

PM 25

524-509

8-10-99

file 1 of 25



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

EPA Reg.  
Number:

524-509

Date of Issuance:

AUG 10 1999

## NOTICE OF PESTICIDE:

☒ Registration  
☐ Reregistration

Term of Issuance:

Conditional

Name of Pesticide Product:

MON 78088 Herbicide

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Monsanto Company  
600 13<sup>th</sup> Street, N.W. Suite 660  
Washington, DC 20005

**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 section 3(c)(7)(A) and (B) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) or 4 when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment.
  - a. Add the phrase "EPA Registration No. 524-509".
  - b. Based on a toxicity category of IV for acute inhalation, you may delete the word "Inhaled" from the statement "Harmful if Swallowed or Inhaled." The first aid statement concerning inhalation may be removed and waterproof gloves may be removed from the PPE.
  - c. In the Agricultural Use Box the PPE required for early entry in treated areas must be changed to read "coveralls over long-sleeved shirt and long pants, socks and chemical resistant footwear and waterproof gloves."
  - d. The statements "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." must be deleted from the Agricultural Use Box.

Signature of Approving Official:

Date:

8-10-99

e. Refer to the enclosed Spray Drift Management attachment for statements required on the labels of products that may be applied by aerial application. Incorporate these statements into your label.

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 section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of labeling is enclosed for your records.

Please Note: The enclosed review and attachment recommends label language for First Aid statements developed by the Consumer Labeling Initiative (CLI). You may incorporate these statements into your labeling at this time.

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3 of 25

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

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Attachment-Spray Drift Management

Under the heading Spray Drift Management the text should read as follows:

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 and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift 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.

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

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 Inversion section of this label).

Controlling Droplet Size

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

Pressure-Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy protection. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of nozzles-Use the minimum number of nozzles that provide uniform coverage.

Nozzle Orientation-Orienting nozzles so that the spray is released backwards, parallel to the airstream will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.

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

Boom Length-For some use patterns, reducing the effective boom length to less than  $3/4$  of the wingspan or rotor length may further reduce drift without reducing swath width.

Application-Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

#### Swath Adjustment

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

#### Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application 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 drift.

#### Temperature and Humidity

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

### Temperature Inversions

Applications should not occur during a temperature inversion, because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun set 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 literally in a connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards 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).

## Attachment 2 to the Guidance Document

## Standard First Aid Statements for Pesticide Products\*

Route of Exposure and Toxicity Category	First Aid Statement*
Ingestion treatment for acute oral toxicity categories 1, 2 and 3	If swallowed: -Call a poison control center or doctor immediately for treatment advice -Have person sip a glass of water if able to swallow. -Do not induce vomiting unless told to by a poison control center or doctor.
Acute oral toxicity category 4	Statement is not required. Registrants may use toxicity category 1-3 statements if they choose.
Skin exposure treatment for acute dermal toxicity, and irritation categories 1, 2 and 3	If on skin: -Take off contaminated clothing. -Rinse skin immediately with plenty of water for 15-20 minutes. -Call a poison control center or doctor for treatment advice.
Dermal and skin irritation toxicity category 4	Statement is not required. Registrants may use toxicity category 1-3 statements if they choose.
Inhalation treatment for acute toxicity categories 1, 2 and 3	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. -Call a poison control center or doctor for further treatment advice.
Inhalation toxicity category 4	Statement is not required. Registrants may use toxicity category 1-3 statements if they choose.
Eye exposure treatment for eye irritation categories 1, 2 and 3	If in eyes: -Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. -Call a poison control center or doctor for treatment advice.
Eye irritation toxicity category 4	Statement is not required. Registrants may use toxicity category 1-3 statements if they choose.
General information to include either near the first aid statement or emergency phone number.	-Have the product container or label with you when calling a poison control center or doctor or going for treatment.

\* Some chemicals may require different first aid statements than the ones shown in this table.

**RESTRICTED USE PESTICIDE**  
(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. This product is a Restricted Use herbicide due to ground and surface water concerns. 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.

**MON 78088**

Herbicide by Monsanto

**Postemergence herbicide for weed control in Roundup Ready® Corn and Fallow with residual broadleaf weed control.**

EPA Reg. No. 524-~~XXX~~ <sup>L/NO</sup>

AVOID CONTACT WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS (EXCEPT FOR ROUNDUP READY® CROPS) DESIRABLE PLANTS AND TREES, SINCE 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**

8 of 25

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.

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 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.

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#### PRECAUTIONARY STATEMENTS

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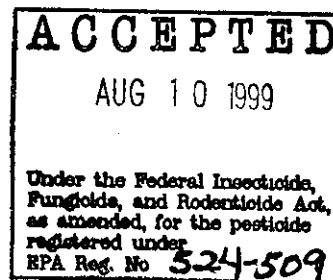
Hazards to Humans and Domestic Animals

Keep out of reach of children.

**CAUTION!**

HARMFUL IF SWALLOWED OR INHALED.

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: IF SWALLOWED:** Call a physician or Poison Control Center. If the patient is conscious and alert, have the patient drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting.

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

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

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#### **Personal Protective Equipment (PPE):**

Applicators and other handlers must wear: long-sleeved shirt and long pants, waterproof gloves, and shoes plus socks.

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.

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#### **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,**

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### Environmental Hazards

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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, i.e., well-drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

This product may not be mixed/loaded, or used within 50 ft. of all wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 ft. 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 spill or equipment leaks, container or equipment rinse or wash-water, and rain-water that may fall on the 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 at a minimum 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 sites.

States may have in effect additional requirements regarding well-head setbacks and operational area containment.

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

#### **Tile-Terraced Fields Containing Standpipes**

To ensure protection of surface water from runoff through standpipes with tile-outlets in terraced fields, one of the following options may be used:

1. Do not apply this product within 66 ft. of standpipes in tile-outletted terraced fields.
2. Apply this product to the entire tile-outletted terraced field under a no-till practice only when a high crop residue management practice is used. High crop residue management practice is described as a crop management practice where little or no crop residue is removed from the field during or after crop harvest.

This pesticide is toxic to aquatic invertebrates. 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 apply when weather conditions favor drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash waters.

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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..... 20.9%

Atrazine, 2-Chloro-4-(ethylamino)-  
6-(isopropylamino)-s-triazine and related triazines ..... 20.9%

OTHER INGREDIENTS: ..... 58.2%  
100.0%

\*Contains 240 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 178 grams per liter or 1.5 pounds per U.S. gallon of the acid, glyphosate.

\*Contains 240 grams per liter or 2.0 pounds per U.S. gallon of the active ingredient atrazine and related triazines.

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 regulation.

**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 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.

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, waterproof gloves, and chemical-resistant footwear plus socks.

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, or cleaning of equipment.

Keep container closed to prevent spills and contamination.

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 individual 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.

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## GENERAL INFORMATION

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**Product Description:** This product is a post-emergent, systemic herbicide for the control of many annual grasses and broadleaf weeds and suppression of perennial weeds in Roundup Ready corn. The product also provides residual control of selected broadleaf weeds.

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

Monsanto recommends that the product only be applied 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 suspension concentrate. It may be applied through most standard industrial or field-type sprayers or aerial 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 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.

The preemergence activity of the product is through root absorption, its preemergence effectiveness depends on moisture to move it into the root zone.

**Stage of Weeds:** Annual weeds are easiest to control when they are small (2-4 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.

**Volatility:** This product is non-volatile. Therefore, it cannot move as a vapor after application to affect nearby vegetation.

**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 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 lbs. 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 Ultra is 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 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 Ultra herbicide on Roundup Ready corn.

**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 OR OTHER NONLABELED CROPS ARE TO BE PLANTED THE FOLLOWING YEAR, THERE IS THE POSSIBILITY OF CROP INJURY DUE TO CARRYOVER OF ATRAZINE.

## MIXING, 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.

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 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.

**NOTE:** Additional surfactants are not required with this product.

#### APPLICATION TIMING AND METHODS

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

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. 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.**

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). 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.



17 of 25

On highly erodible soils as defined by the Soil Conservation Service (SCS), if conservation tillage is utilized (more than 30% plant residue cover), the maximum rate of atrazine is 2 pounds active ingredient per acre. If plant residue is less than 30% the maximum rate of atrazine is 1.6 pounds active ingredient per acre. On soils not highly erodible, the maximum rate of atrazine is 2 pounds active ingredient per acre. The maximum application rate for corn is 2.5 pounds atrazine active ingredient per acre per calendar year. Where sequential postemergence treatments with appropriately registered products containing atrazine are necessary, do not exceed a total of 2.5 pounds atrazine active ingredient per acre per calendar year. Where there are state local requirements regarding atrazine use (including lower maximum rates and/or higher setbacks) which are different from the label, the more restrictive/protective requirements apply.

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 1/2 inch of rainfall has occurred between application and the first irrigation.

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

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

**Ground Broadcast Treatment** - 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.

**For Aerial Applications: DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT EXCEPT UNDER CONDITIONS AS SPECIFIED WITHIN THIS LABEL.**

Use the recommended rates of this product in 3 to 15 gallons of water per acre unless specified on this label. Do not exceed 2 quarts of this product per acre over the top of Roundup Ready corn. **DO NOT APPLY DURING LOW LEVEL INVERSION CONDITIONS, WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITIONS WHICH FAVOR DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. MAINTAIN APPROPRIATE BUFFER ZONES TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION.** Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations which dispense spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure.

18 of 25

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

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. Landing gear are most susceptible. The maintenance of an organic coating (paint), which meets aerospace specification MIL-C-38413, may prevent corrosion.

FOR AERIAL APPLICATION IN ARKANSAS, REFER TO THE FEDERAL SUPPLEMENTAL LABEL FOR MON 78088 FOR AERIAL APPLICATIONS IN THAT STATE FOR SPECIFIC INSTRUCTIONS, RESTRICTIONS AND REQUIREMENTS.

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### WEEDS CONTROLLED

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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 EMERGED WEEDS.

- Apply this product POSTEMERGENCE when the weeds are 2-4 inches tall.
- 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 serriola*

**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 pensylvanicum*

**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 when the weeds are 2-4 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*

2/2/95

Thistle, Canada  
*Cirsium arvense*

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

**ANNUAL BROADLEAF**

**Annual morningglory**  
*Ipomoea sp.*

**Cocklebur**  
*Xanthium strumarium*

**Jimsonweed**  
*Datura stramonium*

**Lambsquarters**  
*Chenopodium album*

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

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

**Pigweed, smooth**  
*Amaranthus hybridus*

**Ragweed, common**  
*Ambrosia artemisiifolia*

**Ragweed, giant**  
*Ambrosia trifida*

**Smartweed**  
*Polygonum pennsylvanicum*

**Wild Buckwheat**  
*Polygonum convolvulus*

**Velvetleaf, Buttonweed**  
*Abutilon theophrasti*

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**Roundup Ready Corn**

Apply this product postemergence to Roundup Ready corn from seedling emergence until the corn reaches 12 inches in height. Apply in 10 to 25 gallons of water per acre as a broadcast spray. A single in-crop application of this product must not exceed 2 quarts per acre. 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 weeds such as fall panicum, barnyardgrass, crabgrass, shattercane, broadleaf signalgrass up to 2 inches tall and Pennsylvania smartweed up to 4 inches tall, 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.

CORN (ALL TYPES INCLUDING SWEET CORN), MILO (SORGHUM), OR SOYBEANS CAN BE PLANTED THE YEAR FOLLOWING THE USE OF THIS PRODUCT. IF SOYBEANS OR OTHER

22 of 25

NONLABELED CROPS ARE TO BE PLANTED THE FOLLOWING YEAR, THERE IS THE POSSIBILITY OF CROP INJURY DUE TO CARRYOVER OF ATRAZINE.

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

For mixing instructions, see the MIXING AND HANDLING section of this label. For aerial application, follow the additional instructions in the APPLICATION TIMING AND METHODS section. Aerial application of this product to Roundup Ready corn may only be made as described in this label.

When applied by itself, adding surfactants, additives containing surfactants, micronutrients, and liquid fertilizers to the spray solution is NOT recommended as crop injury may occur. Tank mixes with products other than those included in this label are not recommended.

#### TANK MIXTURES FOR ROUNDUP READY CORN

This product may be tank-mixed with Harness®, Micro-Tech®, Partner®, or atrazine for improved residual control of certain grasses and broadleaf weeds from a postemergence application in Roundup Ready corn. Use ½ to full label rates of Harness, Micro-Tech or Partner following the soil organic matter and textural restrictions for each label. Refer to the respective label booklets for specific recommendations and limitations.

Tank mixtures of this product with Harness must be applied before the corn is 11 inches tall while tank mixtures with Micro-Tech or Partner must be applied before the corn exceeds 5 inches in height.

Micro-Tech and Partner tank mixtures with this product can be applied using aerial application following the APPLICATION INFORMATION described in this and other respective labels. HUMAN FLAGGERS PROHIBITED! Harness tank mixtures CAN NOT be applied using aerial application equipment.

For atrazine tank mixtures: a maximum of 2 lbs. active ingredient of atrazine may be applied postemergence if no atrazine was applied prior to corn emergence. Two quarts per acre of this product contains 1 lb. active ingredient of atrazine. Therefore, up to an additional 2 pints of atrazine 4L per acre (or 1.1 lbs. per acre of atrazine 90DF) could be applied. The total atrazine applied preemergence and postemergence may not exceed 2.5 lbs. active ingredients per acre per calendar year.

NOTE: PLANT ONLY CORN, SORGHUM OR SOYBEANS FOLLOWING THE USE OF HARNESS tank mixtures with this product.

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

#### Chemical Fallow Application

**Wheat-Sorghum-Fallow rotations:** This product can be used to control emerged annual grasses and broadleaf weeds following wheat harvest and provide residual control or suppression of weeds in the following crop when grown under minimum tillage. Broadcast 1.5 to 2 quarts/A to wheat stubble following wheat harvest until spring planting. This product may be used as a substitute for tillage to control annual weeds in fallow fields. Plant sorghum into wheat stubble the following spring with minimum soil disturbance. Use a surface planter or planter leaving a shallow furrow. If weeds are present at planting, remove them with a sweep plow or other suitable implement before planting.

**Precautions:** (1) use only on silt loam or fine-textured or crop injury may result. (2) Wheat-sorghum-fallow cropping sequence must be followed. (3) Do not apply following sorghum harvest.

**Note:** To avoid illegal residues, do not graze or feed forage from treated area to livestock. To avoid illegal residues and crop injury, do not plant any crop other than those on this label within 18 months following treatment.

**Wheat-Corn-Fallow (in CO, KS, ND, NE, SD and WY only):** This product will control or suppress kochia, mustards, pigweed, Russian thistle, wild lettuce, wild sunflower, cheatgrass (downy brome, chess) and volunteer wheat during period after wheat harvest. Broadcast 1.5 to 2 quarts/A to wheat stubble following wheat harvest until spring planting. Weed control may extend into following corn crop grown under minimum tillage.

On soils in ND and SD with a pH greater than 7.5, do not exceed 1.5 lbs. a.i./A of atrazine. For soils with a pH less than 7.5 in ND and SD, apply 1 to 2 lbs. a.i./A. Use the higher rate on fine-textured soils, and where heavy weed infestations are expected. Use the lower rate on coarse-textured soils and where light weed infestations are expected. In the event grasses are present in the following spring, use a grass herbicide registered for use on corn.

**Precautions:** (1) use only on silt loam or fine-textured or crop injury may result. (2) Wheat-corn-fallow cropping sequence must be followed. (3) Do not apply following corn harvest.

**Note:** To avoid illegal residues, do not graze or feed forage from treated area to livestock. To avoid illegal residues and crop injury, do not plant any crop other than those on this label within 18 months following treatment.

**Wheat-Fallow-Wheat (in CO, KS, NE, ND, SD, and WY only):** For postemergence control of emerged weeds and preemergence control or suppression of common lambsquarters, field pennycress, kochia, mustard, Russian thistle, wild lettuce, cheatgrass (downy brome, chess) and volunteer wheat during fallow period of wheat-fallow-wheat rotations, broadcast 1.5 to 2 quarts per acre on all soils except those listed under *Precautions*. For control of pigweed and wild sunflower, use the higher rate. Apply to stubble ground only once in the fall following wheat harvest. This product may be used as a substitute for tillage to control annual weeds. Ground or aerial application equipment may be used.

**Precautions:** (1) Do not use on sandy soil. (2) Do not treat eroded hillsides, caliche and rocky outcroppings of exposed calcareous subsoil. (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**

**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 Roundup and/or atrazine herbicide can be added to the recommended treatment rates (1.5 to 2 quarts/A) to obtain improved control. See Annual Weeds Rate Tables in the Roundup label to determine the quantity of additional Roundup required for control of specific weed species and size. The maximum additional quantity of atrazine 4L that can be applied is 2 quarts/acre (or 2.2 lbs. per acre of atrazine 90DF). Apply to stubble ground. Treat only once during same fallow period.

Refer to the respective label booklets for Roundup and atrazine for specific recommendations, precautions and limitations regarding application.

24 of 25

**Precautions:** (1) use only on silt loam or finer textured soil. (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 herbicide can be added to the recommended treatment rates to obtain improved control. See Annual Weeds Rate Tables in the Roundup label to determine the quantity of additional Roundup required for control of specific weed species and size. Refer to Roundup 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 hillsides, caliche and rocky outcroppings or exposed calcareous subsoil. (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 APPLICATION TIMING AND METHODS section of this label. For aerial fallow applications, use 3-15 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.

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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25 of 25

## SUPPLEMENTAL LABELING

READ THE ENTIRE LABEL FOR MON 78088 HERBICIDE BEFORE PROCEEDING WITH THE USE DIRECTIONS CONTAINED IN THIS SUPPLEMENTAL LABELING.

"Label" as used in this supplemental labeling refers to the label booklet for MON 78088 and this supplement.

### MON 78088 HERBICIDE

EPA Reg. No. 524-XXX

## FOR AERIAL APPLICATION IN ARKANSAS ONLY

Keep out of reach of children.

### CAUTION!

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

#### DIRECTIONS FOR USE

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

This label must be in the possession of the user at the time of application.

AVOID CONTACT OF HERBICIDE 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.

See "GENERAL INFORMATION" and "MIXING" sections of the label booklet for MON 78088 herbicide for essential product performance information.

#### USE DIRECTIONS

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

Use the recommended rate of this product in 3 to 15 gallons of water per acre.

Use sufficient carrier volume and appropriate equipment set-up to form droplets large enough to avoid drift potential. Coarse droplets in the 300 to 500 (VMD) micron range are recommended.

Applications should typically be made with the nozzle release point at 8 to 15 feet above the top of the target plants unless a greater height is required for aircraft safety.

The distance of the outermost nozzles on the boom must not exceed 75% of the length of the wingspan or rotor. In many cases, reducing this distance to 65% of the length of the wingspan or rotor will improve drift control without affecting the swath width.

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

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

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

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

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

**Read the "Limit of Warranty and Liability" in the label booklet for MON 78088 herbicide before using. These terms apply to this supplemental labeling and if these terms are not acceptable, return the product unopened at once.**

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