



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (H7505C)  
401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg. Number:

51036-333

Date of Issuance:

MAY - 9 2000

**NOTICE OF PESTICIDE:**

- Registration
- Reregistration

(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

Gly-Flo Reduced Tillage

Name and Address of Registrant (include ZIP Code):

Micro Flo Co.  
P.O. Box 772099  
Memphis, TN 38117

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit/cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.
2. Add the phrase "EPA Registration No. 51036-333." to your label before you release the product for shipment.
3. Submit three (3) copies of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of this product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

VKw

Signature of Approving Official:

Date:

5-9-00

### GLY-FLO REDUCED TILLAGE

Herbicide for control of annual and perennial weeds in Colorado, Idaho, Kansas\*, Minnesota\*, Montana, Nebraska\*, Nevada\*, North Dakota, Oklahoma\*, Oregon\*, South Dakota, Utah, Washington\* and Wyoming. \*(Refer to restricted county list at end of label)

AVOID CONTACT WITH FOLIAGE, GREEN STEMS, OR FRUIT OF CROPS, DESIRABLE PLANTS AND TREES, SINCE SEVERE INJURY OR DESTRUCTION MAY RESULT.

ACTIVE INGREDIENT:

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

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

KEEP OUT OF REACH OF CHILDREN

WARNING! AVISO!

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID

IF IN EYES: Hold eyelids open and flush with steady, gentle stream of water for 15 minutes. Get medical attention.

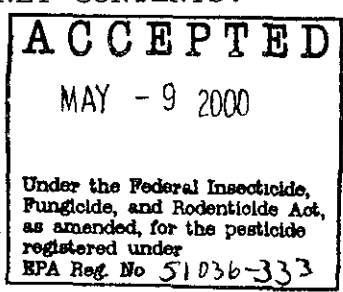
IF SWALLOWED: Drink promptly a large quantity of milk. If milk is not available drink large quantities of water. Avoid alcohol.

IF INHALED: Remove individual to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

EPA Reg. No. 51036-666

EPA Est. No. 51036-CA-001

NET CONTENTS:



Manufactured By:  
 MICRO FLO COMPANY  
 P.O. BOX 772099  
 MEMPHIS, TN 38117

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING! CAUSES SUBSTANTIAL BUT TEMPORARY EYE INJURY. HARMFUL IF SWALLOWED OR INHALED. Do not get in eyes or on clothing. Avoid breathing vapor or spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- 1. Long-sleeved shirt and long pants
- 2. Shoes plus socks
- 3. Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

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

In case of emergency involving this product, Call 1-800-451-8461.

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 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.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling.

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

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

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

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

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 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, are:

- 1. Coveralls
- 2. Waterproof gloves
- 3. Shoes plus socks
- 4. Protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the 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 to prevent transfer of this product onto desirable vegetation.

For more product information, call toll-free 1-800-451-8461.

STORAGE AND DISPOSAL

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

**STORAGE:** 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 containers to mix well before using. For bulk containers, see container label.

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

GENERAL INFORMATION

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

This product, a water-soluble liquid, mixes readily with water to be applied as a foliar spray for the control or destruction of most herbaceous plants. It may be applied through most standard industrial or field-type sprayers after dilution and thorough mixing with water in accordance with label instructions.

This product moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 2 to 4 days but on most perennial weeds may not occur for 7 days or more. Extremely cool or cloudy weather following treatment may slow activity of this product and delay visual effects of control. Visible effects are a gradual wilting and yellowing of the plant, which advances

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to complete browning of above ground growth and deterioration of underground plant parts.

Unless otherwise specified on this label, delay application until vegetation has emerged and reached the stages described for control of such vegetation under the "WEEDS CONTROLLED" section of this label. Unemerged plants arising from unattached underground rhizomes or rootstocks of perennials will not be affected by the herbicide and will continue to grow. For this reason, best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity.

Always use the higher rate of this product per acre within the recommended range when (1) weed growth is heavy or dense, or (2) weeds are growing in an undisturbed (noncultivated) area.

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

This product is recommended for control of emerged weeds prior to establishment of labeled crops. Large amounts of green or decaying vegetation left standing or incorporated into the seedbed may enhance the development of disease in newly planted crops. This may result in poor emergence and/or stands, especially under cool and/or wet conditions.

Spraying early to control young weeds before dense stands develop or light cultivation to assist weed decay will favor preparation of suitable seedbeds.

In reduced tillage and no-till systems, ensure good seed to soil contact and proper seeding depth.

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.

Rainfall or irrigation occurring within 6 hours after application may reduce effectiveness. Heavy rainfall or irrigation within 2 hours after application may wash the chemical off the foliage and a repeat treatment may be required.

This product does not provide residual weed control. 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.

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 labeling. Mixing this product with herbicides or other materials not recommended on this label may result in reduced performance.

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

ATTENTION

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

Do not allow the herbicide solution to mist, drip, drift, or splash onto desirable vegetation since minute quantities of this herbicide can cause severe damage or destruction to the crop, plants, or other areas on which treatment was not intended. The likelihood of injury occurring from the use of this product is greatest when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow spray drift to occur. The use of properly adjusted windshields attached to spray booms aid in preventing drift. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) which are likely to drift. AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE.

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

MIXING ADDITIVES AND APPLICATION INSTRUCTIONS

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

MIXING

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

## TANK MIXTURES

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

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

1. Place a 20 to 35 mesh screen or wetting basket over filling port.
2. Through the screen, fill the sprayer tank one-half full with water and start agitation.
3. If a wettable powder is used, make a slurry with the water carrier, and add it SLOWLY through the screen into the tank. Continue agitation.
4. If a flowable formulation is used, premix one part flowable with one part water. Add diluted mixture SLOWLY through the screen into the tank. Continue agitation.
5. If an emulsifiable concentrate formulation is used, premix one part emulsifiable concentrate with two parts water. Add diluted mixture slowly through the screen into the tank. Continue agitation.
6. Continue filling the sprayer tank with water and add the required amount of this product near the end of the filling process.
7. Where nonionic surfactant is recommended, add this to the spray tank before completing the filling process.
8. Add individual formulations to the spray tank as follows: wettable powder, flowable, emulsifiable concentrate, drift control additive, water soluble liquid followed by surfactant.

Maintain good agitation at all times until the contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed.

Keep by-pass line on or near bottom of tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50 mesh. Carefully select proper nozzle to avoid spraying a fine mist. For best results with conventional ground application equipment, use flat fan nozzles.

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



## ADDITIVES

## SURFACTANTS

Nonionic surfactants which have at least 70 percent active ingredient and are labeled for use with herbicides may be used. Do not reduce rates of this herbicide when adding surfactant. When adding additional surfactant or when label instructions require the use of additional surfactant, use 0.5 percent surfactant concentration (2 quarts per 100 gallons of spray solution). Read and carefully observe surfactant cautionary statements and other information appearing on the surfactant label.

## AMMONIUM SULFATE

The addition of 1 to 2 percent dry ammonium sulfate by weight (or liquid equivalent), may increase the performance of this product in tank mixtures on annual weeds. Add 8.5 to 17 pounds of dry ammonium sulfate per 100 gallons of spray solution. The improvement in performance may be apparent where environmental stress is a concern. Use the higher rate of ammonium sulfate with this product when treating large or dense populations of annual weeds. Low-quality ammonium sulfate may contain material that will not readily dissolve which could result in nozzle-tip plugging. To determine quality, perform a jar test by adding 1/3 cup of ammonium sulfate to 1 gallon of water and agitate for 1 minute. If undissolved sediment is observed, predissolve the dry additive in water and filter prior to addition to the spray tank. If ammonium sulfate is added directly to the spray tank, add slowly with agitation. Adding too quickly may clog outlet lines. 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. Observe all precautionary statements on the ammonium sulfate product labels.

**NOTE:** The use of ammonium sulfate as an additive does not preclude the need for additional surfactant. Do not use herbicide rates lower than recommended in this label.

## APPLICATION EQUIPMENT AND TECHNIQUES

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

This product may be applied using either aerial, conventional ground or hooded spray equipment. Use extreme care to avoid misting or drifting of herbicide solution onto foliage, green stems or fruit of desirable crops, trees, or plants during both growing and dormant periods, since even very small quantities of spray can cause severe plant injury.

GROUND APPLICATION: Apply recommended rates of this product in 3 to 10 gallons of water per acre as a broadcast spray. For optimum spray distribution and coverage, use flat fan or low-volume nozzles. When using flood nozzles, space them no more than 40 inches apart and ensure double overlap of spray pattern. Refer to the manufacturer's recommendations for correct pressure and nozzle height above the target canopy. Avoid pressure and nozzles which produce fine droplets or mist.

Use appropriate marking devices to ensure uniform spray coverage and best results from the herbicide.

AERIAL APPLICATION: Apply the recommended rates of this product in 3 to 5 gallons of water per acre as a broadcast spray.

### SPRAY DRIFT MANAGEMENT

Avoid spray drift to nearby crops as this product will cause modifications in plant growth. Plant injury or reduced yields will result.

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 should be observed.

### AERIAL DRIFT REDUCTION ADVISORY

#### IMPORTANCE OF DROPLET SIZE

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

## CONTROLLING DROPLET SIZE

Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

Pressure - Do not exceed the nozzle manufacturer's recommended pressures. 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 should 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 windward. Therefore, on the up and down edges of the field, the applicator should compensate for the displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with the 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 should 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 should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to 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 should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

DO NOT APPLY DURING INVERSION CONDITIONS, WHEN WINDS ARE GUSTY, OR UNDER ANY OTHER CONDITION WHICH FAVORS DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT WAS NOT INTENDED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.

SELECTIVE EQUIPMENT: This product may be applied through a shielded applicator or a wiper applicator in crops specifically listed in this label. AVOID CONTACT WITH DESIRABLE VEGETATION. Applicators used above desired vegetation should be adjusted so that the lowest wiper contact point is at least 2 inches above the desirable vegetation. Contact of the herbicide solution with the crop may result in damage. Wiper applications made above crops should be made when upright growing weeds are a minimum of 6 inches above desirable vegetation. Better results

will be obtained when more of the weed is exposed to the herbicide solution.

#### SPRAYER CLEANUP

CLEAN THE ENTIRE SPRAYER AFTER APPLICATION OF THIS PRODUCT. Failure to clean the sprayer thoroughly may result in injury to desirable crops which are subsequently sprayed. First, add clean water to the tank and thoroughly rinse the entire sprayer system. Secondly, fill the tank with water and ammonia. Add 1 quart of household ammonia per 25 gallons of water. Pump enough solution through the hoses, boom and nozzles to fill these parts completely. Then fill the tank, close and leave for 24 hours before draining and rinsing thoroughly with water.

Application or use of other agricultural chemicals with the equipment used for this product may result in injury to desirable vegetation.

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.

#### WEEDS CONTROLLED

This herbicide controls many annual and perennial grasses and broadleaf weeds.

##### ANNUAL WEEDS

Add a nonionic surfactant at a rate of 0.5 percent by total spray volume.

Apply to actively growing grass and broadleaf weeds.

Allow at least 3 days after treatment before tillage.

For maximum agronomic benefit, apply when weeds are 6 inches or less in height.

To prevent seed production, applications should be made prior to seedhead formation.

This product does not provide residual control; therefore, delay application until maximum weed emergence. Repeat treatments may be necessary to control later germinating weeds.

Do not use these rates for weeds that have been mowed, grazed or

cut, unless weed regrowth has occurred and weeds are vigorously growing.

Refer to the "TANK MIXTURES" portion of this section for control of additional broadleaf weeds.

RECOMMENDED RATES AND WEEDS CONTROLLED

ANNUAL WEED SPECIES	MAXIMUM HEIGHT/GROWTH STAGE	RATE PER ACRE** (FLUID OUNCES)
Foxtail <i>Setaria spp.</i>	12"	8 oz
Barnyardgrass <i>Echinochloa crus-galli</i> Bluegrass, annual <i>Poa annua</i> Brome, downy* <i>Bromus tectorum</i> Chickweed, jagged <i>Holosteum umbellatum</i> Mustard, blue <i>Chorispora tenella</i> Mustard, tansy <i>Descurainia pinnata</i> Mustard, tumble <i>Sisymbrium altissimum</i> Mustard, wild <i>Sinapis arvensis</i>	6"	12 oz
Barley <i>Echinochloa crus-galli</i> Rye <i>Secale cereale</i> Sandbur, field <i>Cenchrus spp.</i> Shattercane <i>Sorghum bicolor</i> Stinkgrass <i>Fragrosras silianensis</i>	12"	12oz
Wheat <i>Triticum aestivum</i>	18"	12oz.
Morningglory <i>Ipomea spp.</i>	3"	16oz.
Bluegrass, bulbous <i>Poa bulbosa</i> Cheat <i>Bromus secalinus</i> Chickweed, mouseear <i>Cerastium vulgatum</i>	6"	16oz.

ANNUAL WEED SPECIES	MAXIMUM HEIGHT/GROWTH STAGE	RATE PER ACRE** (FLUID OUNCES)
Corn, volunteer <i>Zea mays</i> Groundsel, common <i>Senecio vulgaris</i> Goatgrass, jointed <i>Aegilops cylindrica</i> Horesweed/Marestail <i>Conyza canadensis</i> Pennycress, field; Fanweed <i>Thlaspi arvense</i> Rocket, London <i>Sisymbrium irio</i> Ryegrass, Italian <i>Lolium multiflorum</i> Sheherdspurse <i>Capsella cursa-pastoris</i> Spurge, annual <i>Euphorbia spp.</i>		—           =
Buttercup <i>Ranunculus spp.</i> Cocklebur <i>Xanthium strumarium</i> Crabgrass <i>Digitaria spp.</i> Dwarf dandelion <i>Krigia cespitosa</i> Falseflax, smallseed <i>Camelina microcarpa</i> Johnsongrass, seedling <i>Sorghum halepense</i> Lambsquarter, common <i>Chenopodium album</i> Oats, wild <i>Avena fatua</i> Panicum, fall <i>Panicum dichotomiflorum</i> Panicum, Texas <i>Panicum texanum</i> Pigweed, redroot <i>Amaranthus retroflexus</i> Pigweed, smooth <i>Amaranthus hybridus</i> Witchgrass	12"	16oz.

ANNUAL WEED SPECIES	MAXIMUM HEIGHT/GROWTH STAGE	RATE PER ACRE** (FLUID OUNCES)
<i>Panicum capillare</i>		
Pusley, Florida <i>Richardia scabra</i>	12"	32oz.
Filaree <i>Erodium spp.</i>	12"	48oz.

\*For control in no-till systems, use 16 fluid ounces per acre.

\*\*For those rates less than 32 fluid ounces per acre, this product at rates up to 32 fluid ounces per acre may be used where heavy weed densities exist.

#### FALLOW AND REDUCED TILLAGE SYSTEMS

Use this product in fallow and reduced tillage systems for control of annual weeds prior to emergence of crops listed in this label. Refer to the "WEEDS CONTROLLED" section of this label for specific rates and instructions. This product may be applied using ground or aerial spray equipment. See the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for instructions.

#### TANK MIXTURES

These recommended tank mixtures may be applied using ground or aerial spray equipment. Refer to the "WEEDS CONTROLLED" section of this label for specific instructions.

These tank mixtures may be applied with ground or aerial equipment. See the "APPLICATION EQUIPMENT AND TECHNIQUES" section for instructions.

For ground application, apply in 3 to 10 gallons of water per acre.

For aerial application, apply 3 to 5 gallons of water per acre.

ROUNDUPO ORIGINAL RT plus BANVEL  
plus NONIONIC SURFACTANT

ROUNDUP ORIGINAL RT plus 2,4-D  
plus NONIONIC SURFACTANT

ROUNDUP ORIGINAL RT plus Tordon 22K  
plus NONIONIC SURFACTANT

The addition of Banvel or Tordon 22K in a mixture with this product may provide short-term residual control of selected weed species. Some crop injury may occur if Banvel or Tordon 22K is applied within 45 days of planting. Refer to the Banvel, Tordon



22K and 2,4-D labels for cropping restrictions and other use instructions.

This product plus Banvel, Tordon 22K or 2,4-D will control the annual grasses and broadleaf weeds previously listed for this product alone at the indicated heights (except 8 fluid ounces per acre applications), plus the following broadleaf weeds. For those weeds previously listed at 8 fluid ounces of this product alone per acre, use 12 fluid ounces in these tank mixtures.

**NOTE:** 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 Banvel or Tordon 22K is applied within 45 days of planting. The addition of Banvel or Tordon 22K in a mixture with this product may provide short-term residual control of selected weed species.

) Apply 12 to 24 fluid ounces of this product plus 0.25 pound a.i. of Banvel, or 1 to 2 ounces of Tordon 22K, or 0.5 pound a.i. of 2,4-D plus 0.5 percent nonionic surfactant by total spray volume per acre to control dense populations of the following annual broadleaf weeds when less than 6 inches in height:

- |                              |                               |
|------------------------------|-------------------------------|
| Buckwheat, Wild*             | Lettuce, prickly***           |
| <i>Polygonum convolvulus</i> | <i>Lactuca serriola</i>       |
| Kochia**                     | Pigweed, Redroot              |
| <i>Kochia scoparia</i>       | <i>Amaranthus retroflexus</i> |
| Lambsquarters                | Thistle, Russian***           |
| <i>Chenopodium album</i>     | <i>Salsola kali</i>           |

- \*Controlled with Tordon 22K tank mixture only.
- \*\*Controlled with Banvel tank mixture only.
- \*\*\*Controlled with Banvel or 2,4-D tank mixtures only.

ROUNDUP ORIGINAL RT plus ATRAZINE or BLADEX plus NONIONIC SURFACTANT

For use only in Colorado, Kansas, Nebraska, Oklahoma, Oregon, South Dakota, and Washington. In Oregon and Washington, do not exceed 1 pound of the active ingredient atrazine per acre. The addition of 2 percent dry ammonium sulfate by weight (or liquid equivalent) or 17 pounds per 100 gallons of water is recommended to increase the performance of this product plus atrazine or Bladex plus nonionic surfactant tank mixtures.

Consult the atrazine or Bladex labels (90 DF, 4L, 80W) for use rates, soil type, planting, cropping and other restrictions, as well as other precautionary statements and use according to the most restrictive label.

This product plus atrazine or Bladex plus nonionic surfactant tank mixture provides postemergence control of listed annual weeds in fallow and reduced tillage systems. Apply 12 fluid ounces of this product with 1 pound or less of the active ingredient atrazine per acre or 16 fluid ounces of this product with 2 pounds or less of the active ingredient atrazine per acre, or 20 fluid ounces of this product with 1 to 3 pounds of the active ingredient atrazine per acre, plus 0.5 percent nonionic surfactant by total spray volume. Apply 16 fluid ounces of this product with 2.4 to 4 pounds of the active ingredient cyanazine in Bladex per acre plus 0.5 percent nonionic surfactant. These tank mixtures will provide soil residual control of weeds listed on the atrazine and Bladex label. In addition, these tank-mixtures will provide postemergence control of the following weeds:

Barnyardgrass* <i>Echinochloa crus-gaffi</i>	Pigweed <i>Amaranthus spp.</i>
Brome, downy <i>Bromus tectorum</i>	Sandbur, field <i>Cenchrus spp.</i>
Foxtail, green <i>Setaria viridis</i>	Stinkgrass <i>Eragrostis cilianensis</i>
Kochia** <i>Kochia scoparia</i>	Thistle, Russian <i>Salsola kali</i>
Lambsquarters <i>Chenopodium album</i>	Wheat <i>Triticum aestivum</i>
Leffuce, prickly <i>Lactuca serriola</i>	Witchgrass <i>Panicum capillary</i>
Mustard, tansy <i>Descurainia pinnata</i>	

\*Barnyardgrass will be suppressed at 20 fluid ounces per acre and will require up to 26 fluid ounces per acre for control.

\*\*For improved control of kochia, add 4 fluid ounces per acre (.125 pound a.i. per acre) of Banvel to the above tank mixture.

#### POSTHARVEST APPLICATIONS

This product will provide control of existing weeds following grain harvest. Weeds should be allowed to regrow after damage incurred during harvest operations, and to recover from environmental stress, before application of this product. Weeds should be treated prior to the heading stage of annual grasses, if possible, and before broadleaf weeds exceed 24 inches in height. Nonionic surfactant should be added at 0.5 percent by

total spray volume. Use of ammonium sulfate is recommended and may improve performance on annual weeds.

Apply 12 fluid ounces of this product per acre plus nonionic surfactant to control downy brome, green foxtail, stinkgrass and volunteer wheat.

To control kochia, lambsquarters, mustard, pigweed and Russian thistle, apply 16 fluid ounces of this product plus 0.25 pounds a.i. of Banvel or 0.5 pounds a.i. of 2,4-D plus nonionic surfactant per acre.

Apply 20 fluid ounces of this product per acre plus nonionic surfactant to control barnyardgrass, sandbur, sunflower, and witchgrass. The addition of 0.25 pound a.i. of Banvel or 0.5 pound a.i. of 2,4-D plus nonionic surfactant to 20 fluid ounces of this product will control prickly lettuce.

ECOFARMING SYSTEMS

The Ecofarming System consists of the following rotation: winter wheat, corn/sorghum, ecofallow.

Use the following tank mixtures for control of emerged annual weeds before planting corn or sorghum in the Ecofarming System:

ROUNDUP ORIGINAL RT  
 at 16 to 20 fluid ounces per acre

plus

2,4-D at 0.375 to 0.5 pound a.i. per acre

plus

ATRAZINE at 0.75 to 1 pound a.i. per acre

plus

LASSO at 2.5 to 3 quarts per acre

Add a nonionic surfactant at 0.5 percent by total spray volume,

The above tank mixture should be applied in 28-0-0 or 32-0-0 liquid fertilizer carrier at 20 to 30 gallons per acre. The liquid fertilizer may be diluted with water to achieve the proper carrier volume.

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

Brome, downy	Lettuce, prickly
<i>Bromus tectorum</i>	<i>Lactuca Sea</i>

Cheat <i>Bromus secalinus</i>	Pigweed, redroot <i>Amaranthus retroflexus</i>
Foxtail, green <i>Setaria viridis</i>	Thistle, Russian <i>Salsola kali</i>
Foxtail, yellow <i>Setaria lutescens</i>	Wheat, volunteer <i>Triticum aestivum</i>
Kochia* <i>Kochia scoparia</i>	

\*For improved control of kochia, add 4 fluid ounces per acre (0.125 pound a.i. per acre) of Banvel to the above tank mixture.

Risk of crop injury from 2,4-D or Banvel can be reduced by applying this treatment 7 to 14 days before planting.

Refer to the label booklet for Lasso herbicide for preemergence weed control achieved by this tank mixture.

Refer to the specific product labels for crop rotation restrictions and cautionary statements for all products used in these tank mixtures.

#### AID TO TILLAGE

This product used in conjunction with preplant and conventional fallow tillage practices will provide control of downy brome, volunteer wheat, tansy mustard and foxtail.

Apply 8 fluid ounces per acre of this product plus 0.5 percent nonionic surfactant by total spray volume as a broadcast spray in 3 to 10 gallons of water per acre.

For ground application, apply in 3 to 10 gallons of water per acre. For aerial applications, apply in 3 to 5 gallons of water per acre. Do not mix with residual herbicides.

Application of this product should be made when weeds are actively growing and before weeds are greater than 6 inches tall. Application must be followed by conventional tillage practices before regrowth of the treated plants occurs. Allow at least one day after application before tillage. Tillage must occur no later than 15 days following application.

This product does not provide residual weed control. Repeat treatments may be necessary to control subsequent germinating weeds.

Do not treat weeds under poor growing conditions such as drought stress, or disease or insect damage as reduced weed control may

result. Reduced results also may occur when treating weeds heavily covered with dust, or when straw canopy covers the weeds.

PERENNIAL WEEDS

Apply this product as follows to control or destroy most 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 of growth. Repeat treatments may be necessary to control weeds regenerating from underground parts or seed. Repeat treatments must be made prior to crop emergence.

The addition of 1 to 2 percent dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this herbicide on perennial weeds. The improvement in performance may be apparent where environmental stress is a concern. Refer to the "Mixing, Additives and Application Instructions" section of this label.

When applied as recommended under the conditions described, this product will CONTROL the following perennial weeds:

Alfalfa

*Medicago saliva*

Johnsongrass

*Sorghum halepense*

Larkspur, duncicap

*Delphinium occidentale*

Larkspur, tall

*De hinium barb.*

Nightshade, silverleaf

*Solanum elaeagnifolium*

Quackgrass

*Agropyron repens*

Ryegrass, perennial

*Lolium perenne*

Spurge, leafy\*

*Euphorbia esula*

Thistle, Canada

*Cirsium arvense*

\*Partial Control

**Johnsongrass/Ryegrass, perennial** - Apply 1 to 3 quarts of this product per acre. In annual cropping systems, apply 1 to 2 quarts of this product per acre. Apply 1 quart of this product plus 0.5 percent nonionic surfactant by total spray volume in 5 to 10 gallons of water per acre. Use 2 quarts of this product when applying 10 to 40 gallons of water per acre. In noncrop or areas where annual tillage (no-till), is not performed, apply 2 to 3 quarts of this product in 10 to 40 gallons of water per acre. For best results, apply to actively growing plants when

most have reached the boot-to-head stage of growth. Allow 7 or more days after application before tillage. Do not tank-mix with residual herbicides when using the 1 quart per acre rate.

For burndown of contacted vegetation, apply 1 pint per acre plus 0.5 percent nonionic surfactant in 5 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.

**Larkspur, duncecap/Larkspur, tall** - Apply this product as a 2 percent solution using hand-held equipment. Apply as a spot treatment when the larkspur is actively growing and in the vegetative stage just prior to budding. Coverage should be uniform and complete.

**Quackgrass** - In Annual Cropping Systems, or in Pastures and Sods Followed by Deep Tillage: Apply 1 to 2 quarts of this product per acre. For the one quart rate, apply 0.5 percent nonionic surfactant by total spray volume in 5 to 10 gallons of water per acre. For the 2 quart rate, apply in 10 to 40 gallons of water per acre. Do not tank-mix with residual herbicides when using the 1 quart rate. Spray when quackgrass is 6 to 8 inches tall and actively growing. Do not till between harvest and fall applications or in the fall or spring prior to spring application. Allow 3 or more days after application before tillage. In pastures or sods, for best results, use a moldboard plow.

**Quackgrass** - Pasture or Sod or Other Noncrop Areas Where Deep Tillage is Not Planned Following Application: Apply 2 to 3 quarts in 10 to 40 gallons of water per acre. Spray when the quackgrass is greater than 8 inches tall and actively growing. Do not till between harvest and fall application or in the fall or spring prior to spring application. Allow 3 or more days after application before tillage.

**Spurge, leafy** - For suppression, apply 16 fluid ounces of this product plus 0.5 pound a.i. of 2,4-D per acre plus 0.5 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre in the late summer or fall. Apply when plants are actively growing. If mowing has occurred prior to treatment, apply when most of the plants are 12 inches tall. Allow 7 or more days after application before tillage.

**Thistle, Canada** - Apply 2 to 3 quarts of this product per acre. Apply to actively growing thistles when most 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 of Canada thistle, apply 1 quart per acre of this product plus 0.5 percent nonionic surfactant by total spray volume 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.

**Other perennials listed on this label** - Apply 3 to 5 quarts of this product per acre. Apply when actively growing and when most have reached early head or early bud stage of growth. Allow 7 or more days after application before tillage.

See "DIRECTIONS FOR USE" and "MIXING, ADDITIVES, AND APPLICATION INSTRUCTIONS" sections of this booklet for labeled uses and specific application instructions.

#### TANK MIXTURES

When applied as directed under the conditions described, this product plus Banvel or 2,4-D will SUPPRESS or CONTROL the following perennial broadleaf weed:

**Bindweed, field *Convolvulus arvensis*** - For suppression, apply 16 fluid ounces of this product plus 0.5 pound a.i. of 2,4-D or 0.25 pound a.i. of Banvel, plus 0.5 percent nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre for ground applications and 3 to 5 gallons of water per acre for aerial applications. Applications should be delayed until maximum emergence has occurred and when vines are between 6 to 18 inches in length. These tank mixtures may be applied using aerial application equipment in fallow and reduced tillage systems only.

For control, apply 2 quarts of this product plus 0.5 pound a.i. of Banvel in 3 to 20 gallons of water per acre. At these rates, apply using ground application equipment only.

#### CROPPING SYSTEMS

This product controls annual and perennial weeds listed on this label, prior to the emergence of the crops listed below.

See "GENERAL INFORMATION" and "APPLICATION EQUIPMENT AND TECHNIQUES" sections of this label for essential product performance information.

The maximum use rates stated throughout this product's labeling apply to this product combined with the use of all other herbicides containing glyphosphate or sulfosate as the active ingredient, whether applied as mixture or separately. Calculate the application rates and ensure the total use of this and other

glyphosate or sulfosate containing products does not exceed stated maximum use rate.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seed. Except as otherwise specified on this label, repeat treatments must be made before the crop emerges, in accordance with the instructions of this label.

Except as otherwise specified in a crop section of this label, the combined total of all treatments must not exceed 8 quarts per acre of this product per year.

Do not plant subsequent crops other than those on this label for 30 days following application.

Do not harvest or feed treated vegetation for 8 weeks following application. Following spot treatment or selective equipment use allow 14 days before grazing domestic livestock or harvesting forage grasses and legumes.

- |                    |                       |
|--------------------|-----------------------|
| ALFALFA*           | MILLET                |
| BARLEY*            | OATS*                 |
| BEANS (All)        | ONION                 |
| BEETS (Red, Sugar) | PEAS (All)            |
| CARROT             | POTATO (Irish, sweet) |
| CORN (All)*        | RADISH                |
| COTTON*            | SORGHUM (Milo)*       |
| FORAGE GRASSES*    | SOYBEANS*             |
| FORAGE LEGUMES*    | WHEAT*                |
| LENTILS            |                       |

\*Spot treatments may be applied in these crops.

**Spot Treatment** (Only those crops with "\*" can be spot treated) - Applications in growing crops must be made prior to heading of small grains and milo, initial pod set in soybeans, silking of corn, boll opening on cotton.

For dilution and rates of application using boom or hand-held equipment, see "MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS" and "WEEDS CONTROLLED" sections of this label.

**NOTE:** FOR FORAGE GRASSES AND FORAGE LEGUMES, NO MORE THAN ONE-TENTH OF ANY ACRE SHOULD BE TREATED AT ONE TIME. FOR ALL OTHER CROPS, 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.

**Selective Equipment** - This product may be applied through recirculating sprayers, shielded applicators, or wiper



applicators in cotton and soybeans. Shielded and wiper applicators may also be used in tree crops and grapes. Wiper applicators may be used in rutabagas, forage grasses and forage legumes, including pasture sites and sorghum milo. Wiper applicators may also be used in wheat to control common rye or cereal rye. Applications should be made after rye has headed and achieved maximum growth.

Allow at least the following time intervals between application and harvest:

Cotton, Soybeans .....	7 days
Apples, Avocado, Cherry, Grapes, Pear..	14 days
Stone Fruit .....	17 days
Sorghum (milo)* .....	40 days
Wheat .....	35 days

\*Do not use roller applicators. Do not feed or graze treated milo fodder. Do not ensile treated vegetation,

#### ASPARAGUS

When applied as directed for "CROPPING SYSTEMS" under the conditions described, this product controls weeds listed on this label in asparagus.

For specific rates of applications and instructions for control of various annual and perennial weeds, see the "WEEDS CONTROLLED" section of this label.

**Prior to Crop Emergence** - Apply this product prior to crop emergence for the control of emerged labeled annual and perennial weeds. DO NOT APPLY WITHIN A WEEK BEFORE THE FIRST SPEARS EMERGE.

**Spot Treatment** - Apply this product immediately after cutting, but prior to the emergence of new spears. Do not treat more than 10 percent of the total field area to be harvested. Do not harvest within 5 days of treatment.

**Postharvest** - Apply this product after the last harvest and all spears have been removed. If spears are allowed to regrow, delay application until ferns have developed. Delayed treatments should be applied as 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.

**NOTE:** Select and use recommended types of spray equipment for postemergence 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.

#### PREHARVEST APPLICATIONS

This product controls or suppresses annual and perennial weeds prior to the harvest of soybeans or wheat. For specific rates and application instructions see the "WEEDS CONTROLLED" section of this label booklet. This product may be applied using either aerial or ground spray equipment. See the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for instructions for ground and aerial applications.

#### SOYBEANS

Apply after pods have set and lost all green color. Allow a minimum of 7 days between application and harvest of soybeans. Care should be taken to avoid excessive seed shatter loss due to ground application equipment.

Do not graze or harvest treated crop for livestock feed within 25 days of last preharvest application. DO NOT APPLY MORE THAN 6 QUARTS PER ACRE OF THIS PRODUCT FOR PREHARVEST APPLICATIONS. DO NOT APPLY MORE THAN 1 QUART PER ACRE OF THIS PRODUCT BY AIR. It is not recommended that soybeans grown for seed be treated because a reduction in germination or vigor may occur

#### WHEAT

Make applications after hard-dough stage of grain (30% or less grain moisture) and at least 7 days prior to harvest.

For control of quackgrass or suppression of Canada thistle, apply 1 quart of this product plus 0.5% nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre.

For suppression of field bindweed, apply 1 to 2 pints of this product plus 0.5 to 1.0 pounds a.i. of 2,4-D plus 0.5% nonionic surfactant by total spray volume in 3 to 10 gallons of water per acre.

DO NOT APPLY MORE THAN 1 QUART PER ACRE OF THIS PRODUCT FOR PREHARVEST APPLICATIONS IN WHEAT.

#### CONSERVATION TILLAGE, MINIMUM TILLAGE AND NO-TILL SYSTEMS

#### CORN AND SOYBEANS TANK MIXTURES

When applied as recommended under the conditions described, the tank mixtures listed in this section control many emerged weeds, and give preemergence control of many annual weeds where corn or soybeans will be planted directly into a cover crop, established sod or in previous crop residues.

Refer to specific product labels for crop rotation restrictions and cautionary statements of all products used in these tank mixtures. For mixing instructions, see the "MIXING, ADDITIVES and APPLICATION INSTRUCTIONS" section of this label.

Apply these tank mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre before, during or after planting. Do not apply these mixtures after crop emergence.

When tank mixing with residual herbicides, add an agriculturally approved nonionic surfactant at 0.5 to 1 percent by volume of spray solution. The addition of 1 to 2 percent dry ammonium sulfate by weight may increase the performance of this product.

NOTE: When using these tank mixtures, do not exceed 4 quarts of this product per acre.

CORN

For residual control, this product may be tank-mixed with the following herbicides or combination of herbicides:

- |                |            |
|----------------|------------|
| LASSO/ALACHLOR | ATRAZINE   |
| LARIAT         | CYANAZINE  |
| BULLET         | SIMAZINE   |
| DUAL           | PROWL      |
| BICEP          | MICRO-TECH |
| PARTNERO       | HARNESS    |
| HARNESS XTRA   |            |

For improved burndown, this product may be tank-mixed with 2,4-D or dicamba. Applications of 2,4-D or dicamba must be made at least 7 days prior to planting corn. See the "WEEDS CONTROLLED" section for specific rate information.

SOYBEANS

For residual control, this product may be tank-mixed with the following herbicides or combination of herbicides:

- |                |              |
|----------------|--------------|
| CANOPY         | LOROXM PLUS  |
| COMMAND        | PREVIEW      |
| DUAL           | PROWL        |
| GEMINI         | TURBO        |
| LASSO/ALACHLOR | SCEPTER      |
| LEXONE         | SENCOR       |
| LINURON        | SQUADRON     |
| PURSUIT        | PURSUIT PLUS |
| PARTNER        | MICRO-TECH   |

For improved burndown, this product may be tank-mixed with the following herbicides:

2,4-DB

2,4-D\*

\*See the label for 2,4-D for intervals between application and planting.

CORN AND SOYBEANS

Annual Weeds-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 these tank mixtures. For other labeled annual weeds, apply 1 to 1.5 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. For a complete list of annual weeds controlled, see the "WEEDS CONTROLLED" section of this label.

**Perennial Weeds** - At normal application times in minimum tillage systems, perennial weeds may not be at the proper stage of growth for control. See the "WEEDS CONTROLLED" section of this label for the proper stage of growth for perennial weeds.

Use of 2 to 4 quarts of this product per acre in the tank mixtures mentioned above, under these conditions provides top kill and reduces competition from many emerged perennial grass and broadleaf weeds. For emerged perennial weeds controlled, see the "WEEDS CONTROLLED" section of this label.

To obtain the desired stage of growth, it may be necessary to apply this product alone in the late summer or fall and then follow with a label approved, seedling weed-control program at planting.

USE OF THESE TANK MIXTURES FOR BERMUDAGRASS OR JOHNSONGRASS CONTROL IN MINIMUM TILLAGE SYSTEMS IS NOT RECOMMENDED. For bermudagrass control, follow the instructions under "CONTROL OF PERENNIAL WEEDS" section of this label and then use a label-approved, seedling weed-control program in a minimum tillage or conventional tillage system. For Johnsongrass control, follow instructions under "CONTROL OF PERENNIAL WEEDS" section of this label, and then use a label-approved, seedling weed-control program with conventional tillage.

NONCROP USES

See "GENERAL INFORMATION" and "MIXING, ADDITIVES AND APPLICATION INSTRUCTIONS" sections of this label for essential product performance information and the following "NON-CROP" sections for specific recommended uses. This product may be used in the following noncrop sites. Detailed instructions follow, by site.

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CONSERVATION RESERVE PROGRAM (CRP)  
DORMANT RANGELAND  
FARMSTEAD USES

EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF SPRAY WITH FOLIAGE OF DESIRABLE TURFGRASSES, TREES, SHRUBS, OR OTHER DESIRABLE VEGETATION SINCE SEVERE DAMAGE OR DESTRUCTION MAY RESULT.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seeds.

This product does not provide residual weed control. For subsequent 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.

CONSERVATION RESERVE PROGRAM  
(CRP ACRES)

This product can be used to control undesirable vegetation when rotating out of CRP acres or to suppress competitive growth and seed production of undesirable vegetation in CRP acres.

For specific rates of application for various annual and perennial weeds, see the "WEEDS CONTROLLED" section of this label.

CRP applications may be made with wiper applicators or conventional spray equipment.

For selective applications with broadcast spray equipment, apply 8 to 16 ounces per acre of this product 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. Some stunting of CRP perennial grasses will occur if applications are made when plants are not dormant.

DORMANT RANGELAND APPLICATION

This product will control or suppress many weeds, including downy brome, cheat grass, cereal rye, medusahead rye and jointed goatgrass in dormant rangeland,

Apply 8 to 16 ounces per acre of this product in early spring when weeds have greened up, but desirable grasses such as crested and tall wheatgrass are still truly dormant.

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

Do not use additional surfactant or ammonium sulfate when spraying dormant rangeland grasses with this product. Do not make more than one application per year.

#### FARMSTEAD USES

When applied as directed for "NONCROP USES", under conditions described, this product controls undesirable vegetation listed on this label around farmstead building foundations, along and in fences, shelterbelts, ditch banks, dry ditches and for general nonselective farmstead weed control.

For specific rates of application and instructions for control of various annual and perennial weeds, see the "WEEDS CONTROLLED" section of this label.

**NOTE:** If spraying areas adjacent to desirable plants, use a shield made of cardboard, sheet metal or plyboard while spraying to help prevent spray from contacting foliage of desirable plants.

#### FARM DITCHES

This product will suppress perennial grasses along farm ditches. Apply this product at a rate of 6 to 8 fluid ounces per acre, Use 8 fluid ounces per acre when treating tall (coarse) fescue, fine fescue, orchardgrass or quackgrass covers. For best suppression of these species, add ammonium sulfate at a rate of 1.7 pounds per 10 gallons of spray solution. Use 6 fluid ounces per acre without ammonium sulfate when treating Kentucky bluegrass.

Apply treatments in 10 to 20 gallons of spray solution per acre to actively growing perennial grass covers. For best spray distribution and coverage use flat fan nozzles.

Add a nonionic surfactant at a rate of 0.5 percent of the spray solution.

Where broadleaf weed control or suppression is desired, tank mix this product with an appropriate, labeled broadleaf weed herbicide.

#### TREE AND VINE CROPS

For use only in Colorado, Idaho, Utah and Washington.

This product is recommended for weed control in established groves, vineyards, or orchards, or for site preparation prior to transplanting crops listed in this section. Applications may be

made with boom equipment, CDA, shielded sprayers, hand-held and high-volume wands, lances, or orchard guns, or with wiper applicator equipment, except as directed in this section. See the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for specific information on use of equipment. —

When applying this product, refer to the "WEEDS CONTROLLED" section of this label and to specific recommendations in this section for rates to be used.

#### NOTE

Repeat treatments may be necessary to control weeds originating from underground parts of untreated weeds or from seeds. This product does not provide residual weed control. For subsequent weed control, use repeated applications of this product. Do not apply more than 10.6 quarts of this product per acre per year.

EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF HERBICIDE SOLUTION, SPRAY, DRIFT, OR MIST WITH FOLIAGE OR GREEN BARK OF TRUNK, BRANCHES, SUCKERS, FRUIT, OR OTHER PARTS OF TREES OR VINES. CONTACT OF THIS PRODUCT WITH OTHER THAN MATURED BROWN BARK CAN RESULT IN SERIOUS CROP DAMAGE.

AVOID PAINTING OUT STUMPS WITH THIS PRODUCT AS INJURY RESULTING FROM ROOT GRAFTING MAY OCCUR IN ADJACENT TREES.

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.

For specific rates of applications and instructions, see the "WEEDS CONTROLLED" section of this label, and to specific recommendations which follow.

#### STRIPS

FOR ANNUAL AND PERENNIAL WEEDS IN STRIPS  
OF TREE AND VINE CROPS

TANK MIXTURES WITH RESIDUAL HERBICIDES

When applied as a tank mixture, this product provides control of the emerged annual weeds and control or suppression of emerged perennial weeds listed in this label. The following residual herbicides will provide preemergence control of those weeds listed in the individual product labels.

ROUNDUP ORIGINAL RT plus GOAL 1.6E

ROUNDUP ORIGINAL RT plus KARMEX DF

ROUNDUP ORIGINAL RT plus SIMAZINE,

PRINCEP CALIBER 90

- ROUNDUP ORIGINAL RT plus SIMAZINE 4L
- ROUNDUP ORIGINAL RT plus SIMAZINE 80W
- ROUNDUP ORIGINAL RT plus SOLICAM 80DF
- ROUNDUP ORIGINAL RT plus SURFLAN AS
- ROUNDUP ORIGINAL RT plus SURFLAN 75W
- ROUNDUP ORIGINAL RT plus SIMAZINE  
(80W, or 4L, or PRINCEP CALIBER 90)  
plus SURFLAN (AS or 75W)
- ROUNDUP ORIGINAL RT plus GOAL (1.6E)  
plus SURFLAN (AS or 75W)
- ROUNDUP ORIGINAL RT plus GOAL (1.6E)  
plus SIMAZINE  
(80W, or 4L, or PRINCEP CALIBER 90)
- ROUNDUP ORIGINAL RT plus GOAL (1.6E)  
plus SURFLAN (AS or 75W)  
plus SIMAZINE (80W, 4L  
or PRINCEP CALIBER 90)

When tank-mixing with residual herbicides, add an agriculturally approved nonionic surfactant at 0.5 percent by volume of spray solution.

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

Read and carefully observe the label claims, cautionary statements, rates and all other information on the labels of all products.

RECOMMENDED RATES

**Annual Weeds** - Apply 1 to 5 quarts per acre of this product in these tank mixtures. Use rates at the higher end of the recommended range when weeds are stressed, growing in dense populations or are greater than 12 inches tall.

**Perennial Weeds** - Apply 1 to 5 quarts per acre of this product in these tank mixtures to control or suppress perennial weeds. Follow the recommendations in the "WEEDS CONTROLLED" section of this label for stage of growth and application rates for specific perennial weeds.



ROUNDUPO ORIGINAL RT plus GOAL  
plus SIMAZINE/SURFLAN

This product plus low rates of Goal in three-way or four-way mixtures with simazine and/or Surflan will provide postemergence control of the weeds listed below.

Refer to the individual simazine and Surflan labels for preemergence rates, weeds controlled, precautionary statements and other important information.

Apply these tank mixtures in 3 to 20 gallons of water. Add 0.5 percent nonionic surfactant by total spray volume to the spray solution.

Apply 1 to 5 quarts per acre of this product plus 4 to 48 ounces per acre of Goal plus labeled rates of simazine and/or Surflan to control the following weeds:

Barley, wild <i>Hordeum leporinum</i>	Horseweed/Marestail <i>Conyza canadensis</i>
Bluegrass, annual <i>Poa annua</i>	Nettle, stinging <i>Urtica dioica</i>
Cheeseweed, common <i>Malva spp.</i>	Pineappleweed <i>Matricaria matricarioides</i>
Chickweed, common <i>Stellaria media</i>	Rocket, London <i>Sisymbrium irio</i>
Filaree* <i>Erodium spp.</i>	Shepherdspurse <i>Capsella bursa-pastoris</i>
Fleabane, flaxleaf <i>Conyza bonariensis</i>	Sowthistle, annual <i>Sonchus oleraceus</i>
Groundsel, common <i>Senecio vulgaris</i>	

\*Use a minimum of 1.5 quarts of this product in these mixtures.

PERENNIAL GRASS SUPPRESSION  
ORCHARD FLOORS

When applied as directed, this product will suppress vegetative growth as indicated below.

Apply 6 to 8 fluid ounces of this product per acre to suppress (chemically mow) perennial grass covers between tree rows in orchards.

For tall (coarse) fescue, fine fescue, orchardgrass or quackgrass covers use 8 fluid ounces per acre. For best suppression of these species add ammonium sulfate at 1.7 pounds per 10 gallons of spray solution.

For Kentucky bluegrass covers, use 6 fluid ounces per acre without ammonium sulfate.

Apply treatments in 20 gallons of water per acre to actively growing grass covers. Additional nonionic surfactant may be added at a rate of 0.5 percent of the total spray volume.

For best results, mow orchards in the spring and apply the appropriate rate of this product 3 to 4 days later. Do not treat grass covers under pool growing conditions such as drought stress, disease or insect damage as poor suppression may result.

Low rates will not adequately suppress broadleaf weeds such as dandelion or plantain. If broadleaf weeds make up more than 10 percent of the ground cover, mix this product with 1 Quart of 2.4-D per acre which is labeled for orchard use.

#### TREE CROPS

**Pome Fruit\*:** apple, pear.

**Stone Fruit\*\*:** apricots, cherries, nectarines, peaches, plums/prunes.

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.

For peaches, remove suckers and low hanging limbs at least 10 days prior to application. Avoid applications near trees with recent pruning wounds or other mechanical injury. Apply only near trees which have been planted in the orchard for 2 or more years. **EXTREME CARE MUST BE TAKEN TO ENSURE NO PART OF THE PEACH TREE IS CONTACTED.**

#### NOTE:

\*Allow a minimum of 14 days between last application and harvest.

\*\*Allow a minimum of 17 days between last application and harvest.

#### VINE CROPS

**Grapes\*:** Any variety of table, wine, or raisin grape may be treated with any equipment listed in this section.

\*Applications should not be made when green shoots, canes, or foliage are in the spray zone.  
\*Allow a minimum of 14 days between last application and harvest.

**\*COUNTY RESTRICTIONS**

This product can only be used in certain counties in Kansas, Minnesota, Nebraska, Nevada, Oregon, and Washington. See the following sections for county use restrictions for these states.

In **KANSAS** and **NEBRASKA**, this product can be used in all counties **EXCLUDING** those listed below:

**KANSAS**

Allen	Douglas	Neosho
Anderson	Franklin	Osage
Atchinson	Jackson	Riley
Bourbon	Johnson	Shawnee
Brown	Labefte	Wilson
Cherokee	Leavenworth	Woodson
Coffey	Linn	Wyandotte
Crawford	Miami	
Doniphan	Montgomery	

**NEBRASKA**

Antelope	Hamilton	Polk
Boone	Jefferson	Richardson
Buft	Johnson	Saline
Butler	Knox	Sarpy
Cass	Lancaster	Saunders
Cedar	Madison	Seward
Colfax	Merrick	Stanton
Cuming	Nance	Thurston
Dakota	Nemaha	Washington
Dixon	Otoe	Wayne
Dodge	Pawnee	York
Douglas	Pierce	
Gage	Platte	

In **MINNESOTA**, **NEVADA**, **OKLAHOMA**, **OREGON** and **WASHINGTON**, this product can be used **ONLY** in those counties listed below:

**MINNESOTA**

Becker	Grant	Marshall
Beltrami	Hubbard	Norman
Clay	Kittson	Ottertail
Clearwater	Lake of the Woods	Pennington
Douglas	Mahnomen	Polk

Red Lake  
Roseau

Wadena  
Wilkin

**NEVADA**

Elko  
Humbolt

Pershing  
Churchill

Lyon

**OKLAHOMA**

Beaver

Cimarron

Texas

**OREGON**

Baker  
Crook  
Deschutes  
Gilliam  
Grant  
Harney

Hood River  
Jefferson  
Malheur  
Morrow  
Sherman  
Umatilla

Union  
Wallowa  
Wasco  
Wheeler

**WASHINGTON**

Adams  
Asotin  
Benton  
Chelan  
Columbia  
Douglas  
Ferry

Franklin  
Garfield  
Grant  
Kiftitus  
Klickitat  
Lincoln  
Okanagan

Pend Oreille  
Spokane  
Stevens  
Walla Walla  
Whitman  
Yakima

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**LIMIT OF WARRANTY AND LIABILITY**

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This

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

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