or beyond the bloom stage of growth. Repeat applications may be required.
Thistle, artichoke	-	-	2%	Partial control. Apply to plants that are at or beyond the bloom stage of growth. Repeat applications may be required.
Thistle, Canada	2 - 3	3 - 40	2%	Apply when most plants are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late summer or fall, allow at least 4 weeks for initiation of active growth and rosette development prior to the application of this product. Fall treatments must be applied before a killing frost. Allow 3 or more days after application before tillage.  For suppression, apply 1 quart of this product, or 1 pint of this product plus 0.5 pound a.i. 2,4-D, in 3 to 10 gallons of water per acre in the late summer or fall after harvest, mowing or tillage. Allow rosette regrowth to a minimum of 6 inches in diameter before treating. Applications can be made as long as leaves are still green and plants are actively growing at the time of application. Allow 3 or more days after application before tillage.
Timothy	2 - 3	3 - 40	2%	For best results, apply when most plants have reached the boot-to-head stage of growth.

*(continued)*



PERENNIAL WEEDS RATE TABLE (continued)

WEED SPECIES	RATE (QT/A)	WATER VOL. (GPA)	HAND-HELD % SOLUTION	COMMENTS
Torpedograss	4 - 5	3 - 40	2%	For partial control. Apply when most plants are at or beyond the seedhead stage of growth. Repeat applications will be required to maintain control. Fall treatments must be applied before frost.
Trumpetcreeper	2	5 - 10	2%	Partial control. Apply in late September or October, to plants which are at least 18 inches tall and have been growing 45-60 days since the last tillage operation. Make applications at least 1 week before a killing frost.
Vaseygrass	3 - 5	3 - 20	2%	Apply when most plants are in the early head stage.
Velvetgrass	3 - 5	3 - 20	2%	Apply when most plants are in the early head stage.
Wheatgrass, western	2 - 3	3 - 40	2%	For best results, apply when most plants have reached the boot-to-head stage of growth.

### 16.1 PERENNIAL WEEDS - Bromus Species and Medusahead

For use in the States of Colorado, Idaho, Iowa, Kansas, Montana, Nebraska, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming Only

**Bromus Species:** This product may be used to treat downy brome (*Bromus tectorum*), Japanese brome (*Bromus japonicus*), soft chess (*Bromus mollis*) and cheatgrass (*Bromus secalinus*) found in industrial, rangeland and pasture sites. Apply 8 to 16 fluid ounces of this product per acre on a broadcast basis. For best results, treatment should coincide with early seedhead emergence of the most mature plants. Delaying the application until this growth stage will maximize the emergence of other weedy grass flushes. Applications should be made to the same site each year until seed banks are depleted and the desirable perennial grasses are able to become reestablished on the site.

**Medusahead:** To treat medusahead, apply 16 fluid ounces of this product per acre as soon as plants are actively growing, and prior to the 4 leaf stage. Applications may be made in the fall and spring.

**Application equipment and techniques:** Applications may be made using ground or aerial equipment. Aerial applications for these uses may be made using fixed wing or helicopter equipment. For aerial applications, apply in 2 to 10 gallons of water per acre. For applications using ground equipment, apply in 10 to 20 gallons of water per acre.

When applied as directed there are no grazing restrictions.

### 17.0 WOODY BRUSH AND TREES RATE TABLE ALPHABETICALLY BY SPECIES

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

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

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

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

WEED SPECIES	RATE (QT/A)	HAND-HELD % SOLUTION	COMMENTS
Alder	3 - 4	1 - 1.5%	For control
Ash	2 - 5	1 - 2%	Partial control
Aspen, quaking	2 - 3	1 - 1.5%	For control
Bearmat (Bearclover)	2 - 5	1 - 2%	Partial control
Beech	2 - 5	1 - 2%	Partial control
Birch	2	1%	For control

(continued)

**WOODY BRUSH AND TREES RATE TABLE** *(continued)*

<b>WEED SPECIES</b>	<b>RATE (QT/A)</b>	<b>HAND-HELD % SOLUTION</b>	<b>COMMENTS</b>
Blackberry	3 - 4	1 - 1.5%	For control. Make applications after plants have reached full leaf maturity. Best results are obtained when applications are made in late summer or fall. Applications may also be made after leaf drop and until a killing frost or as long as stems are green. After berries have set or dropped in late fall, blackberry can be controlled by applying a 3/4 percent solution of this product. For control of blackberries after leaf drop and until a killing frost or as long as stems are green, apply 3 to 4 quarts of this product in 10 to 40 gallons of water per acre.
Blackgum	2 - 5	1 - 2%	For control
Bracken	2 - 5	1 - 2%	For control
Broom; French, Scotch	-	1.5 - 2%	For control
Buckwheat, California	-	1 - 2%	For partial control. Thorough coverage of foliage is necessary for best results.
Cascara	2 - 5	1 - 2%	Partial control
Catsclaw	-	1 - 1.5%	Partial control
Ceanothus	2 - 5	1 - 2%	Partial control
Chamise	-	1%	For control. Thorough coverage of foliage is necessary for best results.
Cherry; bitter, black, pin	2 - 3	1 - 1.5%	For control
Coyote brush	-	1.5 - 2%	For control. Apply when at least 50 percent of the new leaves are fully developed.
Dogwood	2 - 5	1 - 2%	Partial control
Elderberry	2	1%	For control
Elm	2 - 5	1 - 2%	Partial control
Eucalyptus	-	2%	For control of eucalyptus resprouts, apply when resprouts are 6 to 12 feet tall. Ensure complete coverage. Avoid application to drought-stressed plants.
Florida holly (Brazilian Peppertree)	2 - 5	1 - 2%	Partial control
Gorse	2 - 5	1 - 2%	Partial control
Hasardia	-	1 - 2%	Partial control. Thorough coverage of foliage is necessary for best results.
Hawthorn	2 - 3	1 - 1.5%	For control
Hazel	2	1%	For control
Hickory	2 - 5	1 - 2%	Partial control
Honeysuckle	3 - 4	1 - 1.5%	For control
Hornbeam, American	2 - 5	1 - 2%	Partial control
Kudzu	4	2%	For control. Repeat applications may be required to maintain control.

*(continued)*

**WOODY BRUSH AND TREES RATE TABLE** *(continued)*

<b>WEED SPECIES</b>	<b>RATE (QT/A)</b>	<b>HAND-HELD % SOLUTION</b>	<b>COMMENTS</b>
Locust, black	2 - 4	1 - 2%	Partial control
Madrone resprouts	-	2%	Partial control. Apply to resprouts that are 3 to 6 feet tall. Best results are obtained with spring/early summer treatments.
Manzanita	2 - 5	1 - 2%	Partial control
Maple, red	2 - 4	1 - 1.5%	For control, apply a 1 to 1.5 percent solution when at least 50 percent new leaves are fully developed. For partial control, apply 2 to 4 quarts of this product per acre.
Maple, sugar	-	1 - 1.5%	For control. Apply when at least 50 percent of the new leaves are fully developed.
Monkey flower	-	1 - 2%	Partial control. Thorough coverage of the foliage is necessary for best results.
Oak; black, white	2 - 4	1 - 2%	Partial control
Oak, post	3 - 4	1 - 1.5%	For control
Oak; northern, pin	-	1 - 1.5%	For control. Apply when at least 50 percent of the new leaves are fully developed.
Oak; southern, red	2 - 3	1 - 1.5%	For control
Persimmon	2 - 5	1 - 2%	Partial control
Pine	2 - 5	1 - 2%	For control
Poison ivy/Poison Oak	4 - 5	2%	For control. Repeat applications may be required to maintain control. Fall treatments must be applied before leaves lose green color.
Poplar, yellow	2 - 5	1 - 2%	Partial control
Redbud, eastern	2 - 5	1 - 2%	For control
Rose, multiflora	2	1%	For control. Treatments should be made prior to leaf deterioration by leaf-eating insects.
Russian olive	2 - 5	1 - 2%	Partial control
Sage, black	-	1%	For control. Thorough coverage of foliage is necessary for best results.
Sage, white	2 - 5	1 - 2%	Partial control
Sage brush, California	-	1%	For control. Thorough coverage of foliage is necessary for best results.
Salmonberry	2	1%	For control
Salt-cedar	2 - 5	1 - 2%	For control
Sassafras	2 - 5	1 - 2%	Partial control
Sourwood	2 - 5	1 - 2%	Partial control
Sumac; poison, smooth, winged	2 - 4	1 - 2%	Partial control
Sweetgum	2 - 3	1 - 1.5%	For control

*(continued)*

**WOODY BRUSH AND TREES RATE TABLE** *(continued)*

<b>WEED SPECIES</b>	<b>RATE (QT/A)</b>	<b>HAND-HELD % SOLUTION</b>	<b>COMMENTS</b>
Swordfern	2 - 5	1 - 2%	Partial control
Tallowtree, Chinese	-	1%	For control. Thorough coverage of foliage is necessary for best results.
Tan oak resprouts	-	2%	For partial control. Apply to resprouts that are less than 3 to 6 feet tall. Best results are obtained with fall applications.
Thimbleberry	2	1%	For control
Tobacco, tree	-	1 - 2%	Partial control
Trumpetcreeper	2 - 3	1 - 1.5%	For control
Vine maple	2 - 5	1 - 2%	Partial control
Virginia creeper	2 - 5	1 - 2%	Partial control
Waxmyrtle, southern	2 - 5	1 - 2%	Partial control
Willow	3	1%	For control

**CONDITIONS OF SALE AND WARRANTY**

The DIRECTIONS FOR USE of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Ragan and Massey, Inc., its Supplemental Distributors, or the Seller. All such risks shall be assumed by the Buyer.

Ragan and Massey, Inc., its Supplemental Distributors and the Seller warrant that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks referred to above. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NEITHER RAGAN AND MASSEY, INC. NOR ITS SUPPLEMENTAL DISTRIBUTORS MAKE ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE TOTALLY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND THE EXCLUSIVE LIABILITY OF RAGAN AND MASSEY, INC., ITS SUPPLEMENTAL DISTRIBUTORS AND THE SELLER FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF OR THE REPAYMENT OF THE PURCHASE PRICE FOR THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. When buyer suffers losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability, or other legal theories), Buyer must promptly notify Seller in writing of any claims to be eligible to receive either

remedy stated above. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO CASE SHALL RAGAN AND MASSEY, INC., ITS SUPPLEMENTAL DISTRIBUTORS, OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OF HANDLING OF THIS PRODUCT. Ragan and Massey, Inc., its Supplemental Distributors, and the Seller offer this product, and the Buyer accepts it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of Ragan and Massey, Inc.

No employee of Ragan and Massey, Inc., its Supplemental Distributor, or the Seller is authorized to vary or exceed the terms of this Warranty in any other manner.

Folex® is a registered trademark of Bayer CropScience.

Prep™ is a trademark of Bayer CropScience.

Banvel®, Clarity®, Frontier®, Guardsman®, Marksman®, Prowl®, Pursuit®, Pursuit® Plus, Scepter® and Squadron® are registered trademarks of BASF Corporation.

DEF® and Sencor® are registered trademarks of Bayer Corporation.

Broadstrike®, Goal®, Surflan®, Surpass® and TopNotch® are registered trademarks of Dow AgroSciences LLC.

Bladex®, Canopy®, Extrazine®, Gemini®, Krovar®, Lexone® and Preview® are registered trademarks of E.I. DuPont de Nemours and Company.

Command® is a registered trademark of FMC Corporation.

Bullet®, Harness®, Lariat®, Lasso®, Micro-Tech®, Partner®, Permit®, and Round-up Ready® are registered trademarks of Monsanto Co.

Sim-trol is a trademark of Oxon Italia Company.

Bicep®, Dual®, Fusion®, Princep®, Solicam®, and Turbo® are registered trademarks of Syngenta Crop Protection, Inc.

Devrinol® is a registered trademark of United Phosphorus Inc.

Farm General™ is a registered trademark of Tangi-Pac, L.L.C.

# FARM GENERAL™ 41% GLYPHOSATE GRASS & WEED KILLER

**ACTIVE INGREDIENT:**

\*Glyphosate, N-(phosphonomethyl) glycine, in the form of its isopropylamine salt ..... 41.0%

**OTHER INGREDIENTS:** ..... 59.0%

**TOTAL:** ..... 100.0%

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

## KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER	
For 24 Hour Medical Emergency Assistance (Human or Animal) call 1-800-308-1241 or for Chemical Emergency Assistance (Spill, Leak, Fire or Accident) call CHEMTREC at 1-800-424-9300.	

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

**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)

Applicators and other handlers must wear:

1. Long-sleeved shirt and long pants,
2. Shoes plus 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 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.

Read the entire label before using this product. Use only according to label instructions.

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

**See Attached Booklet for Complete Precautionary Statements, Directions for Use and Storage and Disposal.**

Manufactured For:  
**Ragan and Massey, Inc.**  
101 Ponchatoula Parkway  
Ponchatoula, LA 70454  
(800) 264-5281  
info@raganandmassey.com

Farm General™ is a registered trademark of Tangi•Pac, L.L.C.

**EPA Reg. No. 84009-12**  
**EPA Est. No. 084840-LA-001**  
**0917(01)**

USER SAFETY RECOMMENDATIONS
<p><b>Users should:</b></p> <ul style="list-style-type: none"> <li>• Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.</li> <li>• Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.</li> </ul>

#### ENVIRONMENTAL HAZARDS

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

#### PHYSICAL OR CHEMICAL HAZARDS

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

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