

524-509

05/17/2006

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MAY 17 2006

Ms. Dawn Fee-White
Monsanto Company
1300 I (Eye) Street N.W., Suite 450 East
Washington, DC 20005

Dear Ms. Fee-White:

Subject: Ready Master ATZ Herbicide (Atrazine Reregistration)
EPA Registration No. 524-509
Submissions Dated February 1, and April 5, 2005

The scientific review and evaluation of the information/ labeling submitted above have been completed. The confidential statements of formula dated February 1, 2005 are acceptable and supersedes all previously approved versions. Our records have been modified accordingly.

Based on your response to the Atrazine Interim Reregistration Eligibility Decision the Agency is accepting the labeling submitted April 5, 2005, provided the following changes are made.

1. Revise the Precautionary Statements, Hazards to Humans and Domestic Animals to read "Harmful if swallowed or inhaled. Causes moderate eye irritation. Avoid contact with eyes or clothing. Avoid breathing spray mist.
2. Incorporate the following into your First Aid Section.

--If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible.

3. Within the PPE for early reentry in the Agricultural Use Requirements box, revise the current glove requirement to read "chemical resistant gloves **made of** any waterproof material.
4. In your Limit of Warranty and Liability, revise the third paragraph to read "**To the fullest extent permitted by law**, buyers and users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this company..."
5. In your Limit of Warranty and Liability, revise the last sentence of your sixth paragraph to read "**TO THE FULLEST EXTENT PERMITTED BY LAW, IN NO EVENT SHALL THE COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.**"

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Enclosed is a copy of your label stamped "Acceptable with Comments". Amended labeling supersedes all previously approved ones. Final reregistration will await completion of cumulative assessments.

Submit one copy of your final printed labeling incorporating the above changes for our files.

Sincerely,

Victoria (C. Walters for)
James A. Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505P)

ACCEPTED
with COMMENTS
In EPA Letter Dated:
MAY 17 2006
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
524-509

RESTRICTED USE PESTICIDE
due to ground and surface water concerns. 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. Users must read and follow all precautionary statements and instructions for use in order to minimize potential for atrazine to reach ground and surface water.



Preemergence weed control in corn, sorghum and fallow, and postemergence weed control in Roundup Ready[®] Corn with residual broadleaf weed control.

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

EPA Reg. No. 524-509 2005-1

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 or "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.

For over-the-top uses on Roundup Ready crop varieties, crop safety and weed control performance are not warranted by Monsanto when this product is used in conjunction with "brown bag" or "bin run" seed saved from previous year's production and replanted.

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 ACCURD 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.

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

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. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.

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 eyes or clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals.

FIRST AID: Call a poison control center or doctor for treatment advice.	
IF SWALLOWED	<ul style="list-style-type: none"> Have person sip a glass of water if able to swallow Do not induce vomiting unless told to do so by a poison control center or doctor Do not give anything by mouth to an unconscious person
IF IN EYES	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 minutes Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye
<ul style="list-style-type: none"> Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact (314) 694-4000, call direct day or night, for emergency treatment information. This product is identified as Ready Master[®] ATZ herbicide, EPA Registration No. 524-509. 	

Personal Protective Equipment (PPE):
Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA Chemical Resistance Category Chart.

Mixers, loaders, applicators and other handlers must wear: long-sleeved shirt and long pants, chemical-resistant gloves such as polyvinylchloride and polyethylene, shoes plus socks, and a chemical-resistant apron, when mixing/loading, cleaning up spills, or cleaning equipment, or otherwise exposed to the concentrate. See "Engineering Controls" for additional requirements.

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.

Engineering Controls

Mixers and loaders supporting aerial applications at a rate greater than 3 pounds active ingredient per acre must use a closed system that meets the requirements for dermal protection listed in the Worker Protection Standard (WPS) for Agricultural Pesticides (40 CFR 170.240 (d)(4)) and must:

- Wear the personal protective equipment required for mixers and loaders.
 - Wear protective eyewear if the system operates under pressure, and
 - Be provided and have immediately available for use in emergency, such as a spill or equipment breakdown: chemical-resistant footwear.
- Pilots must use an enclosed cockpit in a manner that is consistent with the WPS for Agricultural Pesticides (40 CFR 170.240 (d)(6)). Pilots must wear the PPE required on this labeling for applicators, however they need not wear chemical-resistant gloves when using an enclosed cockpit.
- Flaggers supporting aerial applications must use an enclosed cab that meets the definition on the Worker Protection Standard for Agricultural Pesticides (40 CFR 170.240 (d)(5)) for dermal protection.

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 Recommendations

- Users should:
- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
 - Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
 - Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

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

Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable. A wet-drained "low local agricultural" areas can provide further information on the type of soil in your area and the location of ground water.

This product must not be mixed or loaded within 50 feet of intermittent streams and rivers, natural or impounded lakes and reservoirs. This product must not be applied aerially or by ground within 66 feet of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet of natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66-foot buffer or setback from runoff entry points must be planted to crop, seeded with grass, or other suitable crop.

This product must not be mixed or loaded within 50 feet of any well, abandoned well, drainage well, and sink holes. Operators that receive manure, loading manure, or washing off this product into or from pastures, hand-dug or application equipment or containers within 50 feet of any well are prohibited unless conducted on an approved 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 spill or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall

not be allowed must be self-removal. An application 110 application equipment size to shall have a of the largest Centainment times The abo to vehicles wh Additional Str and operation This pesticide water, to area the near: high drift from treat arduous to aqua water when of

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

ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION OF FEDERAL LAW. Before using this product, you must consult the Atrazine Watershed Information Center (AWIC) to determine whether use of this product is prohibited in your watershed. AWIC can be accessed through www.atrazina-watershed.info or 1-866-365-3014. If use of this product is prohibited in your watershed, you may return this product to the point of purchase or contact Monsanto Company for a refund.

Storage and Disposal

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

PESTICIDE STORAGE: Keep container closed to prevent spills and contamination.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

CONTAINER DISPOSAL: Empty container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

See individual container label for additional PESTICIDE STORAGE AND DISPOSAL instructions.

GENERAL INFORMATION

Product Description: This product is a systemic herbicide for the control of many annual grasses and broadleaf weeds and suppression of perennial weeds preemergence in corn and sorghum and postemergence in corn that contains the Roundup Ready gene. This product also provides residue control of selected broadleaf weeds.

This product is applied preemergence to corn and sorghum in fallow fields and also postemergence to Roundup Ready corn from seedling emergence until the corn reaches 12 inches in height.

Monsanto recommends that this product only be applied postemergence to corn hybrids designated as containing the Roundup Ready gene. Applying this product to corn hybrids that 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.

This product is formulated as a suspension concentrate. It may be applied through most standard industrial or field-type sprayers or aera application 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 post-emergence activity of this product and delay development of visible symptoms. Visible effects are a gradual wilting and yellowing of the plant that advances to complete browning of above-ground growth and deterioration of underground plant parts.

The preemergence activity of this product is through root absorption; its pre-emergence effectiveness depends on moisture to move it into the root zone.

Stage of Weeds: Annual weeds are easiest to control when they are small (2 to 4 inches tall).

Always use the higher rate of this product per acre within the recommended range 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.

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

Rainfastness: Heavy rainfall or sprinkler irrigation soon after application may wash this product off of the foliage reducing the level of 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 rotation restrictions, 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. When this label recommends a tank mixture with atrazine, the user is responsible for ensuring that the mixture product's label allows the specific application.

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 or crop injury.

Maximum Use Rate: Except as otherwise specified in a crop section of this label, the maximum rate for a single application must not exceed 2 quarts of this product per acre per application in Roundup Ready corn. The combined total of all treatments, including fallow, must not exceed 5 quarts per acre per calendar year (maximum of 2.5 pounds active ingredient of atrazine per acre). Make only one application between corn emergence and before corn exceeds 12 inches in height. If additional weed control is needed after the corn is 12 inches tall, Roundup[®] agricultural herbicides are recommended.

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

Due to potential crop injury it is not recommended that this product be applied in liquid fertilizer carriers over the top of Roundup Ready corn.

Do not graze or feed forage from treated areas for 8 weeks following a fallow application.

Allow a minimum of 60 days between application of this product and harvest or grazing of corn or sorghum forage.

Rotational Crops:
CORN (ALL TYPES INCLUDING SWEET CORN), MILO (SORGHUM), OR SOYBEANS CAN BE PLANTED THE YEAR FOLLOWING THE USE OF THIS PRODUCT IF SOYBEANS ARE TO BE PLANTED THE FOLLOWING YEAR, THERE IS THE POSSIBILITY OF CROP INJURY DUE TO CARRYOVER OF ATRAZINE.

MIXING AND HANDLING INSTRUCTIONS

Transfers

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 protective clothing.

2.5 Gallon Containers

Open pouring from these containers can result in exposure from splashing or spilling. Special care in filling 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 rinseate directly to the mix or spray tank.

Equipment Cleaning and 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.

Thoroughly clean the spray tank and all lines and filters to eliminate potential contamination from other herbicides prior to mixing and applying this product.

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

Mix this product or labeled tank mixture 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.
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 this product SLOWLY through the screen into the tank.

6. Complete filling the sprayer tank with water. Use caution to avoid siphoning back into the carrier source. Use approved anti-back-siphoning devices where required by state or local regulation. 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. If needed, use an approved anti-foaming or defoaming agent.

Clean sprayer thoroughly immediately after use by flushing system with water containing a detergent.

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.

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 one-third cup of ammonium sulfate to 1 gallon of water and agitate for 1 minute. If undissolved sediment is observed, pre-dissolve the ammonium sulfate in water and filter prior to addition to the spray tank. Following use of ammonium sulfate, thoroughly rinse the spray system with clean water to reduce corrosion.

NOTE: Additional surfactants are not required with this product.

APPLICATION TIMING AND METHODS

Spray Drift Management

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 which does not contain the Roundup Ready gene. 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.

Avoiding spray drift at the application site is the responsibility of the applicator. The interactions of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Erodible Soils

Maximum broadcast applications rates for corn and sorghum must be as follows:

- If no atrazine was applied prior to corn or sorghum emergence, apply a maximum of 2 pounds of atrazine active ingredient per acre broadcast. If a postemergence treatment is required following an ear- or herbicide application, the total atrazine applied may not exceed 2.5 pounds atrazine active ingredient per acre per calendar year.
- Apply a maximum of 2.0 pounds active ingredient per acre as a single preemergence application on soils that are not highly erodible or on highly erodible soils (as defined by the Natural Resources Conservation Service) if at least 30 percent of the soil is covered with plant residues, or
- Apply a maximum of 1.6 pounds active ingredient per acre as a single preemergence application on highly erodible soils (as defined by the Natural Resources Conservation Service) if less than 30 percent of the surface is covered with plant residues, or
- 2.0 pounds active ingredient per acre may be applied postemergence.

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 or frozen or snow covered soils.

Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least 0.5 inch of rainfall has occurred between application and the first irrigation.

Read each of these sections of this label for essential product performance information.

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Equipment

Ground Broadcast Treatment—Use conventional broadcast sprayers with nozzles that provide excellent air stream application. Be certain that nozzles are properly adjusted and are the same size. Calibrate nozzles before use and read label at the end of each season. Apply this product and labeled tank mixtures at 10 to 20 gallons of water per acre unless otherwise specified. Do not apply during periods when wind is gusty or other conditions which favor drift.

As density of weeds increases, spray volume should be increased within the recommended range to ensure complete coverage. Quality of weed control depends on spray pressure to spray area, not the flow rate. Do not reduce flow rate to 5 to 10 gpm/acre. Do not spray when wind is blowing toward the spray direction.

Special Applications—DO NOT APPLY THIS PRODUCT USING A MANUAL SPRAYER EQUIPMENT EXCEPT UNDER CONDITIONS AS SPECIFIED UNDER THIS LABEL.

Use the recommended rates of this product at 3 to 15 gallons of water per acre unless otherwise specified on this label. Do not exceed 2 quarts of this product per acre over the top of Roundup Ready corn.

WEATHER APPROPRIATE BUFFER ZONES TO PREVENT RUNOFF TO ADJACENT SENSITIVE AREAS

Establish buffer zones between treated areas and sensitive areas. Buffer zones should be established between treated areas and sensitive areas. Buffer zones should be established between treated areas and sensitive areas. Buffer zones should be established between treated areas and sensitive areas.

FOR AGRICULTURAL USE ONLY. REFER TO THE FEDERAL SUPPLY, PESTICIDE LABEL FOR WEED KILLER AND WEED PREVENTIVE INSTRUCTIONS FOR SPECIFIC INFORMATION.

Aerial Spray Drift Management

The following drift management requirements must be followed to avoid potential drift movement from aerial applications to agricultural field crops:

- 1. The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the aircraft or rotor.
- 2. Nozzles must always point backward parallel with the aircraft and never be directed toward other aircraft, buildings, or other structures.

Controlling Droplet Size

Use the best spray management strategy to apply the spray droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will prevent some applications from being uniformly or under unfavorable environmental conditions (see the "Wind, Temperature and Humidity" and "Temperature Inversions" sections of this label).

- **Volume:** Use the lowest rate that will give the best spray droplet size for the application.
- **Pressure:** Use the lower spray pressures recommended for the nozzle. Higher spray pressures create fine and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles:** Use the minimum number of nozzles that provide uniform coverage.

Nozzle Orientation: Operating nozzles should be adjusted to produce a fan spray pattern. Do not use air induction nozzles. Do not use air induction nozzles. Do not use air induction nozzles. Do not use air induction nozzles.

Nozzle Type: Use a nozzle type that is best suited for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles often produce larger droplets than other nozzle types.

Boom Length: For some use patterns, reducing the effective boom length to less than 3/4 of the aircraft or rotor length may further reduce drift without reducing spray volume.

Application Height: Applying spray at the lowest height that will provide the best coverage of the target area will reduce the exposure of the droplets to evaporation and wind.

Swath Adjustment
When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the operator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment (if done) should be made with caution. Do not reduce ground speed to the point of creating a high risk of crop damage.

Wind
Do not apply this product when wind speed is 10 mph or greater. The spray should be applied when wind speed is between 3 and 10 mph. Do not apply this product when wind speed is 10 mph or greater. The spray should be applied when wind speed is between 3 and 10 mph. Do not apply this product when wind speed is 10 mph or greater.

Temperature and Humidity
Do not apply this product when temperature is above 90°F or below 50°F. Do not apply this product when humidity is above 90% or below 30%. Do not apply this product when temperature is above 90°F or below 50°F.

Temperature Inversions
Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions occur when a layer of cool air is trapped near the ground, preventing the normal mixing of air.

Sensitive Areas
Do not apply this product to sensitive areas. Sensitive areas include water bodies, wetlands, and areas with high wildlife populations. Do not apply this product to sensitive areas.

Application Instructions

Preemergence to Corn and Sorghum
Apply this product preemergence to corn and sorghum at a rate of 1.5 to 2.0 quarts per acre up to 14 days prior to crop planting. When tank-mixing with another herbicide, apply this product at a rate of 1.5 to 2.0 quarts per acre.

Preemergence to Roundup Ready Corn

Apply this product preemergence to Roundup Ready corn from seedling emergence until 12 weeks after emergence. Apply at 1.5 to 2.0 quarts per acre as a broadcast spray. Do not apply this product to Roundup Ready corn after it has emerged.

Annual Weeds—For difficult-to-control weeds such as fall panicum, common ragweed, and common waterhemp, use this product at 2.0 to 2.5 quarts per acre. For easier-to-control weeds, use this product at 1.5 to 2.0 quarts per acre.

Controlled Traffic Farming (CTF)
Do not apply this product to CTF systems. CTF systems are designed to reduce soil erosion and improve soil health. Do not apply this product to CTF systems.

Use of Roundup Ready Corn
Do not apply this product to Roundup Ready corn. Roundup Ready corn is a genetically modified crop that is resistant to Roundup herbicide. Do not apply this product to Roundup Ready corn.

Use of Roundup Ready Soybeans
Do not apply this product to Roundup Ready soybeans. Roundup Ready soybeans are a genetically modified crop that is resistant to Roundup herbicide. Do not apply this product to Roundup Ready soybeans.

Use of Roundup Ready Cotton
Do not apply this product to Roundup Ready cotton. Roundup Ready cotton is a genetically modified crop that is resistant to Roundup herbicide. Do not apply this product to Roundup Ready cotton.

Use of Roundup Ready Sugarbeets
Do not apply this product to Roundup Ready sugarbeets. Roundup Ready sugarbeets are a genetically modified crop that is resistant to Roundup herbicide. Do not apply this product to Roundup Ready sugarbeets.

Use of Roundup Ready Alfalfa
Do not apply this product to Roundup Ready alfalfa. Roundup Ready alfalfa is a genetically modified crop that is resistant to Roundup herbicide. Do not apply this product to Roundup Ready alfalfa.

Label Requirements for each label
Do not apply this product to crops that are not listed on the label. Do not apply this product to crops that are not listed on the label. Do not apply this product to crops that are not listed on the label.

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Chemical Fallow Applications

- Do not apply this product to chemical fallow applications.
- For soils in North and South Dakota with a pH of 7.5 or greater, do not apply more than 2.5 pounds of atrazine active ingredient per acre in a single application.
- Do not apply this product to chemical fallow applications.

Weed Standalone Applications

Do not apply this product to weed standalone applications. Weed standalone applications are not recommended. Do not apply this product to weed standalone applications.

Preemergence to Corn and Sorghum
Apply this product preemergence to corn and sorghum at a rate of 1.5 to 2.0 quarts per acre up to 14 days prior to crop planting. When tank-mixing with another herbicide, apply this product at a rate of 1.5 to 2.0 quarts per acre.

Preemergence to Roundup Ready Corn
Apply this product preemergence to Roundup Ready corn from seedling emergence until 12 weeks after emergence. Apply at 1.5 to 2.0 quarts per acre as a broadcast spray. Do not apply this product to Roundup Ready corn after it has emerged.

Annual Weeds—For difficult-to-control weeds such as fall panicum, common ragweed, and common waterhemp, use this product at 2.0 to 2.5 quarts per acre. For easier-to-control weeds, use this product at 1.5 to 2.0 quarts per acre.

Controlled Traffic Farming (CTF)
Do not apply this product to CTF systems. CTF systems are designed to reduce soil erosion and improve soil health. Do not apply this product to CTF systems.

Use of Roundup Ready Corn
Do not apply this product to Roundup Ready corn. Roundup Ready corn is a genetically modified crop that is resistant to Roundup herbicide. Do not apply this product to Roundup Ready corn.

Use of Roundup Ready Soybeans
Do not apply this product to Roundup Ready soybeans. Roundup Ready soybeans are a genetically modified crop that is resistant to Roundup herbicide. Do not apply this product to Roundup Ready soybeans.

Use of Roundup Ready Cotton
Do not apply this product to Roundup Ready cotton. Roundup Ready cotton is a genetically modified crop that is resistant to Roundup herbicide. Do not apply this product to Roundup Ready cotton.

Precautions: (1) Do not use on sandy soil. (2) Do not treat eroded banks, sides, cañons and rocky outcroppings of exposed calcareous substrate. (3) Do not treat soils of the Rosebud and Canyon Series in western NE and adjoining counties in CO and WY. (4) Do not treat soils with calcareous surface layers. (5) Avoid spray overlap. (6) Do not graze treated areas within 6 months after application.

Tank Mixtures for Chemical Fallow

Atrazine Use Limitations:

- Do not apply more than one application per cycle.
- For soils in North and South Dakota with a pH of 7.5 or greater, do not apply more than 1.5 pounds of atrazine active ingredient per acre in a single application.
- For soils in North and South Dakota with a pH of less than 7.5, do not apply more than 2 pounds of atrazine active ingredient per acre in a single application.
- Do not apply more than 2.25 pounds atrazine active ingredient per acre for any application.

Wheat-Corn-Fallow or Wheat-Sorghum-Fallow rotations (in KS, NE, only): In cases of heavy weed infestation or hard-to-control weed species found on this label, additional amounts of a Roundup agricultural herbicide and/or atrazine herbicide can be added to the recommended treatment rates (1.5 to 2 quarts per acre) to obtain improved control. See "ANNUAL WEEDS RATE TABLES" in the Roundup agricultural herbicide label to determine the additional quantity required for control of specific weed species and size. The maximum additional quantity of atrazine AI that can be applied is 2 quarts per acre for 2.2 pounds per acre of atrazine 90DF. Apply to stubble ground. Treat only once during same fallow period.

Refer to the product labels for Roundup agricultural herbicides and atrazine for specific recommendations, precautions and limitations regarding application.

Precautions: (1) Use only on soil (corn or forage sorghum). (2) Wheat-sorghum-fallow or wheat-corn-fallow cropping sequence must be followed. (3) Do not graze or feed forage from treated area to livestock. (4) Do not plant any crop other than those labeled within 18 months following treatment.

Wheat-Fallow-Wheat (in CO, KS, NE, ND, SD, and WY only): In cases of heavy weed infestation, large weed size or hard-to-control weed species emerged at the time of application, additional amounts of Roundup agricultural herbicide can be added to the recommended treatment rates to obtain improved control. See "ANNUAL WEEDS RATE TABLES" in the Roundup agricultural herbicide label to determine the additional quantity required for control of specific weed species and size. Refer to the Roundup agricultural herbicide label booklet for specific recommendations, precautions and limitations regarding application. Applications are to be made in the fall following wheat harvest.

Precautions: To avoid crop injury: (1) Do not use on sand soil. (2) Do not treat eroded banks, sides, cañons and rocky outcroppings or exposed calcareous substrate. (3) Do not treat soils of the Rosebud and Canyon Series in western NE and adjoining counties in CO and WY. (4) Do not treat soils with calcareous surface layers. (5) Avoid spray overlap.

NOTE: Do not graze treated areas within 6 months after application, or illegal residues may result.

Aerial Application for Chemical Fallow application: For aerial application, follow the additional instructions in the "Equipment" and "Aerial Spray Drift Management" sections of this label. For aerial fallow applications, use 3 to 15 gallons of water.

Winter Weed Control In Texas

For postemergence control of winter annual broadleaf and grassy weeds only, such as henbit, seedling dock and annual thistle on fall bedded land in the Gulf Coast and Blacklands of Texas. Apply 2 quarts per acre postemergence to the weeds in November or December to land that will be planted to corn, grain sorghum or forage sorghum the following spring.

Normal weed control programs may be used in the following corn, grain sorghum, or forage sorghum crops.

NOTE: Do not plant any crops except corn, grain sorghum or forage sorghum the spring following this treatment, or illegal residues may result.

WEEDS CONTROLLED

Emergent Weeds

When applied as directed under conditions described, this product alone or in tank mixtures with other products listed will control or reduce competition from the following "Emergent Weeds":

- Apply this product PREEMERGENCE to corn and sorghum.
- Apply this product POSTEMERGENCE to corn containing the Roundup Ready gene when the weeds are 2 to 4 inches tall.
- Reduced control of emergent 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 fabae
- Foxtail, green
Setaria viridis
- Foxtail, yellow
Setaria lutescens
- Goosegrass
Elymus indica
- Panicum, fall
Panicum dichotomiflorum
- Sandbur; Grassbur
Cenchrus spp.
- Shattercane
Sorghum bicolor
- Signalgrass, broadleaf
Bracharia platyphylla
- Sprangletop, red
Lepidochloa hirsutum
- Wheat, volunteer
Triticum aestivum

ANNUAL BROADLEAVES

- Buttercup, smallflower
Ranunculus abortivus
- Carpetweed
Mollis verticillata
- Chickweed, common
Stellaria media
- Cocklebur
Xanthium strumarium
- Fleabane
Ergatis spp.
- Henbit
Lamium amplexicaule
- Kochia
Kochia scoparia
- Lambsquarters
Chenopodium album
- Lettuce, prickly
Lactuca serriola
- Mustard spp.
Brassica spp.
- Marestail; Horseweed
Centaurea canadensis
- Pennygrass, field
Thlaspi arvense
- Pigweed; Carelessweed, redroot
Amaranthus retrofractus
- 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 Emergent PERENNIAL WEEDS:

- Apply this product PREEMERGENCE to corn and sorghum.
- Apply this product POSTEMERGENCE to corn containing the Roundup Ready gene when the weeds are 2 to 4 inches tall.

PERENNIAL GRASSES

- Bluegrass, Kentucky
Poa spp.
- Bromegrass, smooth
Bromus inermis
- 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

Preemergent to Weeds

This product applied alone PREEMERGENCE to corn and sorghum or POSTEMERGENCE to corn containing the Roundup Ready gene when the weeds are 2 to 4 inches tall, will provide PREEMERGENCE CONTROL or SUPPRESSION of the following weeds:

ANNUAL BROADLEAVES

- Cocklebur
Xanthium strumarium
- Jimsonweed
Datura stramonium
- Lambsquarters
Chenopodium album
- Morningglory, annual
Ipomoea spp.
- Mustard spp.
Brassica spp.
- Pigweed; Carelessweed, redroot
Amaranthus retrofractus
- Pigweed, smooth
Amaranthus hybridus
- Ragweed, common
Ambrosia artemisiifolia
- Ragweed, giant
Ambrosia trifida
- Smartweed
Polygonum pennsylvanicum
- Wild Buckwheat
Polygonum convolvulus
- Velvetleaf; Buttonweed
Abutilon theophrasti

In case of emergency involving this product, Call Collect, day or night, (314) 694-4000.

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