

524-473

11/3/2004

1839



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

NOV - 3 2004

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Ms. Dawn M. Fee-White  
Monsanto Company  
1300 "P" Street, N. W., Suite 450 East  
Washington, DC 20005

Dear Ms. Fee-White:

Subject: Harness Herbicide (Response to Atrazine MOA)  
EPA Registration No. 524-473  
Application Dated September 17, 2004

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act as amended is acceptable provided you make the following change before you release the product for shipment.

-On pages 23 and 28, under the atrazine tank-mixes, revise the grazing restriction to read "Do not graze or feed treated forage to livestock for 60 days following application of this tank-mix.--

Submit two (2) copies of your final printed labeling incorporating the above changes before you release the product for shipment. Amended labeling will supercede all previously accepted ones. A stamped copy of labeling is enclosed for your records.

Sincerely,

*James A. Tompkins*  
James A. Tompkins  
Product Manager 25  
Herbicide Branch  
Registration Division (7505C)

2739

MASTER LABEL FOR EPA REG. NO. 524-473

Registered Brand Names:

**HARNESS<sup>®</sup> Herbicide**  
**Confidence Herbicide**  
**MON 58425**

I.	Main Label for Crop Uses	2 - 38
II.	Supplemental Labeling	none

**RESTRICTED USE PESTICIDE**  
due to oncogenicity. For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

**[Insert Brand Name]<sup>®</sup> Herbicide by Monsanto**

**[Insert Brand Name] is an emulsifiable herbicide for weed control in Field Corn, Production Seed Corn, Silage Corn and Popcorn.**

**Complete Directions for Use**

EPA Reg. No. 524-473

2004

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 label option]

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.

[Refillable 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.

[Non-refillable Container Label Statement:]  
THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION OR REPACKAGING.

**CONTENTS**

- 1 1.0 INGREDIENTS**
- 2 2.0 IMPORTANT PHONE NUMBERS**
- 3 3.0 PRECAUTIONARY STATEMENTS**
  - 3.1 Hazards to Humans and Domestic Animals
  - 3.2 Environmental Hazards
- 4 4.0 STORAGE AND DISPOSAL**
- 5 5.0 GENERAL INFORMATION**
  - 5.1 Use Restrictions

- 6 6.0 SOIL TEXTURE
- 7 7.0 **MIXING, SPRAYING AND HANDLING INSTRUCTIONS**
  - 7.1 Equipment Cleaning & Repair
  - 7.2 Sprayer Compatibility
  - 7.3 Standard Sprayable Fluid Fertilizer Compatibility Test
- 8 8.0 **APPLICATION SYSTEMS**
  - 8.1 Ground Broadcast Treatment
  - 8.2 Band Treatment
  - 8.3 Application With Dry Bulk Fertilizer
- 9 9.0 **APPLICATION TIMING AND METHODS**
  - 9.1 Early Preplant Surface Application
  - 9.2 Preemergence Surface Application
  - 9.3 Preplant Incorporation Application
  - 9.4 Postemergence Surface Application
  - 9.5 Cultivation Information
- 10 10.0 **WEEDS CONTROLLED**
  - 10.1 Annual Grasses
  - 10.2 Annual Broadleaves
- 11 11.0 **CONSERVATION OR MINIMUM TILLAGE SYSTEMS**
  - 11.1 At-Planting Applications
    - 11.1.1 Additional Preemergence Control
  - 11.2 Control or Suppression of Emerged Weeds
    - 11.2.1 Roundup WeatherMAX Herbicide
    - 11.2.2 Gramoxone Extra
    - 11.2.3 2,4-D
  - 11.3 Early Preplant Application
    - 11.3.1 [Insert Brand Name] Alone
    - 11.3.2 [Insert Brand Name] Plus Atrazine
- 12 12.0 **CONVENTIONAL TILLAGE**
  - 12.1 [Insert Brand Name] herbicide
  - 12.2 [Insert Brand Name] plus Roundup WeatherMAX on Roundup Ready Corn
  - 12.3 [Insert Brand Name] plus Accent
  - 12.4 [Insert Brand Name] plus Atrazine
  - 12.5 [Insert Brand Name] plus Balance Pro
  - 12.6 [Insert Brand Name] plus Banvel or Clarity
  - 12.7 [Insert Brand Name] plus Callisto
  - 12.8 [Insert Brand Name] plus Hornet WDG
  - 12.9 [Insert Brand Name] plus Marksman
  - 12.10 [Insert Brand Name] plus Permit
  - 12.11 [Insert Brand Name] plus Princep
  - 12.12 [Insert Brand Name] plus Prowl
  - 12.13 [Insert Brand Name] plus Pursuit
  - 12.14 [Insert Brand Name] plus Atrazine plus Prowl
  - 12.15 [Insert Brand Name] plus Python WDG

**13.0 LIMIT OF WARRANTY AND LIABILITY**

5 8 39

1.0 INGREDIENTS

ACTIVE INGREDIENT:

*Acetochlor.....	74.8%
OTHER INGREDIENTS.....	25.2%
	100.0%

\*Contains 839 grams/liter or 7.0 pounds/gallon of 2-chloro-N-ethoxymethyl-N-(2-ethyl-6-methylphenyl)acetamide.

U.S. Patent No. 5,225,570. Other patents pending. No license is granted under any non-U.S. patents.

2.0 IMPORTANT PHONE NUMBERS

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

1-800-332-3111

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

(314)-694-4000

3.0 PRECAUTIONARY STATEMENTS

3.1 Hazards to Humans and Domestic Animals

Keep out of reach of children.

WARNING! AVISO!

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

CAUSES SUBSTANTIAL BUT TEMPORARY EYE AND SKIN IRRITATION. HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE ALLERGIC SKIN REACTION.

Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling.

ACCEPTED with COMMENTS In EPA Letter Dated:

NOV - 3 2004

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.

524-423

<b>FIRST AID:</b>	
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> <li>• Sensitized persons should avoid further contact and reuse of contaminated clothing.</li> </ul>
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"> <li>• Call poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.  This product is identified as <b>[Insert Brand Name] Herbicide, EPA Registration No. 524-473.</b>  You may also contact <b>(314) 694-4000</b>, collect day or night, for emergency medical treatment information.</p>	

#### Personal Protective Equipment (PPE):

Some of the 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 selection chart.

**Applicators and other handlers must wear:** coveralls over short-sleeved shirt and short pants, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, chemical-resistant footwear plus socks, protective eyewear, chemical-resistant headgear for overhead exposure and chemical-resistant apron when cleaning equipment, mixing, or loading.

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

When handlers use closed systems or enclosed cabs 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.

**User Safety Recommendations:**

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.
- 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.

**3.2 Environmental Hazards**

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

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

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

**4.0 DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

**Agricultural Use Requirements**

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, are: coveralls over short-sleeved shirt and short pants, chemical-resistant gloves made of any waterproof material, chemical-resistant footwear plus socks, protective eyewear, and chemical-resistant headgear for overhead exposure.

**4.1 Storage and Disposal**

0739

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

**PESTICIDE STORAGE:** Keep container closed to prevent spills or 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:** Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

(See container label for additional STORAGE AND DISPOSAL instructions.)

[container label option for Bulk and Minibulk]

**Instructions for Users:** When the container is empty, replace the cap and seal all openings that have been made during usage, and return the container to the point of purchase, or to an alternate location designated by the registrant at the time of purchase of this product. If not returned to the point of purchase or a designated location, triple rinse or pressure rinse the empty container and offer it for recycling if available. If not refilled or recycled, 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.

**Instructions for Users and Refillers:** This container must only be refilled with this pesticide product. **Do not reuse this container for any other purpose.** Do not transport if this container is damaged or leaking. If the container is damaged or leaking or obsolete, or to obtain information about recycling refillable containers, contact Monsanto Company at 800-762-6387. Cleaning is not necessary prior to refilling with the same product. Clean container before final disposal. Disposal of this container must be in compliance with state and local regulations.

**Instructions for Refillers:** Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting. If the container cannot be refilled, triple rinse or pressure rinse the empty container and offer for recycling if available. If not refilled or recycled, 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.

[container label option for plastic 1-way containers]

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.

[container label option 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.

## 5.0 GENERAL INFORMATION

[Insert Brand Name] herbicide is recommended for control of yellow nutsedge and the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label. This product alone will not control emerged seedlings. This product may be applied either as a surface application before or after planting, or after crop emergence. This product may also be shallowly incorporated prior to planting to blend the herbicide treatment into the upper 1 to 2 inches of soil. Except for minimum or conservation tillage systems, the seedbed should be fine, firm and free of clods and trash.

Read and carefully observe precautionary statements and all other information appearing on the labeling of all products used in mixtures and sequential treatments.

### **5.1 Use Restrictions**

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

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

Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain a minimum of 110 percent 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 percent of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Do not flood irrigate to apply or incorporate this product.

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

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

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

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

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

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

Do not apply this product using aerial application equipment.

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

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

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

Make application when the wind velocity favors on-target product deposition (approximately 3 to 10 miles per hour). Do not apply when wind velocity exceeds 15 miles per hour. Avoid application when gusts approach 15 miles per hour.

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

Use of this product not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences.

Flush sprayer with clean water after use.

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

## 6.0 SOIL TEXTURE

Applicators should evaluate soil conditions carefully to assure that they choose the correct label rate. The recommended use rates of this product and the other herbicides labeled for use in tank mixtures with this product vary with soil texture. Unless soil texture is specifically named, rate tables throughout this label refer to only three soil textural groups: coarse, medium and fine. The following is a complete listing of soil textures included in each of these three soil textural groups:

SOIL TEXTURAL GROUP	SOIL TEXTURE
COARSE	sand, loamy sand, sandy loam
MEDIUM	loam, silt loam, silt, sandy clay loam
FINE	silty clay loam, clay loam, sandy clay, silty clay, clay

Refer to the above table to determine the corresponding soil textural group for the soil to be treated.

## 7.0 MIXING, SPRAYING AND HANDLING INSTRUCTIONS

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

### 2.5 Gallon Containers

11 8 39

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.

**7.1 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.

**7.2 Sprayer Compatibility**

Always predetermine the compatibility of this product or labeled mixtures of this product with water carrier or sprayable fluid fertilizer carrier by mixing small proportional quantities in advance. See the "STANDARD SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST" section in this label to determine the compatibility of this product and the labeled tank mixtures recommended for use with sprayable fluid fertilizer carrier.

Mix this product or labeled tank mixture of this product with the appropriate carrier 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 appropriate carrier.
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. If a wettable powder or dry flowable formulation is used, make a slurry with water, and add it slowly through the screen into the tank. Continue agitation.
5. If a flowable formulation is 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 and added slowly to the tank in diluted form.
6. Add this product slowly through the screen into the tank. Mixing and compatibility may be improved when this product is prediluted with two parts of water and added to the tank in diluted form.
7. Complete filling the sprayer tank with carrier. If a Roundup® agricultural herbicide or Gramoxone™ Extra is used, add the required amount near the end of the filling process. Remove hose from tank immediately after filling to avoid siphoning back into the water source.

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.

### 7.3 Standard Sprayable Fluid Fertilizer Compatibility Test

Herbicides may not always mix evenly throughout a sprayable fluid fertilizer or the components may separate too quickly to make their combined use of practical value. This may be due to certain characteristics of the different fluid fertilizers. A simple test using small quantities of the components is suggested to provide compatibility potential. The test follows:

#### A. Materials Required For A Compatibility Test

1. Two one-quart jars with lid or stopper (marked "with" and "without").
2. TEASpoons (for a more exacting test, a five to ten milliliter (mL.) pipette or graduated cylinder is desirable).
3. Sprayable fluid fertilizer to be tested.
4. The herbicide chemicals to be mixed.
5. A compatibility agent (the purpose of the adjuvant is to help keep the fertilizer and crop protection chemical in suspension, if this assistance is needed).

#### B. Procedure

1. Add one pint of the sprayable fluid fertilizer that will be used or other herbicide carrier to each jar marked "with" and "without".

Add One Pint Liquid Fertilizer To Two Quart Jars.	
WITH	WITHOUT

2. To the jar marked "with", add 1/4 TEASpoon or 1.2 milliliters of a suitable compatibility agent; shake gently for five to ten seconds to mix. (1/4 TEASpoon in one pint is the equivalent of two pints per 100 gallons of liquid fertilizer.)

To Jar Marked "With" Add Compatibility Agent And Shake to Mix	
WITH	WITHOUT

3. To each jar add the appropriate amount of herbicide(s). If more than one is used, add them separately with the wettable powders or dry flowables added first, flowables second and liquid last. Shake gently five to ten seconds after each addition.

Add Herbicide(s) To Both Jars And Shake to Mix	
WITH	WITHOUT

HERBICIDE	RATE/Acre		Amount to be Added per Pint of Sprayable Fluid Fertilizer (Assuming Volume is 25 gal/A)
			Level TEAspoons
Wettable	1 pound	=	1.5
Powders	2 pounds	=	3.0
or	3 pounds	=	4.5
Dry Flowables	4 pounds	=	6.0
	5 pounds	=	7.5

HERBICIDE	RATE/A		Level		Milliliters
			TEAspoons		
Emulsifiable	1 pint	=	0.5	or	2.4
Concentrates or	1 quart	=	1.0	or	4.7
Flowables or	2 quarts	=	2.0	or	9.5
Liquids or	3 quarts	=	3.0	or	14.2
Solutions	1 gallon	=	4.0	or	19.0
	5 quarts	=	5.0	or	23.8

This compatibility test is designed for 25 gallons of spray per acre with the maximum labeled rate of herbicide. For changes in spray volume or herbicide rate, make appropriate changes in the ingredients of the test. Regardless of spray volume, the amount of compatibility agent should be equal to two or three pints (two pints = 1/4 TEAspoon or 1.2 milliliters, three pints = 3/8 TEAspoon or 1.8 milliliters per pint of sprayable fluid fertilizer) per 100 gallons of liquid fertilizer.

### C. Observations and Decisions

1. If the herbicide(s) and the sprayable fluid fertilizer are compatible.
2. If a compatibility agent is necessary.

Five minutes after the final addition and mixing, observe both jars for the formation of large flakes, sludge, gels or other precipitates. Observe if the herbicide(s) cannot be physically mixed with the liquid fertilizer but remains as small oily particles in the solution.

If incompatibility in any form described above occurs in the jar "with" the compatibility agent added, the liquid fertilizer and the herbicide(s) should not be used together in the same spray tank.

If incompatibility as described above occurs in the jar "without" the adjuvant but not in the jar "with" adjuvant, the use of a compatibility adjuvant is recommended.

Both jars should be allowed to stand and be observed periodically for one-half hour. If the separate layers of liquid fertilizer and additives can be resuspended by shaking, commercial application is possible. An emulsifiable concentrate normally will go to the top after standing; wettable powders will either settle to the bottom of the tank or jar, or float to the top, depending upon the density of the fertilizers.

If the herbicide(s) is compatible with fluid fertilizer in the foregoing test without having to use a compatibility agent, fluid fertilizer may be used for the premixing. If it is not compatible without the compatibility agent, the herbicide(s) should be premixed with water before adding to the spray tank.

**8.0 APPLICATION SYSTEMS**

**8.1 Ground Broadcast Treatment**

Apply this product and the labeled tank mixtures in 10 or more gallons of solution per acre using broadcast boom equipment. The carrier may be either water or sprayable fluid fertilizer as specified for the crop to be treated in the "DIRECTIONS FOR USE" section of this label. Do not apply during periods of gusty winds, when winds are in excess of 15 miles per hour or when other conditions favoring drift exist.

**8.2 Ground Band Treatment**

Apply a broadcast equivalent rate and volume per acre. To determine these:

Band width in inches	X	Broadcast RATE per acre	=	Band RATE per acre
Row width in inches				

Band width in inches	X	Broadcast VOLUME per acre	=	Band VOLUME per acre
Row width in inches				

**8.3 Application With Dry Bulk Fertilizer**

The herbicide-fertilizer impregnation process (In-Plant and On-Board systems) must be completed only by commercial fertilizer or chemical dealerships properly equipped for this procedure. Contact Monsanto Company for additional information regarding recommended equipment and methods for herbicide-fertilizer impregnation applications.

Dry bulk fertilizer may be impregnated with this product or the tank mixtures of this product plus atrazine on corn. This product and these tank mixtures must be applied with 200 to 450 pounds of dry bulk fertilizer per acre and shallowly incorporated within 14 days prior to planting. On medium and fine-textured soils in areas where soil incorporation is not planned, i.e., reduced tillage situations or in some conventional tillage situations, applications can be made up to 30 days before planting to allow moisture to move the herbicide-fertilizer mixture into the soil. On coarse-textured soils, applications can be made up to 14 days prior to planting. The herbicide must be applied as recommended in this label for the crop, weed and soil type treated. Refer to the table for broadcast rate per acre to determine the recommended rate per acre for the herbicide treatment to be applied.

The following table provides a reference to determine the amount of LIQUID herbicide to be mixed per ton of dry bulk fertilizer for a range of herbicide recommendations for fertilizer rates per acre:

Fertilizer Rate (pounds/Acre)	Acres Covered (per ton)	RECOMMENDED QUARTS OF LIQUID HERBICIDE/ACRE (pints of herbicide/ton dry bulk fertilizer)		
		2.0	2.25	2.75
200	10.0	20.0	22.5	27.5
250	8.0	16.0	18.0	22.0
300	6.7	13.4	15.0	18.4
350	5.7	11.4	12.8	15.7
400	5.0	10.0	11.3	13.8

450	4.5	9.0	10.1	12.4
-----	-----	-----	------	------

To determine the amount of herbicide needed for rates not included in the preceding table, use the following formula:

Recommended Herbicide Rate

$\frac{\text{Pints/Acre X 2000}}{\text{Pounds Fertilizer/Acre}}$	=	Pints of herbicide per ton of dry bulk fertilizer
--	---	---

With the In-Plant system, mix and blend the dry fertilizer and herbicide mixture in a closed rotary-drum type mixture allowing sufficient time to ensure uniform coverage. Use at least one ton of dry fertilizer per mixing operation. Inject the herbicide into the drum over a minimum of a 2-minute period and allow at least 2 additional minutes mixing time to ensure uniformity. The nozzle used to spray the herbicide treatment must be placed inside the mixer to provide uniform spray coverage of the tumbling fertilizer.

If the dry fertilizer used has inadequate absorptive capacity, use a higher absorptive material such as Agsorb™ or Micro-Cel™, to provide a free-flowing mixture. Contact Monsanto Company for specific guidelines with regard to the sequence of addition for the various components and the amount of drying agent to add to provide a free-flowing mixture.

The following table provides a partial list of dry fertilizers which may be impregnated with this product or tank mixtures of this product with other herbicides.

FERTILIZER	[INSERT BRAND NAME]	[INSERT BRAND NAME] + ATRAZINE
Ammonium sulfate (21-0-0)	Yes	Yes
Ammonium phosphate-sulfate (16-20-0)	Yes	Yes
Diammonium phosphate (18-46-0)	Yes	Yes
Potassium chloride (0-0-60)	Yes	Yes
Potassium sulfate (0-0-52)	Yes	Yes
Single super-phosphate (0-20-0)	Yes	No
Treble super-phosphate (0-46-0)	Yes	No
*Urea (46-0-0)	Yes	Yes

\*Some ureas may be phytotoxic when applied on corn. Use only ureas known to be safe to corn.

NOTE: DO NOT impregnate this product or tank mixtures of this product with other herbicides on fertilizers containing ammonium nitrate, potassium nitrate or sodium nitrate.

Spread the herbicide-dry fertilizer mixture uniformly with a properly calibrated applicator: dribble, pneumatic (air flow) or spin. When using spin applicators, fertilizers impregnated with this product or tank mixtures of this product with other herbicides must be spread at half-rate and overlapped 100 percent to obtain full rate and uniform distribution. Non-uniform spreading of the fertilizer-herbicide mixture may result in unsatisfactory weed control or crop injury.

### **8.3.1 Pneumatic (Compressed Air) Application (this product alone)**

High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer may cause herbicide-fertilizer mixture to build up or plug the distributor head, air tubes, or deflector plates. To minimize buildup, premix this product with Exxon Aromatic 200 at a rate of 1 to 4 pints per gallon of this product. Aromatic 200 may be used in either fertilizer blender or through direct injection systems. Drying agents should not be used when using Aromatic 200.

**NOTES:** Mixtures of this product and Aromatic 200 must be used on dry fertilizer only. Poor results or crop injury may result if these mixtures are used in water or liquid fertilizer solutions for spraying applications. When impregnating this product in a blender before application, a drier mixture can be attained by substituting a drying agent for Aromatic 200. The use of Agsorb or a drying agent of 6/30 particle size are recommended. Drying agents are not recommended for use with On-The-Go impregnation equipment.

## **9.0 APPLICATION TIMING AND METHODS**

### **9.1 Early Preplant Surface Application**

This product and some labeled tank mixtures of this product may be applied in no-till and other conservation tillage systems before weeds emerge and up to 45 days before planting field corn or silage corn. Split applications can be made 30 to 45 days prior to planting with 60 percent of the recommended broadcast rate applied initially and the remaining 40 percent applied at planting. Applications made less than 30 days prior to planting can be made either as a split or as a single application. If weeds are present at the time of application, apply this product in tank mixture with an appropriate contact herbicide. Observe directions for use, precautions and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

### **9.2 Preemergence Surface Application**

This product and all labeled tank mixtures may be applied to the soil surface after planting and prior to either crop or weed emergence. Apply within 5 days of last preplant tillage. If weeds emerge after treatment, or if treatment is applied more than 5 days after last preplant tillage, rotary hoe or shallowly cultivate immediately to improve performance. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone. The amount of precipitation or overhead sprinkler irrigation required depends on existing soil mixture, soil type and percent organic matter content, but 1/2 to 3/4 inch is normally adequate. Performance is improved when moisture is received within 7 days after application and prior to weed emergence. High intensity or excessive rainfall or excessive irrigation after application may reduce control.

### **9.3 Preplant Incorporation Application**

This product and many of the labeled tank mixtures may be mixed into the soil using shallow incorporation equipment any time within 14 days prior to planting. Apply the recommended treatment rate to the soil surface as a broadcast application. Either existing soil moisture or subsequent precipitation or irrigation is required to bring incorporated herbicide treatments into contact with germinating weed

seedlings. If weeds emerge after treatment, rotary hoe or shallowly cultivate immediately to improve performance.

**1-Pass Incorporation:** Shallowly incorporate the treatment into the upper 1 to 2 inches of the soil. Equipment should be operated at manufacturer's designed speed for incorporation to ensure adequate mixing and distribution of the herbicide treatment in the soil. Equipment design including any drag attachments must be adequate to avoid soil ridging which may result in streaked or reduced weed control. Soil conditions, including moisture content and crop residue levels, must be suitable to allow thorough and uniform mixing with the equipment used for 1-pass incorporation.

**2-Pass Incorporation:** When 2-pass incorporation is used, shallowly incorporate the herbicide treatment into the upper 1 to 2 inches of the soil with equipment set to work the soil **NO DEEPER THAN 4 INCHES**. The second pass must be made at an angle to and no deeper than the first pass to ensure proper distribution of the herbicide treatment in the soil.

#### 9.4 Postemergence Surface Application

This product and certain tank mixtures may be applied postemergence until corn reaches 11 inches in height. Application must be made prior to weed seedling emergence or in a tank-mixture that controls emerged weeds. Read and follow all restrictions and directions on tank mix product labels. Refer to the specific treatment intended in the "DIRECTIONS FOR USE" section of the label to determine if postemergence applications to corn are recommended and determine the proper weed and corn growth stage limitations. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone to control unemerged weeds. The amount of precipitation or irrigation required depends on existing soil moisture, soil type and percent organic matter content, but 1/4 to 3/4 inch is normally adequate. If weeds emerge after treatment, rotary hoe or shallowly cultivate to improve performance.

**DO NOT** make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

**Cultivation Information--**Delay cultivation after application for as long as possible unless weeds or grasses emerge. Shallowly cultivate or rotary hoe immediately if weeds or grasses emerge. If cultivation is necessary because of soil crusting or compaction, set equipment shallow and minimize lateral soil movement to avoid dilution or displacement of the herbicide treatment. If a band application is used and weeds have emerged in the treated band, set cultivator to throw soil into the row covering the band

#### 10.0 WEEDS CONTROLLED

When applied as directed under conditions described, this product alone will **CONTROL** the following weeds:

##### 10.1 Annual Grasses

When applied as directed under conditions described, this product and tank mixtures of this product will control or reduce competition from the weeds listed.

NOTE: C = Control

R = Reduced Competition

	[INSERT BRAND NAME]	[INSERT BRAND NAME] plus			
		ATRAZINE	BANVEL OR CLARITY	PRINCEP	PURSUIT
<b>Barnyardgrass</b> <i>Echinochloa crus-galli</i>	C	C	C	C	C
<b>Crabgrass</b> <i>Digitaria ischaemum</i> <i>Digitaria sanguinalis</i>	C	C	C	C	C
<b>Crowfootgrass</b> <i>Dactyloctenium aegyptium</i>	C	C	C	C	C
<b>Cupgrass, prairie</b> <i>Eriochloa contracta</i>	C	C	C	C	C
<b>Cupgrass, woolly</b> <sup>1</sup> <i>Eriochloa villosa</i>	C	C	C	C	C
<b>Foxtail, giant</b> <i>Setaria faberi</i>	C	C	C	C	C
<b>Foxtail: green, robust purple, robust white</b> <i>Setaria viridis</i>	C	C	C	C	C
<b>Foxtail, yellow</b> <i>Setaria lutescens</i>	C	C	C	C	C
<b>Goosegrass</b> <i>Eleusine indica</i>	C	C	C	C	C
<b>Johnsongrass, seedling</b> <i>Sorghum halepense</i>	R	R	R	R	C
<b>Millet, foxtail</b> <i>Setaria italica</i>	R	R	R	R	R
<b>Millet, proso</b> <sup>2</sup> <i>Panicum miliaceum</i>	R	R	R	R	R
<b>Oats, wild</b> <i>Avena fatua</i>	R	C	R	C	R
<b>Panicum, browntop</b> <i>Panicum fasciculatum</i> <b>Panicum, fall</b> <i>Panicum dichotomiflorum</i>	C	C	C	C	C
<b>Panicum, Texas</b> <i>Panicum texanum</i>	R	R	R	R	R
<b>Rice, red</b> <i>Oryza sativa</i>	C	C	•	C	C
<b>Sandbur, Grassbur</b> <i>Cenchrus incertus</i>	R	R	•	R	R
<b>Shattercane, wildcane</b> <sup>2</sup> <i>Sorghum bicolor</i>	R	R	•	R	R
<b>Signalgrass, broadleaf</b> <i>Brachiaria platyphylla</i>	C	C	C	C	C
<b>Sprangletop, red</b> <i>Leptochloa filiformis</i>	C	C	C	C	C
<b>Wheat, volunteer</b> <i>Triticum aestivum</i>	R	C	R	C	R

Witchgrass <i>Panicum capillare</i>	C		C	C	C	C
--	---	--	---	---	---	---

## 10.2 Annual Broadleaves

		[INSERT BRAND NAME] plus			
	[INSERT BAND NAME]	ATRAZINE	BANVEL OR CLARITY	PRINCEP	PURSUIT
<b>Beggarweed, Florida</b> <i>Desmodium tortuosum</i>	R	C	•	•	R
<b>Carpetweed</b> <i>Mollugo verticillata</i>	C	C	C	C	C
<b>Cocklebur<sup>3</sup></b> <i>Xanthium strumarium</i>	•	C	C	R	R
<b>Galinsoga</b> <i>Galinsoga spp.</i>	C	C	C	C	C
<b>Groundcherry, annual</b> <i>Physalis spp.</i>	•	C	•	•	•
<b>Groundcherry, cutleaf</b> <i>Physalis angulata</i>	R	C	C	C	R
<b>Henbit</b> <i>Lamium amplexicaule</i>	C	C	C	C	C
<b>Jimsonweed<sup>8</sup></b> <i>Datura stramonium</i>	R	C	•	R	C
<b>Kochia<sup>4</sup></b> <i>Kochia scoparia</i>	R	C	•	C	C
<b>Lambsquarters<sup>5</sup></b> <i>Chenopodium album</i>	C	C	C	C	C
<b>Morningglory<sup>3</sup>,</b> Tall <i>Ipomoea purpurea</i> Plitted <i>Ipomoea lacunosa</i> Ivyleaf <i>Ipomoea hederacea</i> Entireleaf <i>Ipomoea hederacea</i> var. <i>intergriuscula</i> Smallflower <i>Jacquemontia tamnifolia</i>	•	C	R	C	R
<b>Mustard</b> <i>Brassica spp.</i>	•	C	C	C	C
<b>Nightshade,</b> black <i>Solanum nigrum</i> hairy <i>Solanum sarrachoides</i>	C	C	C	C	C
<b>Pigweed, Carelessweed<sup>5</sup></b> <i>Amaranthus spp.</i>	C	C	C	C	C
<b>Purslane</b> <i>Portulaca oleracea</i>	C	C	C	C	C
<b>Pusley, Florida</b> <i>Richardia scabra</i>	C	C	C	C	C
<b>Ragweed, common<sup>5</sup></b> <i>Ambrosia artemisiifolia</i>	C	C	C	C	C
<b>Ragweed, giant<sup>5</sup></b>	•	C	C	C	R

<i>Ambrosia trifida</i>					
<b>Sicklepod</b> <i>Cassia obtusifolia</i>	•	C	•	R	•
<b>Sida, prickly; Teaweed</b> <i>Sida spinosa</i>	R	C	•	C	C
<b>Smartweed</b> <i>Polygonum pennsylvanicum</i> <i>Polygonum persicaria</i>	R	C	C	C	C
<b>Starbur, bristly</b> <i>Acanthospermum hispidum</i>	R	C	•	R	•
<b>Sunflower, common</b> <sup>3,8</sup> <i>Helianthus annuus</i>	•	C	R	R	C
<b>Velvetleaf, Buttonweed</b> <sup>6,8</sup> <i>Abutilon theophrasti</i>	R	C	C	R	C
<b>Waterhemp</b> <i>Amaranthus tuberculatus</i>	C	C	C	C	C
<b>SEDGE</b>					
<b>Nutsedge, yellow</b> <sup>7</sup> <i>Cyperus esculentus</i>	C	C	•	C	C

- 1 Use 3 to 3.4 pints per acre of this product applied alone or in tank-mix combinations for best results. Control can be erratic especially under dry weather conditions. Control escaped weeds with cultivation or application of an appropriate EPA-registered postemergence herbicide. Contact the local Monsanto representative for details regarding a complete woolly cupgrass management program.
- 2 Use 3 to 3.4 pints per acre of this product to reduce competition from this weed.
- 3 Use a minimum of 1.5 quarts atrazine 4L per acre in tank mixture combinations to control this weed. Control can be erratic especially under dry weather conditions. Control escaped weeds with cultivation or application of an appropriate EPA-registered postemergence herbicide.
- 4 If triazine-resistant biotypes are suspected, tank mixtures with triazine herbicides may require a post sequential application of a non-triazine herbicide for control.
- 5 Use the higher rate in the recommended range for [Insert Brand Name] herbicide alone and in tank mixtures with triazine herbicides if triazine-resistant biotypes are suspected.
- 6 Use a minimum of 1.5 quarts atrazine per acre in tank-mixture combinations to control this weed. In areas restricted to 1 pound atrazine per acre (1 quart atrazine 4L) or where less atrazine per acre is desired, on medium- and fine-textured soils, use 2.75 pints of [Insert Brand Name] herbicide in a tank mixture with 1 quart atrazine 4L per acre for control of this weed. Control can be erratic especially under dry weather conditions. Control escaped weeds with cultivation or application of an appropriate EPA-registered postemergence herbicide.
- 7 Use 2.5 to 3.4 pints per acre of this product applied alone or in tank mixtures and apply preplant incorporated only for control on medium and fine-textured soils.
- 8 When using a tank mixture of [Insert Brand Name] herbicide plus Pursuit, these weeds are more consistently controlled by preplant incorporated treatments.

**11.0 CONSERVATION OR MINIMUM TILLAGE SYSTEMS**

**NOTE:** Each section of this label provides recommended treatment rates for this product and tank mixtures including this product. Applications, which are not consistent with recommendations in this label, may result in unsatisfactory weed control, injury to crops, persons or animals, or other unintended consequences. Refer to specific product labels for crop rotation restrictions and cautionary statements of

all products used in these tank mixtures, including precautions on soil pH sensitive varieties, minimum re-cropping interval and rotational guidelines.

Use the higher rates in the recommended ranges in areas of heavy weed infestation or where otherwise specified. If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds. Do not apply when conditions favor drift.

Detailed information regarding "APPLICATION SYSTEMS" and "APPLICATION TIMINGS AND METHODS" appears in the "GENERAL INFORMATION" section and should be carefully reviewed in conjunction with the information in this section. If the specific information in this section differs from the "GENERAL INFORMATION", the specific information should control.

The tank mix recommendations in the Conventional Tillage Section of this label may also be followed when using Conservation or Minimum Tillage Systems. Follow all label precautions, directions and restrictions of tank mix partners.

### 11.1 At-Planting Applications

When applied as directed under the conditions described, these tank mixtures control many emerged annual weeds, suppress many emerged perennial weeds and give preemergence control of many annual grasses and weeds when corn will be planted directly into a cover crop, established sod or in previous crop residues. These tank mixtures will not control regrowth from perennial weeds.

DO NOT APPLY BY AIR.

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

#### 11.1.1 Additional Preemergence Control

This product and tank mixtures with atrazine, Princep, Pursuit or atrazine plus Princep can be tank-mixed with Roundup agricultural herbicides, Gramoxone Extra and/or 2,4-D.

Apply these tank mixtures with a Roundup agricultural herbicide or 2,4-D (amine or low volatile ester) in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre, or the tank mixtures with Gramoxone Extra in 20 to 60 gallons of water or clear liquid fertilizer per acre immediately before, during or after planting, but BEFORE CROP EMERGENCE. As density of stubble, crop residue or weeds increase, spray gallonage and rate should be increased within the recommended ranges to ensure complete coverage. In the absence of emerged vegetation, delete the Roundup agricultural herbicide, Gramoxone Extra or 2,4-D portion of these tank mixtures.

#### Approved Application Systems

Ground--Broadcast boom

### 11.2 Control Or Suppression Of Emerged Weeds

AVOID DRIFT--EXTREME CARE MUST BE USED WHEN APPLYING THESE TANK MIXTURES TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS. Do not allow spray mist to drift since even minute quantities of spray can cause severe damage or destruction to nearby crops, plants or other areas on which treatment is not intended. Do not apply when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in fine particles (mist) which are more likely to drift.

### 11.2.1 Roundup WeatherMAX™ Herbicide

*note to reviewer: This section is expected to change over time to include newer Roundup brandnames and approved rates providing an equal amount of glyphosate]*

#### Annual Weeds

Apply Roundup WeatherMAX herbicide, or other Roundup agricultural herbicides, in the recommended tank mixtures at the proper rate for the weed per the label instructions.

#### Perennial Weeds

At normal application dates in minimum tillage systems, perennial weeds may not be at the proper stage of growth for control. Use of 1.3 to 2.7 quarts of Roundup WeatherMAX herbicide per acre, or equivalent rates of other Roundup agricultural herbicides, in the above mixtures under these conditions provides top kill and reduces competition from many emerged perennial grasses and broadleaf weeds.

**USE OF THIS MIXTURE FOR BERMUDAGRASS OR JOHNSONGRASS CONTROL IS NOT RECOMMENDED.**

**NOTE:** When using these tank mixtures, do not exceed 2.7 quarts of Roundup WeatherMAX herbicide per acre.

#### Ammonium Sulfate

The addition of ammonium sulfate in the spray solution may increase the performance of Roundup agricultural herbicide tank mixtures on emerged annual weeds under adverse growing conditions. When using ammonium sulfate, add 2 percent dry ammonium sulfate by weight or 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 the herbicide or surfactant. Do not mix ammonium sulfate in fluid fertilizer solutions. The equivalent rate of ammonium sulfate in a liquid formulation may also be used.

If ammonium sulfate is added directly to the spray tank, add slowly with agitation. Adding too quickly may clog outlet lines. Nozzle tip plugging may result from the use of low quality ammonium sulfate. To determine quality, perform a jar test by adding 1/3 cup of ammonium sulfate to 1 gallon of water and agitate for one minute. If undissolved sediment is observed, pre-dissolve the ammonium sulfate in water and filter prior to adding to the spray tank.

#### Surfactants

Nonionic surfactants that are labeled for use with herbicides may be used with some Roundup agricultural herbicides check specific label for restrictions. Do not reduce rates of Roundup agricultural herbicides when adding surfactant. Use 0.5 percent surfactant concentration (2 quarts per 100 gallons of spray solution) when using surfactants that contain at least 50 percent active ingredient or a 1 percent surfactant concentration (4 quarts per 100 gallons of spray solution) for those surfactants containing less than 50 percent active ingredient. Read and carefully observe surfactant cautionary statements and other information appearing on the surfactant label.

### 11.2.2 Gramoxone Extra

When used as directed, Gramoxone Extra in a labeled tank mixture controls many emerged annual weeds and suppresses many emerged perennial weeds.

### Broadcast Treatment

Apply 1.5 to 3 pints of Gramoxone Extra per acre in the recommended tank mixtures immediately before, during or after planting but BEFORE CROP EMERGENCE. Use 2 to 2.5 pints when weeds are 3 to 6 inches tall. Use 2.5 to 3 pints when weeds are 6 inches tall. This mixture may not control weeds taller than 6 inches. As density of stubble, crop residue or weeds increases, spray gallonage should be increased within the recommended range for complete coverage. Add a nonionic spreader surfactant (approved for use on crops) containing at least 75 percent surfactant active agent at 8 ounces per 100 gallons of diluted spray. REFER TO THE GRAMOXONE EXTRA LABEL FOR PRECAUTIONARY STATEMENTS.

#### 11.2.3 2,4-D

When used as directed, 2,4-D in labeled tank mixtures controls many emerged annual and perennial broadleaf weeds. For emerged weeds controlled, see the "WEEDS CONTROLLED" section of the label for 2,4-D.

### Broadcast Treatment

Apply 1 to 2 pints of 2,4-D (amine or low-volatile ester) in the recommended tank mixtures. Applications should be made 7 to 14 days before planting or 3 to 5 days after planting but BEFORE CORN EMERGES. As density of stubble, crop residue or weeds increase, spray gallonage should be increased within the recommended range for complete coverage.

**DO NOT use 2,4-D on light, sandy soils, or where soil moisture is inadequate for normal weed growth. Observe all precautions and limitations on the 2,4-D label booklet.**

### 11.3 Early Preplant Application

If emerged weeds are present at the time of treatment, a Roundup agricultural herbicide, Gramoxone Extra or 2,4-D should be added to this product according to the directions for use on their respective product labels. If unsatisfactory weed control occurs (due to excessively dry or excessively wet conditions) following the earlier application, a postemergence application of an appropriate labeled grass and/or broadleaf weed herbicide may be used. If a postemergence treatment includes the herbicide used early preplant, do not exceed the labeled rate for corn on a given soil texture. Observe all precautions and limitations on the labels for [Insert Brand Name] herbicide, Roundup agricultural herbicides, Gramoxone Extra, 2,4-D and other postemergence herbicides before use of these products.

DO NOT apply tank mixtures containing a Roundup agricultural herbicide, Gramoxone Extra or other contact herbicides by air.

#### 11.3.1 [INSERT BRAND NAME]

This product, when applied in a single application or split application will provide preemergence control or reduced competition of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label. If weeds are emerged at time of application, apply a labeled contact herbicide with this product. Observe the directions for use, precautions and restrictions on the label of the contact herbicide.

### Approved Application Systems

Ground - Broadcast boom

Dry Bulk Fertilizer Impregnation

**Recommended Rate And Timing Of Application**

**Single application**

Application of this product should be made less than 30 days before planting but prior to weed emergence.

**NOTE:** Application on coarse soils should not be made more than two weeks prior to planting.

**Split Application**

Apply 60 percent of the recommended rate as a split application prior to weed emergence and no more than 45 days prior to planting and the remaining 40 percent at or immediately following planting but before crop emergence.

See the following table for recommended broadcast rates per acre for single and split applications.

	BROADCAST RATE PER ACRE
SOIL TEXTURAL GROUP	[Insert Brand Name] (pints)
Coarse	1.50 to 2.00
Medium	2.25 to 2.75
Fine	2.75 to 3.00

In order to provide broad-spectrum weed control, both single and split applications of this product must be followed with a planned postemergence application of a labeled broadleaf and/or grass herbicide. Observe the directions for use, precautions and restrictions on the label of the postemergence herbicide before use of these products.

If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds.

**11.3.2 [Insert Brand Name] Plus Atrazine**

This tank mixture, when applied in a single application (alone or in a 3-way combination with Princep), split application or as a sequential application to Princep in early preplant programs, will provide preemergence control or reduced competition of annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

DO NOT graze treated area or feed treated forage to livestock for 21 days following application of this tank mixture.

The maximum atrazine broadcast application rates for corn:

- If no atrazine was applied prior to corn emergence, apply a maximum of 2 pounds active ingredient per acre broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 pounds 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 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 if <30 percent of the surface is covered with plant residues; or 2.0 pounds active ingredient per acre if only applied postemergence.

CORN, SOYBEANS\* OR MILO (SORGHUM) can be planted the year following use of this mixture.

\* There is a possibility of injury due to carryover of atrazine if soybeans are planted the following year. DO NOT plant soybeans the year following use of this tank mixture on furrow irrigated corn.

Approved Application Systems  
Ground - Broadcast boom  
Dry Bulk Fertilizer Impregnation

**Recommended Rate And Timing Of Application**

**Single application**

Application of this product should be made less than 30 days before planting but prior to weed emergence.

**NOTE:** Application on coarse soils should not be made more than two weeks prior to planting.

**Split application**

Apply 60 percent of the recommended rate as a split application prior to weed emergence and no more than 45 days prior to planting and the remaining 40 percent at or immediately following planting but before crop emergence.

See the following table for recommended broadcast rates per acre for single and split applications.

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE		
	[INSERT BRAND NAME] * (pints)	+	ATRAZINE 4L ** (quarts)
Coarse	1.75		1.25 to 1.5
Medium	1.75 to 2.25		1.50 to 2.0
Fine	2.00 to 2.50		1.50 to 2.0

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

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

If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds.

**Sequential Application**

Apply 1 to 1.25 quarts per acre of Princep prior to weed emergence and no more than 45 days prior to planting. At or immediately following planting, but before crop emergence, apply the recommended rate of this tank mixture.

**NOTE:** LAND TREATED WITH PRINCEP SHOULD NOT BE PLANTED TO ANY CROP OTHER THAN CORN FOR ONE YEAR FOLLOWING TREATMENT AS CROP INJURY MAY OCCUR. AFTER HARVEST OF TREATED CROP, PLOW AND THOROUGHLY TILL THE SOIL IN THE FALL OR SPRING TO MINIMIZE POSSIBLE INJURY TO SPRING SEEDED ROTATIONAL CROPS.

Following application of Princep, see the following table for recommended rates.

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE		
	[INSERT BRAND NAME] * (pints)	+	ATRAZINE 4L ** (quarts)

Coarse	1.75		1.25
Medium	2.25		1.50
Fine	2.25 to 2.5		1.50 to 2.0

- \* Use the higher rates in the recommended ranges in areas of heavy weed infestation.
- \*\* Use rates listed in this label when using atrazine 4L. Use equivalent rates when using atrazine 90 percent dry flowable formulations. One quart of atrazine 4L equals 1.1 pounds of atrazine 90 percent dry flowable.

**12.0 CONVENTIONAL TILLAGE**

**NOTE:** Each section of this label provides recommended treatment rates for this product and tank mixtures including this product. Applications that are not consistent with recommendations in this label may result in unsatisfactory weed control, injury to crops, persons or animals, or other unintended consequences. Refer to specific product labels for crop rotation restrictions and cautionary statements of all products used in these tank mixtures, including precautions on soil pH sensitive varieties, minimum re-cropping interval and rotational guidelines.

Use the higher rates in the recommended ranges in areas of heavy weed infestation or where other specified. If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds. Do not apply when conditions favor drift.

Detailed information regarding "APPLICATION SYSTEMS" and "APPLICATION TIMINGS AND METHODS" appears in the "GENERAL INFORMATION" section and should be carefully reviewed in conjunction with the information in this section. If the specific information in this section differs from the "GENERAL INFORMATION", the specific information should control.

**12.1 [Insert Brand Name]**

Apply this product in water or sprayable fluid fertilizer solution.

**Approved Application Systems**  
 Ground--Broadcast boom; banded  
 Dry Bulk Fertilizer Impregnation

**Approved Application Methods**

**Preplant Incorporated; Preemergence Surface**

**Postemergence Surface**

Apply this product prior to weed emergence and before corn reaches 11 inches in height. Do not exceed 3.4 pints per acre. Weeds emerged at the time of application are not controlled by this product. If weeds are emerged at application, shallowly cultivate or rotary hoe to improve performance. **DO NOT** make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

**RECOMMENDED RATES:** Refer to the following tables for the recommended broadcast treatment rates for this product. Applications which are not consistent with recommendations in this label may result in unsatisfactory weed control or crop injury.

**Application Rates**

	<b>BROADCAST RATE PER ACRE (pints) *</b>
--	--

SOIL TEXTURAL GROUP	Less than 3% organic matter	3 % or more organic matter **
Coarse	1.25 to 1.75	1.75
Medium	1.75 to 2.25	1.75 to 2.25
Fine	1.75 to 2.25	2.25 to 2.75

\* Use the higher rate in the recommended range in areas of heavy weed infestation.

\*\* On soils with 6 to 10 percent organic matter use 2.5 to 3.4 pints/acre. On soils with more than 10 percent organic matter use 3.4 pints/acre.

## 12.2 [Insert Brand Name] Plus Roundup WeatherMAX™ on Roundup Ready Corn and Roundup Ready Corn 2

This program may be used postemergence to Roundup Ready Corn and Roundup Ready Corn 2 from seedling emergence until the corn reaches 11 inches in height. Refer to the Roundup WeatherMAX or other Roundup agricultural herbicide labels for specific weeds controlled postemergence.

**AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS WHICH TO NOT CONTAIN THE ROUNDUP READY GENE.**

### Approved Application Systems

Ground—broadcast boom

### Approved Application Methods

#### Preemergence Surface

##### Sequential Program

This product may be applied preemergence to Roundup Ready Corn and Roundup Ready Corn 2 at the Roundup Ready Rate of 1.5 pints per acre in a planned preemergence followed by Roundup agricultural herbicide postemergence sequential program.

#### Postemergence Surface

This product is applied postemergence to Roundup Ready Corn and Roundup Ready Corn 2 from seedling emergence until the corn is 11 inches in height. The Roundup Ready Rate for this product is 1.5 pints per acre. Labeled use rates for this tank-mix are defined in the table below. Use the higher rate on larger weeds and where heavy weed infestations exist. This tank mix should be applied when weeds are 2 to 4 inches in height and before the weed height and/or density become competitive with the crop.

For difficult to control weeds such as fall panicum, barnyardgrass, crabgrass, shattercane, broadleaf signalgrass and Pennsylvania smartweed use the higher rate of Roundup WeatherMAX or equivalent rates or other Roundup agricultural herbicides.

**ROUNDUP READY RATE – [Insert Brand Name] at 1.5 pints per acre.**

### Application Rates (Minimum and Maximum range)

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE	
	[INSERT BRAND NAME] (pints)	ROUNDUP WEATHERMAX (ounces)

Coarse	1.0 to 1.75	16 to 22
Medium	1.1 to 2.25	16 to 22
Fine	1.1 to 2.75	16 to 22

### 12.3 [Insert Brand Name] Plus Accent

Apply this tank mixture in water after crop emergence to provide preemergence and postemergence control of certain grass and broadleaf weeds. Refer to the Accent herbicide label for specific weeds controlled postemergence. Applications which are not consistent with recommendations in this label may result in unsatisfactory weed control or crop injury.

#### Approved Application Systems

Ground--Broadcast boom; banded

#### Approved Application Methods

#### Postemergence Surface

Apply this tank mixture after corn emergence up to 11 inches in height and until grasses are 3 inches in height. Applications made after weeds exceed 3 inches in height may not provide satisfactory control. Always add a nonionic surfactant at 0.25 percent v/v. This tank mixture will not control certain emerged broadleaf weeds. Addition of Banvel or Permit herbicide will improve performance on broadleaf weeds. Refer to the Accent herbicide label for specific weeds controlled. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected.

#### Application Rates

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE *					
	Less than 3% organic matter			3% or more organic matter **		
	[INSERT BRAND NAME] (pints)	+	ACCENT*** (ounces)	[INSERT BRAND NAME] (pints)	+	ACCENT (ounces)
Coarse	1.00 to 1.25		1/2 to 2/3	1.25 to 1.75		1/2 to 2/3
Medium	1.25 to 2.25		1/2 to 2/3	1.75 to 2.25		1/2 to 2/3
Fine	1.75 to 2.25		1/2 to 2/3	1.75 to 2.75		1/2 to 2/3

\* Use the higher rate in the recommended ranges in areas of heavy weed infestation.

\*\* On soils with 6 to 10 percent organic matter use 2.5 to 3.4 pints/acre. On soils with more than 10 percent organic matter use 3.4 pints/acre.

\*\*\* The Accent rate may be reduced to 1/3 to 2/3 ounce per acre if grasses are less than 2 inches in height when sprayed.

### 12.4 [Insert Brand Name] Plus Atrazine

Apply this tank mixture in water or sprayable fluid fertilizer.

#### Approved Application Systems

Ground--Broadcast boom; banded  
Dry Bulk Fertilizer Impregnation

#### Approved Application Methods

Preplant Incorporated; Preemergence Surface

**Postemergence Surface**

Apply this tank mixture before weeds reach the 2-leaf stage and the corn is no more than 11 inches in height. Applications made beyond the 2-leaf stage may not provide satisfactory weed control. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

The maximum atrazine broadcast application rates for corn:

- If no atrazine was applied prior to corn emergence, apply a maximum of 2 pounds active ingredient per acre broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 pounds 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 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 if <30 percent of the surface is covered with plant residues; or 2.0 pounds active ingredient per acre if only applied postemergence.

CORN, SOYBEANS\* OR MILO (SORGHUM) can be planted the year following use of this mixture.

- \* There is a possibility of injury due to carryover of atrazine if soybeans are planted the following year. DO NOT plant soybeans the year following use of this tank mixture on furrow irrigated corn.

DO NOT graze treated area or feed treated forage to livestock for 21 days following application of this tank mixture.

**Application Rates**

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE *					
	Less than 3% organic matter			3% or more organic matter		
	[INSERT BRAND NAME] (pints)	+	ATRAZINE 4L ** (quarts)	[INSERT BRAND NAME] (pints)	+	ATRAZINE 4L ** (quarts)
Coarse	1.00 to 1.25		1.25 to 2.0	1.25 to 1.75		1.25 to 2.0
Medium	1.25 to 1.75		1.25 to 2.0	1.75 to 2.25		1.50 to 2.0
Fine	1.75 to 2.25		1.50 to 2.0	1.75 to 2.25		1.50 to 2.0

- \* Use the higher rate in the recommended ranges in areas of heavy weed infestation. In areas restricted to 1 pound atrazine per acre (1 quart atrazine 4L) or where less atrazine per acre is desired, on medium- and fine-textured soils use 2.75 pints of [Insert Brand Name] herbicide in a tank mixture with 1 quart atrazine 4L per acre for control of grass and broadleaf weeds listed except cocklebur.
- \*\* Use rates listed in this label when using atrazine 4L. Use equivalent rates when using atrazine 90 percent dry flowable formulations. One quart of atrazine 4L equals 1.1 pounds of atrazine 90 percent dry flowable.

**12.5 [Insert Brand Name] Plus Balance Pro  
For Use In Field Corn And Silage Corn**

**Approved Application Systems**  
Ground – Broadcast boom; banded.

**Approved Application Method**

**Preemergence Surface**

Balance PRO is not registered in all states. Follow all Restrictions and Precautions on the Balance PRO label including planting depth, environmental precautions, and soil type restrictions.

Follow the Balance PRO Technical Bulletins, 24(c) labels and 2(ee) recommendations for additional use rate restrictions based on soil textures and depth to groundwater in various states.

**Application Rates:**

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE					
	Less than 3% organic matter			3% or more organic matter		
	[INSERT BRAND NAME] (pints)	+	BALANCE PRO (ounces)	[INSERT BRAND NAME] (pints)	+	BALANCE PRO (ounces)
Coarse *	1.00 to 1.75		1.0 to 1.88	1.25 to 1.75		1.0 to 1.88
Medium	1.25 to 2.25		1.0 to 2.50	1.25 to 2.25		1.5 to 3.00
Fine	1.25 to 2.25		1.5 to 2.75	1.75 to 2.75		2.0 to 3.50

\* It is not recommended to use Balance PRO on coarse soils with less than 1.5% organic matter.

**12.6 [Insert Brand Name] Plus Banvel Or Clarity**

**For use on level or flat-planted field corn on soils with more than 2 percent organic matter.**

Apply in water or sprayable fluid fertilizer solutions for control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

**Approved Application Systems**  
Ground--Broadcast boom; banded

**Approved Application Methods**

**Preemergence Surface**

Apply this tank mixture after planting, before crop and weeds emerge and within 5 days of last preplant tillage operation. Corn seeds must be planted 1-1/2 inches or deeper beneath the soil surface. Direct chemical contact with corn seed must be avoided since crop injury may result. Apply far enough behind planter equipment to avoid any incorporation by the planter wheel or other covering device. Do not apply if corn seeds are planted less than 1-1/2 inches beneath the soil surface.

For Use on Kochia - Preemergence Surface only – Banvel and Clarity tank mix rates may be reduced to 0.25 to 0.5 pint per acre in soils less than 3% organic matter, or 0.5 pint per acre in soils equal to or greater than 3% organic matter. Follow all label restrictions.

**Postemergence Surface**

Apply this tank mixture prior to emergence of grasses and before corn exceeds 8 inches in height. This tank mixture does not control emerged grasses. Addition of Accent to this tank mixture will improve control of emerged grasses. Some leaf burn to corn may occur occasionally but subsequent growth or

yield should not be affected. DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

**NOTE:** PREVENT DRIFT TO SOYBEANS OR OTHER DESIRABLE PLANTS. Do not use on furrow-irrigated corn, or when corn is planted at the bottom of a furrow, utilizing lister, till or other similar planting methods. DO NOT incorporate after planting or corn emergence. If it is necessary to drag for leveling or rotary hoe to break soil crust, DO NOT disturb the soil more than 1/2 inch deep.

#### Application Rates

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE *					
	Less than 3% organic matter			3% or more organic matter		
	[INSERT BRAND NAME] (pints)	+	BANVEL or CLARITY (pints)	[INSERT BRAND NAME] (pints)	+	BANVEL or CLARITY (pints)
Coarse **	1.25 to 1.75		1	1.75		1
Medium	1.75 to 2.25		1	1.75 to 2.25		1
Fine	1.75 to 2.25		1	2.25 to 2.75		1

\* Use the higher rate in the recommended ranges in areas of heavy weed infestation.

\*\* On coarse-textured soils containing 2 percent or more organic matter, use [Insert Brand Name] herbicide plus Banvel or Clarity only on sandy loam. Do not use on sand and loamy sand with less than 2 percent organic matter.

#### 12.7 [Insert Brand Name] Plus Callisto™

For postemergence surface applications for field corn, production seed corn and silage corn

#### Approved Application Systems

Ground–Broadcast boom; banded

#### Approved Application Methods

#### Postemergence Surface

Callisto is not registered in all states. Follow all Restrictions and Precautions on the Callisto label including planting depth, environmental precautions, and soil type restrictions.

Do not apply to the following soils if ground water depth is 30 feet or less: sands with less than 3% organic matter; loamy sands with less than 2% organic matter; or sandy loams with less than 1% organic matter.

#### RECOMMENDATION

[Insert Brand Name] may be tank-mixed with 3 ounces of Callisto for postemergence applications:

- Use the labeled rates of [Insert Brand Name] that correspond to the soil texture and organic matter.
- Broadleaf weeds should not exceed 5 inches for Callisto applications.
- Accent® herbicide may be added for postemergence grass control. Follow the label for Accent rates and maximum grass sizes.
- Corn must be sprayed before it exceeds 11 inches in height.
- Add 2.5% (v/v) spray grade UAN (28%N) or AMS (8.5 lbs/100 gallons spray solution)
- The addition of 0.25% (v/v) NIS to [Insert Brand Name] will aid in emerged weed control.

- DO NOT use Methylated Soybean Oil (MSO).
- DO NOT make post applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

**12.8 [Insert Brand Name] Plus Hornet WDG  
Only Apply This Tank Mixture To Field Corn.**

Apply in water or sprayable fluid fertilizer solutions for control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

Approved Application Systems  
Ground--Broadcast boom; banded

**Approved Application Methods**

**Preplant Surface, Preplant Incorporated Applied**

For minimum-tillage or no tillage systems this tank-mix may be applied up to 30 days before planting. If weeds are present at the time of treatment, apply in a tank mixture combination with an appropriate contact herbicide. Observe all directions for use, precautions and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

**Preemergence Surface**

Apply this tank mixture after planting, before crop and weeds emerge and within 5 days of last preplant tillage operation. Adequate soil moisture is required for optimum herbicidal activity. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone.

**NOTE:** For all soil applications of this tank mixture, corn seeds must be planted 1-1/2 inches or deeper beneath the soil surface.

DO NOT use this tank mixture when Counter™ (terbufos) or Thimet™ (phorate) insecticides are to be applied due to the risk of severe crop injury.

**Postemergence Surface**

Apply this tank mixture before grasses have reached the 2-leaf stage and the corn is less than 11 inches in height. Applications made to grasses beyond the 2-leaf stage may not provide satisfactory control. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. Include a non-ionic surfactant at 0.25 percent v/v (1 qt/100 gal) or crop oil concentrate at 1 percent v/v for all postemergence applications. DO NOT make postemergence surface tank mixture applications using sprayable fluid fertilizer as the total carrier because severe crop injury may occur.

This tank mixture may be combined with Accent herbicide at 1/3 to 2/3 ounces per acre to increase control of emerged grasses. Follow all label restrictions and directions.

**NOTE:** Avoid all direct or indirect contact with nontarget plants. Spray drift of this tank mixture to emerged soybeans or soil to which soybeans will be planted during the same growing season may cause soybean injury.

**NOTE:** OBSERVE ALL PRECAUTIONS AND LIMITATIONS OF THE [INSERT BRAND NAME] AND HORNET WDG LABELS BEFORE USE OF THIS TANK MIXTURE, INCLUDING PRECAUTIONS ON SOIL RESTRICTIONS, SOIL INSECTICIDES, ROTATIONAL RESTRICTIONS, AND SPRAYER CLEANUP.

**Application Rates**

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE *					
	Less than 3% organic matter			3% or more organic matter		
	[INSERT BRAND NAME] (pints)	+	HORNET WDG (ounces)	[INSERT BRAND NAME] (pints)	+	HORNET WDG (ounces)
Coarse **	1.25 to 1.75		3.0	1.75		3.0
Medium	1.75 to 2.25		3.0 to 4.0	1.75 to 2.25		3.0 to 4.0
Fine	1.75 to 2.25		3.0 to 4.0	2.25 to 2.75		3.0 to 4.0

- \* In areas of heavy weed infestation use the higher rates.
- \*\* Hornet may be substituted for Hornet WDG at 80% of the rates above.

**12.9 [Insert Brand Name] Plus Marksman**

For use on level or flat-planted field corn on soils with more than 2 percent organic matter.

Apply in water or sprayable fluid fertilizer solutions for control of the annual grasses and broadleaf weeds listed for [Insert Brand Name] plus atrazine in the "WEEDS CONTROLLED" section of this label.

**Approved Application Systems**  
Ground--Broadcast boom; banded

**Approved Application Methods**

**Preemergence Surface**

Apply this tank mixture after planting, before crop and weeds emerge and within 5 days of last preplant tillage operation. Corn seeds must be planted 1-1/2 inches or deeper beneath the soil surface. Direct chemical contact with corn seed must be avoided since crop injury may result. Apply far enough behind planter equipment to avoid any incorporation by the planter wheel or other covering device. Do not apply if corn seeds are planted less than 1-1/2 inches beneath the soil surface.

For Kochia preemergence use only – Marksman may be reduced to 1.0 to 2.0 pints per acre in soils less than 3% organic matter, or 2.0 pints per acre in soils equal to or greater than 3% organic matter. Follow all label restrictions.

**Postemergence Surface**

Apply this tank mixture before grasses reach the 2-leaf stage and the corn reaches 8 inches in height. Applications made beyond the 2-leaf stage will not provide satisfactory grass control. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

**NOTE: PREVENT DRIFT TO SOYBEANS OR OTHER DESIRABLE PLANTS.** Do not use on furrow-irrigated corn, or when corn is planted at the bottom of a furrow, utilizing lister, till or other similar planting methods. DO NOT incorporate after planting or corn emergence. If it is necessary to drag for leveling or rotary hoe to break soil crust, DO NOT disturb the soil more than 1/2 inch deep.

**Application Rates**

	BROADCAST RATE PER ACRE *	
	Less than 3% organic matter	3% or more organic matter

SOIL TEXTURAL GROUP	[INSERT BRAND NAME] (pints)	+	MARKSMAN (pints)	[INSERT BRAND NAME] (pints)	+	MARKSMAN (pints)
Coarse **	1.25 to 1.75		3.5	1.75		3.5
Medium	1.75 to 2.25		3.5	1.75 to 2.25		3.5
Fine	1.75 to 2.25		3.5	2.25 to 2.75		3.5

\* Use the higher rate in the recommended ranges in areas of heavy weed infestation.

\*\* On soils with 6 to 10 percent organic matter use 2.5 to 3.4 pints/acre. On soils with more than 10 percent organic matter use 3.4 pints/acre.

### 12.10 [Insert Brand Name] Plus Permit

Apply this tank mixture in water after crop emergence to provide preemergence control of certain grass and broadleaf weeds and postemergence control of broadleaf weeds listed on the Permit herbicide label.

#### Approved Application Systems

Ground--Broadcast boom; banded

#### Approved Application Methods

#### Postemergence Surface

Apply this tank mixture after corn emergence up to 11 inches in height and until weeds reach 3 inches in height. This tank mixture will not provide control of emerged grasses. Addition of Accent to this tank mixture will control of emerged grasses. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected.

#### Application Rates

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE					
	Less than 3% organic matter			3% or more organic matter		
	[INSERT BRAND NAME] * (pints)	+	PERMIT (ounces)	[INSERT BRAND NAME] * (pints)	+	PERMIT (ounces)
Coarse	1.25 to 1.75		2/3	1.75		2/3
Medium	1.75 to 2.25		2/3	1.75 to 2.25		2/3
Fine	1.75 to 2.25		2/3	2.25 to 2.75		2/3

\* Use the higher rate in the recommended ranges in areas of heavy weed infestation.

### 12.11 [Insert Brand Name] Plus Princep

Apply this tank mixture in water or sprayable fluid fertilizer.

#### Approved Application Systems

Ground--Broadcast boom; banded  
Dry Bulk Fertilizer Impregnation

#### Approved Application Methods

#### Preplant Incorporated

Apply this tank mixture within 14 days prior to planting and shallowly incorporate or Surface Blend into the upper 1 to 2 inches of soil.

**Preemergence Surface**

Apply this tank mixture after planting, before crop and weed emergence and within 5 days after last preplant tillage operation.

**NOTE:** LAND TREATED WITH PRINCEP SHOULD NOT BE PLANTED TO ANY CROP OTHER THAN CORN FOR ONE YEAR FOLLOWING TREATMENT AS CROP INJURY MAY OCCUR. AFTER HARVEST OF TREATED CROP, PLOW AND THOROUGHLY TILL THE SOIL IN THE FALL OR SPRING TO MINIMIZE POSSIBLE INJURY TO SPRING SEEDED ROTATIONAL CROPS.

**Application Rates**

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE *					
	Less than 3% organic matter			3% or more organic matter		
	[INSERT BRAND NAME] (pints)	+	PRINCEP 4L ** (quarts)	[INSERT BRAND NAME] (pints)	+	PRINCEP 4L ** (quarts)
Coarse	1.00 to 1.25		1.25 to 2.0	1.25 to 1.75		1.25 to 2.0
Medium	1.25 to 2.25		1.25 to 2.0	1.75 to 2.25		1.50 to 2.0
Fine	1.75 to 2.25		1.50 to 2.0	1.75 to 2.25		1.50 to 2.0

\* Use the higher rate in the recommended ranges in areas of heavy weed infestation.

\*\* Use rates listed on this label when using Princep 4L. Use equivalent rates when using Princep 90 percent dry flowable formulations. One quart of Princep 4L equals 1.1 pounds of Princep 90 percent dry flowable.

**12.12 [Insert Brand Name] Plus Prowl**

Apply this tank mixture in water or sprayable fluid fertilizer.

**Approved Application Systems**

Ground--Broadcast boom; banded  
Dry Bulk Fertilizer Impregnation

**Approved Application Methods**

**Preemergence Surface**

Apply this tank mixture after planting, before crop and weed emergence and within 5 days after last preplant tillage operation.

DO NOT preplant incorporate this tank mixture as serious crop injury can result.

**Application Rates**

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE *					
	Less than 3% organic matter			3% or more organic matter		
	[INSERT BRAND NAME] (pints)	+	PROWL ** (pints)	[INSERT BRAND NAME] (pints)	+	PROWL ** (pints)

Coarse	1.25 to 1.75	1.0	1.50 to 1.75	1.0
Medium	1.50 to 2.25	1.0 to 2.0	1.75 to 2.25	1.0 to 2.0
Fine	1.75 to 2.25	1.0 to 2.0	2.00 to 2.75	1.0 to 2.0

- \* Use the higher rate in the recommended ranges in areas of heavy weed infestation.
- \*\* Use rates listed in this label when using Prowl. Use equivalent rates when using Prowl 3.3 EC. One quart of Prowl equals 1.2 quarts of Prowl 3.3 EC.

**12.13 [Insert Brand Name] Plus Pursuit**

Apply this tank mixture in water or sprayable fluid fertilizer.

**Approved Application Systems**  
Ground--Broadcast boom; banded

Approved Application Methods

Preplant Incorporated; Preemergence Surface

**Postemergence Surface**

Apply this tank mixture before weeds reach 3 inches in height and the corn is no more than 11 inches in height. Applications made after weeds are beyond 3 inches in height may not provide satisfactory control. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

**NOTE: THIS TANK MIXTURE IS FOR USE ONLY ON SELECTED FIELD CORN HYBRIDS (IMI-CORN) WARRANTED BY THE SEED COMPANY TO POSSESS RESISTANCE/TOLERANCE TO DIRECT APPLICATION OF PURSUIT (FOR EXAMPLE: PIONEER IR HYBRIDS). DO NOT APPLY PURSUIT TO CORN HYBRIDS WHICH LACK GENETIC RESISTANCE/TOLERANCE TO PURSUIT HERBICIDE. OBSERVE ALL PRECAUTIONS AND LIMITATIONS ON THE [INSERT BRAND NAME] HERBICIDE AND PURSUIT LABELS BEFORE USE OF THIS TANK MIXTURE INCLUDING PRECAUTIONS ON MINIMUM RECROPPING INTERVAL AND ROTATIONAL GUIDELINES.**

**Application Rates**

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE *					
	Less than 3% organic matter			3% or more organic matter		
	[INSERT BRAND NAME] (pints)	+	PURSUIT (ounces)	[INSERT BRAND NAME] (pints)	+	PURSUIT (ounces)
Coarse	1.00 to 1.25		4	1.25 to 1.75		4
Medium	1.25 to 1.75		4	1.75 to 2.25		4
Fine	1.75 to 2.25		4	1.75 to 2.25		4

- \* Use the higher rate in the recommended ranges in areas of heavy weed infestation.

**12.14 [Insert Brand Name] Plus Atrazine Plus Prowl**

Apply this tank mixture in water or sprayable fluid fertilizer solutions for additional control of triazine-resistant lambsquarters and pigweed in addition to yellow nutsedge and the annual grasses and broadleaf weeds.

**Approved Application Systems**  
 Ground--Broadcast boom; banded  
 Dry Bulk Fertilizer Impregnation

**Approved Application Methods**

**Preemergence Surface**

DO NOT preplant incorporate this tank mixture as serious crop injury can result.

The maximum atrazine broadcast application rates for corn:

- If no atrazine was applied prior to corn emergence, apply a maximum of 2 pounds active ingredient per acre broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 pounds 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 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 if <30 percent of the surface is covered with plant residues; or 2.0 pounds active ingredient per acre if only applied postemergence.

CORN, SOYBEANS\* OR MILO (SORGHUM) can be planted the year following use of this mixture.

- \* There is a possibility of injury due to carryover of atrazine if soybeans are planted the following year. DO NOT plant soybeans the year following use of this tank mixture on furrow irrigated corn.

**Application Rates**

BROADCAST RATE PER ACRE *					
Less than 3% organic matter					
SOIL TEXTURAL GROUP	[INSERT BRAND NAME] (pints)	+	ATRAZINE 4L ** (quarts)	+	PROWL ** (quarts)
Coarse	1.00 to 1.25		0.75 to 2.0		0.75
Medium	1.25 to 1.75		1.00 to 2.0		0.75 to 1.0
Fine	1.25 to 1.75		1.25 to 2.0		1.00

BROADCAST RATE PER ACRE *					
More than 3% organic matter					
SOIL TEXTURAL GROUP	[INSERT BRAND NAME] (pints)	+	ATRAZINE 4L ** (quarts)	+	PROWL ** (quarts)
Coarse	1.25 to 1.75		1.00 to 2.0		0.75 to 1.0
Medium	1.50 to 2.0		1.25 to 2.0		1.0
Fine	1.75 to 2.25		1.25 to 2.0		1.0

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

\*\* Use rates listed in this label using atrazine 4L and Prowl. Use equivalent rates when using atrazine 90 percent dry flowable and Prowl 3.3 EC formulations. One quart of atrazine 4L equals 1.1 pounds of atrazine 90 percent dry flowable. One quart of Prowl equals 1.2 quarts of Prowl 3.3 EC.

**12.15 [Insert Brand Name] Plus Python™ WDG**  
**Only Apply This Tank Mixture To Field Corn.**

Apply in water or sprayable fluid fertilizer solutions for control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

**Approved Application Systems**  
 Ground--Broadcast boom; banded

**Approved Application Methods**

**Preplant Surface Applied**

For minimum-tillage or no tillage systems this tank mix may be applied up to 30 days before planting. If weeds are present at the time of treatment, apply in a tank mixture combination with an appropriate contact herbicide. Observe directions for use, precautions and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

**Preemergence Surface**

**NOTE:** For all soil applications of this tank mixture, corn seeds must be planted 1-1/2 inches or deeper beneath the soil surface.

**DO NOT** use this tank mixture when Counter (terbufos) or Thimet (phorate) insecticides are to be applied due to the risk of severe crop injury.

**NOTE:** Avoid all direct or indirect contact with nontarget plants. Spray drift of this tank mixture to emerged soybeans or soil to which soybeans will be planted during the same growing season may cause soybean injury.

**NOTE:** OBSERVE ALL PRECAUTIONS AND LIMITATIONS OF [INSERT BRAND NAME] AND PYTHON LABELS BEFORE USE OF THIS TANK MIXTURE, INCLUDING PRECAUTIONS ON SOIL RESTRICTIONS, SOIL INSECTICIDES, ROTATIONAL RESTRICTIONS, AND SPRAYER CLEANUP.

**Application Rates**

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE *					
	Less than 3% organic matter			3% or more organic matter		
	[INSERT BRAND NAME] (pints)	+	PYTHON WDG (ounces)	[INSERT BRAND NAME] (pints)	+	PYTHON WDG (ounces)
Coarse **	1.25 to 1.75		0.80	1.75		0.89
Medium	1.75 to 2.25		0.89	1.75 to 2.25		1.00
Fine	1.75 to 2.25		0.89	2.25 to 2.75		1.00

\* In areas of heavy weed infestation use the higher rates.

\*\* Refer to the "USE RESTRICTIONS" and "GENERAL INFORMATION" sections of this label and PYTHON WDG for restrictions

**13.0 LIMIT OF WARRANTY AND LIABILITY**

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

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

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

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

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

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

[Insert Brand Name], Roundup, Roundup Ready and Roundup WeatherMAX are trademarks of Monsanto Technology LLC.

Permit is a registered trademark of, and used under license from, Nissan Chemical Industries, Ltd. All other trademarks are the property of their respective owners.

EPA Reg. No. 524-473

©2004 MONSANTO COMPANY  
ST. LOUIS, MISSOURI 63167