

PM 25

524-513

11/4/99

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**RESTRICTED USE PESTICIDE**

Due to oncogenicity. For retail sale to and use only by Certified Applicators, or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

**MON 78103**

Herbicide by Monsanto

**Postemergence herbicide for weed control in Roundup Ready® Corn with residual grass weed control.**

EPA Reg. No. 524-513

AVOID CONTACT WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, DESIRABLE PLANTS AND TREES, OTHER THAN CORN WITH THE ROUNDUP READY GENE, BECAUSE SEVERE INJURY OR DESTRUCTION MAY RESULT.

MONSANTO COMPANY RECOMMENDS USE OF THIS PRODUCT ONLY ON CORN HYBRIDS DESIGNATED AS CONTAINING THE ROUNDUP READY® GENE.

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.

**Container Statement:**

Read "Limit of Warranty and Liability" which appears in the label booklet, before buying or using. If terms are not acceptable, return at once unopened.

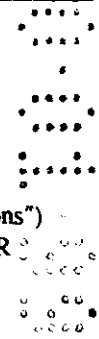
THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.

**Container Label Statement:**

THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. IT IS INTENDED THAT REPACKAGING BE ONLY IN ACCORDANCE WITH A MONSANTO REPACKAGING OR TOLL REPACKAGING AGREEMENT.

**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 warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, 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.

This Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company's stewardship requirements and with express written permission from this Company.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

Buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Keep out of reach of children.

CAUTION!

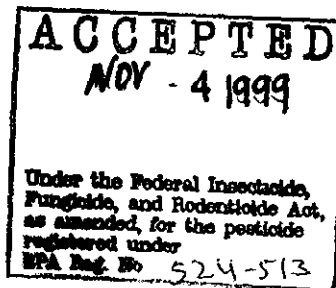
HARMFUL IF SWALLOWED

CAUSES MODERATE EYE IRRITATION.

Avoid contact with skin, eyes or clothing.

Wash thoroughly with soap and water after handling.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.



**FIRST AID: IF SWALLOWED:** call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger, or if available, by administering syrup of ipecac. IF PERSON IS UNCONSCIOUS, DO NOT GIVE ANYTHING BY MOUTH AND DO NOT INDUCE VOMITING.

**IF ON SKIN:** wash with plenty of soap and water. Get medical attention if irritation persists.

**IF IN EYES:** flush eyes with plenty of water. Call a physician if irritation persists.

**Personal Protective Equipment (PPE):**

Applicators and other handlers must wear: long-sleeved shirt and long pants, shoes and socks, and chemical resistant gloves (such as Nitrile, Butyl, Neoprene and/or Barrier Laminate)

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.

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

**IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

**User Safety Recommendation:**  
Users should:

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

**IMPORTANT PHONE NUMBERS**

FOR PRODUCT INFORMATION OR ASSISTANCE IN USING THIS PRODUCT,  
CALL TOLL-FREE,

1-800-332-3111

IN CASE OF AN EMERGENCY INVOLVING THIS PRODUCT, OR FOR MEDICAL ASSISTANCE,  
CALL COLLECT, DAY OR NIGHT,

(314)-694-4000

**Environmental Hazards**

This product is toxic to fish. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the groundwater is shallow, may result in groundwater contamination.

Acetochlor has properties that may result in surface water contamination via dissolved runoff and runoff erosion. Practices should be followed to minimize the potential for dissolved runoff and/or runoff erosion.

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### Physical or Chemical Hazards

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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.

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**ACTIVE INGREDIENT\*:**

Glyphosate, N-(phosphonomethyl) glycine, in the form of its isopropylamine salt.....21.1%

Acetochlor, 2-chloro-N-ethoxymethyl-N-(2-ethyl-6-methylphenyl)acetamide.....36.9%

OTHER INGREDIENTS.....42.0%  
100.0%

\*Contains 243 grams per liter or 2.0 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its isopropylamine salt. Equivalent to 180 grams per liter or 1.5 pounds per U.S. gallon of the acid, glyphosate.

\*Contains 420 grams per liter or 3.5 pounds per U.S. gallon of the active ingredient acetochlor.

Glyphosate is protected by U.S. Patent No. 4,405,531. Other patents pending. No license granted under any non-U.S. patent(s).

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### DIRECTIONS FOR USE

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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 regulations.

**Agricultural Use Requirements:**

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 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, is: coveralls, shoes and socks and chemical resistant gloves (such as Nitrile, Butyl, Neoprene, and/or Barrier Laminate).

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.

### Storage and Disposal

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

**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.

See container label for additional STORAGE AND DISPOSAL instructions.

#### Container Label Statements:

##### (ALL CONTAINERS)

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.

##### (FOR REFILLABLE PORTABLE CONTAINERS)

Do not reuse this container except for refill in accordance with a valid Monsanto Repackaging or Toll Repackaging Agreement. If not refilled or returned to the authorized repackaging facility, triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

##### (FOR BULK CONTAINERS)

Triple rinse emptied bulk container. Then offer for recycling or reconditioning, or dispose of in a manner approved by state and local authorities.

**(FOR PLASTIC 1-WAY CONTAINERS & BOTTLES)**  
 Do not reuse container. Triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**(FOR DRUMS)**  
 Do not reuse container. Return container per the Monsanto container return program. If not returned, triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**GENERAL INFORMATION**

**Product Description:** This product provides postemergence, systemic control of many annual grasses and broadleaf weeds and suppression of perennial weeds in Roundup Ready® corn. The product will also provide residual control of selected grasses.

This product can be applied postemergence to Roundup Ready corn from seedling emergence until the corn reaches 11 inches in height. A single in-crop application of this product is not to exceed 2.0 quarts per acre.

**Make a single application of this product only to corn hybrids designated as containing the Roundup Ready gene.** Applying this product to corn hybrids which are not designated as Roundup Ready will result in severe crop injury and yield loss. The Roundup Ready designation indicates that the corn contains a patented gene which provides tolerance to this herbicide. Information on Roundup Ready corn may be obtained from your seed supplier or Monsanto Representative.

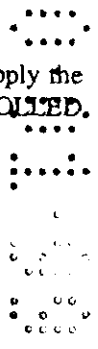
The product is formulated as a emulsion in water (EW). It may be applied through most standard industrial or field-type sprayers after dilution and thorough mixing with water according to label instructions.

**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 above-ground growth and deterioration of underground plant parts.

For preemergence activity moisture in the form of rainfall or irrigation is required after application to move this product into the weed germination zone. The amount of moisture required depends on the soil moisture content at the time of application, soil type, and plant residues. Performance is improved when 1/3 to 3/4 inch of moisture is received within one week after application and prior to weed emergence. High intensity or excessive rainfall or irrigation after application may reduce preemergence weed control on coarse soils.

**Stage of Weeds:** Annual weeds are easiest to control when they are small (2-4 inches tall). Apply the product prior to when weeds become competitive with the corn. Refer to the **WEEDS CONTROLLED** section for recommendations for specific weeds.

Always use the highest labeled rate of this product when weed growth is heavy or dense.



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.

**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.

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

**Maximum Use Rate:** Except as otherwise specified in a crop section of this label, the maximum postemergence rate for a single application must not exceed 2.0 quarts of this product per acre per application in Roundup Ready corn. If additional weed control is needed after the corn is 11 inches tall, Roundup is recommended. Follow the Roundup label USE RESTRICTIONS and PRECAUTIONARY STATEMENTS for later postemergence applications in Roundup Ready corn.

**Rotational Crops:**

Do not rotate to crops other than soybeans, corn (all types including sweet corn), milo (sorghum), or wheat.

**USE RESTRICTIONS**

This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the groundwater is shallow, may result in groundwater contamination. Do not apply to the following soils where depth to groundwater is 30 feet or less: sands with less than 3% organic matter; loamy sands with less than 2% organic matter; or sandy loams with less than 1% organic matter.

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.

Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain a minimum of 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the

capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Do not flood irrigate to apply or incorporate this product.

Product must be used in a manner which will prevent back siphoning into wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

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

Disposal of excess pesticide, spray mixtures or rinsate should be according to label use instructions or according to the state Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA regional office.

Do not apply under conditions which favor runoff or wind erosion of soil containing this product to non-target areas. To prevent off-site movement due to runoff or wind erosion:

Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

Do not apply to impervious substrates such as paved or highly compacted surfaces.

Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least 1/2 inch of rainfall has occurred between application and the first irrigation.

Do not apply this product using aerial application equipment.

Do not apply when wind conditions favor drift to non-target sites. To minimize spray drift to non-target areas:

Use low pressure application equipment capable of producing a large droplet spray. Do not use nozzles that produce a fine droplet spray. Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.

Keep ground driven spray boom as low as possible above the target surface.

Make application when the wind velocity favors on-target product deposition (approximately 3-10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid application when winds are gusty and conditions favor drift.

Low humidity and high temperatures increase the likelihood of spray drift to sensitive areas. Avoid spraying during conditions of low humidity and/or high temperatures. Do not apply during inversion conditions.

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.

Flush sprayer with clean water after use.

**DO NOT GRAZE OR FEED FORAGE FROM TREATED AREAS FOR 8 WEEKS FOLLOWING APPLICATION.**



Allow minimum of 50 days between application of this product and harvest of corn forage.

Do not graze, harvest or feed corn forage or silage following a sequential in-crop application of this product followed by Roundup on Roundup Ready corn.

READ AND CAREFULLY OBSERVE PRECAUTIONARY STATEMENTS AND ALL OTHER INFORMATION APPEARING ON THE LABELING OF ALL PRODUCTS USED IN MIXTURES.

**MIXING, SPRAYING AND HANDLING INSTRUCTIONS**

**NOTE**

Direct contact or exposure to this product or spray mixtures of this product should be minimized. The following instructions for transfer, mixing, cleaning or repairing equipment should be followed in order to minimize this exposure. Review the protective clothing requirements as listed in the "PRECAUTIONARY STATEMENTS" section of this label and do not use this product until you have the necessary protection clothing.

**2.5 Gallon Containers**

Open pouring from these containers can result in exposure from splashing or spilling. Special care in lifting and pouring is strongly recommended.

**Bulk Containers**

Open pouring from these containers can result in exposure from splashing or spilling and is not recommended. This product should be transferred from these containers to the mix or spray tank using pumps or transfer probes. The probe or pump should not be removed from the container or disconnected until the container is emptied or rinsed. Use the pump or probe system to rinse the empty container and transfer the rinsate directly to the mix or spray tank.

**Equipment Cleaning & Repair**

Cleaning and repair of transfer systems and application equipment is a source of exposure to this product. Care should be taken to minimize exposure during cleaning and repair to transfer systems application equipment. Whenever possible, these systems or equipment should be rinsed before being cleaned or repaired.

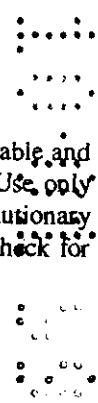
When repairs must be made during transfer or application, the equipment should be shut down, and special care taken to avoid contact with the pesticide.

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

**NOTE:** Reduced results may occur if muddy water is used, such as water from ponds or ditches.

**Mixing this product with water:**

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.
3. If a compatibility agent is necessary to improve mixing or to prevent the formation of undesirable and unsprayable gels or precipitates, while agitating add it to the carrier already in the tank. Use only compatibility agents cleared by FDA for this use. Read and follow all directions for use, cautionary statements and all other information appearing on the selected compatibility agent label. Check for adequate agitation.



4. Add tank mix components. If a wettable powder is used, make a slurry with water, and add it SLOWLY through the screen into the tank. Continue agitation. If flowable herbicides are used, add slowly through screen into the tank. Mixing and compatibility may be improved when flowable is premixed one part flowable with one part water. Add diluted mixture SLOWLY through the screen into the tank.
5. Add the recommended amount of this product near the end of the filling process SLOWLY through the screen into the tank and mix well. Mixing and compatibility may be improved when this product is prediluted with two parts of water and added to the tank in diluted form.
6. Complete filling the sprayer tank with water. If Roundup® is used, add the required amount near the end of the filling process. Remove hose from tank immediately to avoid siphoning back into the water source. Maintain good agitation at all times until the contents of the tank are sprayed.

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

Keep bypass 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. Check for even distribution of spray droplets. For best results with ground application, use flat fan or whirl-chamber nozzle. To reduce loss of chemical due to drift of a fine mist, apply at pressures less than 40 psi.

**MIX ONLY WITH CLEAN WATER.** Reduced weed control may occur if muddy water is used, such as water from ponds or ditches.

Due to crop injury, it is not recommended that postemergence applications of this product be made to Roundup Ready corn using fluid fertilizer as the carrier because severe crop injury may occur. Adding surfactants, additives containing surfactants, micronutrients, and liquid fertilizers are NOT recommended as crop injury may occur.

Tank mixes with products other than those included in this label are not recommended.

**Ammonium Sulfate** - The addition of ammonium sulfate in the spray solution may increase the performance of this product on emerged annual weeds under adverse growing conditions. When using ammonium sulfate, add 1 to 2 percent dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water. Ammonium sulfate should be added to the water in the spray tank and completely dissolved prior to adding herbicide. The equivalent rate of ammonium sulfate in a liquid formulation may also be used.

If ammonium sulfate is added directly to the spray tank, add slowly with agitation. Adding too quickly may clog outlet lines. Nozzle tip plugging may result from the use of low-quality ammonium sulfate. 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 ammonium sulfate in water and filter prior to addition to the spray tank. Following use of ammonium sulfate, thoroughly rinse the spray system with clean water to reduce corrosion.

**THOROUGHLY CLEAN THE SPRAY TANK AND ALL LINES AND FILTERS TO ELIMINATE POTENTIAL CONTAMINATION FROM OTHER HERBICIDES PRIOR TO MIXING AND APPLYING THIS PRODUCT.**

## APPLICATION INFORMATION

**ATTENTION: AVOID CONTACT WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, DESIRABLE PLANTS AND TREES, OTHER THAN CORN WITH THE ROUNDUP READY GENE, BECAUSE SEVERE INJURY OR DESTRUCTION MAY RESULT.**

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

Do not allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended. The likelihood of injury occurring from the use of this product increases when winds are gusty, as wind velocity increases, when wind direction is constantly changing or when there are other meteorological conditions that favor spray drift. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) which are likely to drift. **AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE.**

**Postemergence Broadcast Application to Roundup Ready Corn** - This product may be applied postemergence until Roundup Ready corn reaches 11 inches in height. Use conventional ground sprayers equipped with nozzles that provide accurate and uniform application. Be certain that nozzles are uniformly spaced and are the same size. Calibrate sprayer before use and recalibrate at the start of each season. Apply this product and labeled tank mixtures in 10 to 25 gallons of water per acre unless otherwise specified. Do not apply during periods when winds are gusty or any other conditions which favor drift.

As density of weeds increases, spray volume should be increased within the recommended range to ensure complete coverage. Carefully select correct nozzles and spray pressure to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles or a drift reducing nozzle with a droplet size of 400-800 microns. Check for even distribution of spray droplets.

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### WEEDS CONTROLLED

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When applied as directed under conditions described, this product will control or reduce competition from the following EMERGED WEEDS.

- Apply this product **POSTEMERGENCE** to Roundup Ready Corn when the weeds are 2-4 inches tall and prior to the corn height reaching 11 inches..
- Reduced control of emerged weeds may occur when weeds are under poor growing conditions such as from drought stress, or when excessive amounts of dust cover the plants.

#### ANNUAL GRASSES

**Barnyardgrass**  
*Echinochloa crus-galli*

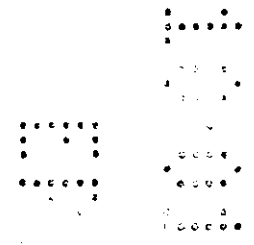
**Bluegrass, annual**  
*Poa annua*

**Brome, downy**  
*Bromus tectorum*

**Corn, volunteer**  
*Zea mays*

**Crabgrass**  
*Digitaria ischaemum*  
*Digitaria sanguinalis*

**Cupgrass, woolly**



*Eriochloa villosa*

**Foxtail, giant**  
*Setaria faberi*

**Foxtail, green**  
*Setaria viridis*

**Foxtail, yellow**  
*Setaria lutescens*

**Goosegrass**  
*Eleusine indica*

**Panicum, fall**  
*Panicum dichotomiflorum*

**Sandbur, Grassbur**  
*Cenchrus spp.*

**Shattercane**  
*Sorghum bicolor*

**Signalgrass, broadleaf**  
*Brachiaria platyphylla*

**Sprangletop, red**  
*Leptochloa filiformis*

**Wheat, volunteer**  
*Triticum aestivum*

**ANNUAL BROADLEAVES**

**Buttercup, smallflower**  
*Ranunculus abortivus*

**Carpetweed**  
*Mollugo verticillata*

**Chickweed, common**  
*Stellaria media*

**Cocklebur**  
*Xanthium strumarium*

**Fleabane**  
*Erigeron spp.*

**Henbit**  
*Lamium Amplexicaule*

**Kochia**  
*Kochia scoparia*

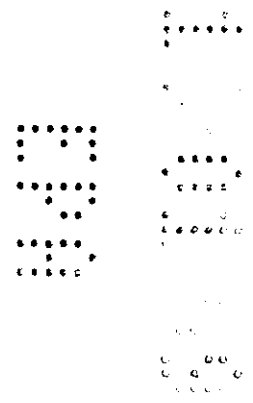
**Lambsquarters**  
*Chenopodium album*

**Lettuce, prickly**  
*Lactuca scariola*

**Mustard sp.**  
*Brassica spp.*

**Marestail, Horseweed**  
*Conyza canadensis*

**Pennycress, field**  
*Thlaspi arvense*



**Pigweed; Carelessweed, redroot**  
*Amaranthus retroflexus*

**Pigweed, smooth**  
*Amaranthus hybridus*

**Pepperweed, spp**  
*Lepidium spp.*

**Ragweed, common**  
*Ambrosia artemisiifolia*

**Ragweed, giant**  
*Ambrosia trifida*

**Shepherd's purse**  
*Capsella bursa-pastoris*

**Smartweed**  
*Polygonum pennsylvanicum*

**Sunflowers**  
*Helianthus annuus*

**Thistle, Russian**  
*Salsola kali*

**Velvetleaf, Buttonweed**  
*Abutilon theophrasti*

**Waterhemp, tall**  
*Amaranthus, tuberculatus*

To REDUCE COMPETITION from the following EMERGED Perennial WEEDS:

- Apply this product POSTEMERGENCE to Roundup Ready Corn when the weeds are 2-4 inches tall and prior to the corn height reaching 11 inches..

**PERENNIAL GRASSES**

**Bluegrass, Kentucky**  
*Poa spp.*

**Bromegrass, smooth**  
*Bromus innermost*

**Fescue**  
*Festuca spp.*

**Muhly, wirestem**  
*Muhlenbergia frondosa*

**Johnsongrass**  
*Sorghum halepense*

**Orchardgrass**  
*Dactylis glomerata*

**Quackgrass**  
*Agropyron repens*

**Ryegrass, perennial**  
*Lolium perenne*

**Timothy**  
*Phleum pratense*

**PERENNIAL BROADLEAVES**

**Alfalfa**

*Medicago sativa*

**Clover, red**  
*Trifolium pratense*

**Clover, white**  
*Trifolium repens*

**Dock, curly**  
*Rumex crispus*

**Milkweed**  
*Asclepias spp.*

**Mullein, common**  
*Verbascum thapsus*

**Smartweed, swamp**  
*Polygonum coccineum*

**Thistle, Canada**  
*Cirsium arvense*

This product applied alone POSTEMERGENCE to Roundup Ready Corn when the weeds are 2-4 inches tall will provide PREEMERGENCE CONTROL or SUPPRESSION of the following weeds:

**ANNUAL GRASSES**

**Barnyardgrass**  
*Echinochloa crus-galli*

**Crabgrass**  
*Digitaria ischaemum*  
*Digitaria sanguinalis*

**Cupgrass, woolly**  
*Eriochloa villosa*

**Foxtail, giant**  
*Setaria faberi*

**Foxtail, green, robust**  
**purple, robust white**  
*Setaria viridis*

**Foxtail, yellow**  
*Setaria lutescens*

**Goosegrass**  
*Elusine indica*

**Johnsongrass, seedling**  
*Sorghum halepense*

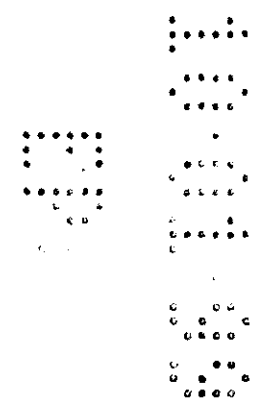
**Millet proso**  
*Panicum miliaceum*

**Oat, wild**  
*Avena fatua*

**Panicum, browntop**  
*Panicum fasciculatum*

**Panicum, fall**  
*Panicum dichotomiflorum*

**Panicum, Texas**  
*Panicum texanum*



**Red, rice**  
*Oryza sativa*

**Sandbur, Grassbur**  
*Cenchrus spp.*

**Shattercane, wildcane**  
*Sorghum bicolor*

**Signalgrass, broadleaf**  
*Brachiaria platyphylla*

**Sprangletop, red**  
*Leptochloa filiformis*

**Wheat, volunteer**  
*Triticum aestivum*

**Witchgrass**  
*Panicum capillare*

**ANNUAL BROADLEAF**

**Lambsquarters**  
*Chenopodium album*

**Pigweed; Carelessweed,  
redroot**  
*Amaranthus retroflexus*

**Pigweed, smooth**  
*Amaranthus hybridus*

**Ragweed, common**  
*Ambrosia artemisiifolia*

**Smartweed**  
*Polygonum pennsylvanicum*

**Velvetleaf, Buttonweed**  
*Abutilon theophrasti*

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**Roundup Ready Corn**

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This product is applied postemergence to Roundup Ready corn from seedling emergence until the corn reaches 11 inches in height. A single in-crop application of this product is not to exceed 2.0 quarts per acre. Normal use rates are between 1.5 and 2.0 quarts per acre based on weed species, weed size and weed density at the time of the postemergence application. Use the higher rate on larger weeds and where heavy weed infestations exist. This product should be applied when weeds are 2-4 inches in height and before the weed height and/or density become competitive with the crop.

Annual weeds--For difficult-to-control annual weeds such as fall panicum, barnyardgrass, crabgrass, shattercane, broadleaf signal grass and Pennsylvania smartweed, apply this product at 2 quarts per acre. For other labeled annual weeds, apply 1.5 to 2 quarts of this product per acre. Use the higher rates in areas of heavy weed pressure and when targeting perennial weeds to reduce competition.

When applied as directed under the conditions described, this product will control many emerged annual weeds, suppress many emerged perennial weeds, and provide preemergence control or suppression of many annual grasses in Roundup Ready corn. See WEED CONTROLLED section of this label for a listing of weeds controlled. This product will not control regrowth from perennial weeds or unemerged perennial weeds.

For mixing instructions, see the MIXING, SPRAYING AND HANDLING section of this label.

**NOTE:** For hard-to-control weeds, additional amounts of Harness® herbicide and/or atrazine may be added to the recommended treatment rates for this product to provide improved residual control from a postemergence application in Roundup Ready corn. For more consistent control of common cocklebur, annual morningglory or velvetleaf, atrazine may be applied so that the total atrazine is at least 1.5 lb active ingredient per acre on medium textured soils with less than 3 percent organic matter, and 1.5 to 2 lb active ingredient per acre on medium and fine textured soils with 3 percent or greater organic matter.

Atrazine up to a maximum rate of 2 lbs. active ingredients per acre can be applied postemergence. Up to 2 quarts of atrazine 4L per acre (or 2.2 lbs. per acre of atrazine 90DF) could be applied with this product. If additional postemergence atrazine treatment is to be applied following an earlier atrazine application, the total atrazine applied may not exceed 2.5 lbs. active ingredient per acre per calendar year.

**NOTE:** The maximum application rate of atrazine is 2.5 pounds active ingredient per acre per calendar year (2.5 quarts per acre atrazine 4L). On highly erodible soils (as defined by the Soil Conservation Service with less than 30 percent residue cover, the maximum rate of atrazine is 1.6 pounds active ingredient (1.6 quarts per acre of atrazine 4L). On soils not highly erodible or on highly erodible soils with more than 30 percent plant residue cover, the maximum rate of atrazine is 2 pounds active ingredient per acre (2 quarts per acre of atrazine 4L).

The following table shows the maximum amounts of Roundup OR Harness OR atrazine herbicides that can be added to specific treatment rates of this product applied postemergence on Roundup Ready corn.

RECOMMENDED RATE	ADDITIONAL PRODUCT (pints/acre)*		
	(maximum)		
MON 78103	ROUNDUP®	Harness®**	Atrazine***
1.5 quart/a****	0.5	up to 1.25	up to 4
2.0 quarts/a	0	up to 0.75	up to 4

\* Use the higher rates in the recommended ranges in areas of heavy weed infestation within label recommendations.

\*\* The maximum Harness rate is a function of soil type and soil organic matter.

\*\*\* Use rates listed in this label when using atrazine 4L. Use equivalent rates when using atrazine 90% dry flowable formulations. One quart of atrazine 4L equals 1.1 pounds of atrazine 90% dry flowable.

\*\*\*\*Refer to the "USE RESTRICTIONS" section of this label for restrictions.

**NOTE:** There is a possibility of crop injury due to carryover of atrazine if soybeans are planted the following year. DO NOT plant soybeans the year following use of these tank mixtures on furrow irrigated corn.

REFER TO SPECIFIC PRODUCT LABELS FOR ADDITIONAL WEEDS CONTROLLED, CROP ROTATION RESTRICTIONS AND CAUTIONARY STATEMENTS.

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EPA Reg. No. 524-



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In case of emergency involving this product,

Call Collect, day or night, (314) 694-4000.

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