

524-485

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

SEP 22 2003

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Mr. Roy G. Danhaus
Monsanto Company
600 13th Street, N. W., Suite 660
Washington, DC 2005

Dear Mr. Danhaus:

Subject: Harness Extra 5.6 L Herbicide (Revise First Aid & Add Tank Mixes)
EPA Registration No. 524-485
Your Application Dated June 26, 2003

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 changes, most of which are based on recent label revisions required for all products containing atrazine, before you release the product for shipment.

1. The following paragraph must be added to your Directions for Use.

–“ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION OF FEDERAL LAW. Before using this product, you must consult the Atrazine Watershed Information Center (AIWC) to determine whether the use of this product is prohibited in your watershed. AIWC can be assessed through [www.atrazine-watershed.info] or [1-866-365-3014]. If use of this product is prohibited in your watershed, you may return this product to your point of purchase or contact [Dow AgroSciences, LLC] for a refund.”

2. Revise your Personal Protective Equipment (PPE)” section to read as follows.

“Some materials that are chemical-resistant to this product are polyethylene or polyvinylchloride. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.”

“Mixers, loaders, applicators and other handlers not using Engineering Controls must wear:

- Coveralls over long-sleeved shirt and long pants,
- Chemical resistant gloves,
- Chemical resistant footwear plus socks,
- Chemical resistant headgear (If overhead exposure),
- A NIOSH approved dust mist filtering respirator with any N, R, P, or HE filter, and
- A chemical resistant apron (if exposed to the undiluted product).”

Note: The registrant must drop the N type filter from the respirator statement if the pesticide product contains or is used with oil.

Mixers, loaders, applicators and other handlers using "Engineering Controls must wear:"

- "-Long-sleeved shirt and long pants,
- Chemical-resistant apron for mixers and loaders,
- shoes plus socks"

See engineering controls for additional requirements.

3. Add the statement "Discard clothing and other absorbent materials that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them." immediately after the sentence "Keep and wash PPE separately from other laundry."

4. Add the heading "Engineering Controls" before the paragraph "When handlers used closed systems, ... as specified in WPS."

5. Replace the first paragraph under "Environmental Hazards" with the one below..

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

6. Add the statement "Do not apply when weather conditions favor drift from treated areas" to the third paragraph in your Environmental Hazards section before the sentence beginning with "Runoff and drift from treated areas..."

7. Within the list of PPE for early re-entry in the Agricultural Use Requirements box, revise the requirement for "waterproof gloves" to a requirement for "chemical-resistant gloves made of any waterproof material."

8. Add a "Pesticide Storage" section to your Storage and Disposal.

9. Under Storage and Disposal revise "Disposal" to read "Pesticide Disposal".

10. Add the following bulk container language to your Storage and Disposal section. Alternatively you may use the language recently approved und EPA Registration No. 524-537.

Container Disposal (Bulk and Mini Bulk)

Instructions for Users

"When the container is empty, replace the cap and seal all openings that have been opened during use, and return the container to the point of purchase, or to an alternate location designated by the registrant at the rime 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 for recycling if available.

Instructions for Users and Refillers

This container must only be refilled with this pesticide product. **Do Not Reuse the Container for Any Other Purpose.** Do not transport if this container is damaged or leaking. If the container is damaged, leaking, or obsolete, or to obtain information about recycling refillable containers, contact Monsanto Company at [insert phone number]. Cleaning is not necessary prior to refilling with the same product. Clean container before final 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.

11. Replace the Atrazine rate paragraphs on pages 8 and 16 with the following statements.

“Maximum broadcast application rates for corn must as follows:

–If no atrazine was applied prior to corn emergence, apply a maximum of 2 lb ai/A broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 lb ai/A per calendar year.

–2.0 lb ai/A as a single preemergence application on soils that are not highly erodible or on highly erodible if at least 30% of the soil is covered with plant residues, or

–1.6 lb ai/A as a single preemergence application on highly erodible soils if <30% of the surface is covered with plant residues; or 2.0 lb ai/A if only applied postemergence.

–If no atrazine was applied prior to corn emergence, apply a maximum of 2 lb ai/A broadcast.

12. A paragraph similar to the following must be added to your label.

“When tank-mixing or sequentially applying, atrazine or products containing atrazine to corn, the total pounds atrazine applied (lb ai/A) must not exceed the specific seasonal rate limits from preemergence or postemergence or preemergence + postemergence applications as noted in the use limitation table in the use directions.”

13. The label must specify a 60-day PHI for field corn forage uses.

14. The following paragraph must be added to your Bulk Fertilizer Use instructions.

–Impregnation of bulk fertilizer is restricted to commercial facilities. On-farm fertilizer impregnation is prohibited. No more than 500 tons of bulk fertilizer can be impregnated per day. No single facility may impregnate fertilizer with this product for more than 30 days per calendar year.--

15. Add the statement “All postemergence treatments of products containing atrazine must be made before corn is 12 inches in height.

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Submit three (3) copies of your final printed labeling incorporating the above changes. Amended labeling will supercede all previously accepted ones. A stamped copy of labeling is enclosed for your records.

Sincerely,

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

RESTRICTED USE PESTICIDE

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

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.

HARNESS XTRA® 5.6L

Herbicide by Monsanto

Preemergence herbicide for weed control in Field Corn, Production Seed Corn, Silage Corn and Popcorn.

In case of an emergency involving this product or for user safety information on this product, Call Collect, day or night (314) 694-4000.

Complete Directions for Use

Harness Xtra 5.6L is referred to throughout these instructions as "Harness Xtra"

2003

EPA Reg. No. 524-485

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

PRECAUTIONARY STATEMENTS

GENERAL INFORMATION

USE RESTRICTIONS

MIXING, SPRAYING, AND
HANDLING INSTRUCTIONS

APPLICATION INFORMATION

CULTIVATION INFORMATION

WEED CONTROL WITH HARNESS XTRA

Read the entire label before using this product.

Use only according to label instructions.

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

SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.

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For non-refillable container label:
 THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION OR REPACKAGING.

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

LIMIT OF WARRANTY AND LIABILITY

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

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

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, 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.

APPENDIX

- APPLICATION INFORMATION
 - BAND TREATMENT
 - GROUND BROADCAST TREATMENT
 - APPLICATION WITH
 - DRY BULK FERTILIZER
 - APPLICATION TIMING AND METHODS

DIRECTIONS FOR USE

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CORN, PRODUCTION SEED CORN, FIELD CORN, SILAGE CORN AND POPCORN
 HARNESS XTRA
 HARNESS XTRA + Roundup UltraMAX in corn with the Roundup Ready gene
 HARNESS XTRA + Accent
 HARNESS XTRA + Balance PRO
 HARNESS XTRA + Banvel or Clarity
 HARNESS XTRA + Callisto
 HARNESS XTRA + Marksman
 HARNESS XTRA + Permit
 HARNESS XTRA + Prowl
 HARNESS XTRA + Pursuit

CONSERVATION OR MINIMUM TILLAGE SYSTEMS

At-Planting Applications
 HARNESS XTRA
 HARNESS XTRA + Balance PRO
 HARNESS XTRA + Callisto
 HARNESS XTRA + Princep

Early-Preplant Applications
 HARNESS XTRA

DISPOSAL

FLUID FERTILIZER COMPATIBILITY TEST

GENERAL INFORMATION

INGREDIENTS

LIMIT OF WARRANTY AND LIABILITY

MIXING, SPRAYING, AND HANDLING INSTRUCTIONS

PRECAUTIONARY STATEMENTS

SOIL TEXTURE

WEEDS CONTROLLED WITH HARNESS XTRA

ACCEPTED
 with **COMMENTS**
 In EPA Letter Dated:
 SEP 22 2003
 Under the Federal Insecticide,
 Fungicide, and Rodenticide Act,
 as amended, for the pesticide
 registered under EPA Reg. No.
524-485

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Keep out of reach of children.

CAUTION!

HARMFUL IF SWALLOWED OR INHALED.

CAUSES EYE IRRITATION.

MAY CAUSE ALLERGIC SKIN REACTION.

Avoid contact with skin, eyes, or clothing.

Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

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FIRST AID

If in eyes

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

If on skin or clothing

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.
- Sensitized persons should avoid further contact and reuse of contaminated clothing.

If swallowed

- Call poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

If inhaled

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then Give artificial respiration, preferably by mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

- Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
- In case of an emergency involving this product, Call Collect, day or night (314) 694-4000.
- This product is identified as **Harness Xtra 5.6L Herbicide, EPA Registration No. 524-485.**

Personal Protective Equipment (PPE)

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

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

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.

In case of an emergency involving this product,
 or for user safety information on this product,
 Call Collect, day or night, (314) 694-4000.

Environmental Hazards

Atrazine has been identified in limited ground water sampling and there is the possibility that it can leach through the soil to ground water, especially where soils are coarse and ground water is near the surface. Users are advised not to apply this product to sand and loamy sand soils where the water table (ground water) is near the surface and where these soils are permeable (well drained).

Ground water contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material.

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

This chemical demonstrates the properties and characteristics associated with chemicals detected in 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.

ACTIVE INGREDIENTS:*

Acetochlor, 2-chloro-N-ethoxymethyl-N-(2-ethyl-6-methylphenyl)acetamide	33.4%
Atrazine, 2-chloro-4-(ethylamino)-6-(isopropylamino)-s-triazine and related triazines.....	26.9%
OTHER INGREDIENTS.....	39.7%
	100.0%

*Contains 372 grams/litre or 3.1 pounds/gallon of acetochlor and 300 grams/liter or 2.5 pounds/gallon of atrazine and related compounds.

U.S. Pat. No. 4,256,481. Other patents pending. No license is granted under any non-U.S. patents.

DIRECTIONS FOR USE

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

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, waterproof gloves and shoes plus socks.

For more product information, call toll-free 1-800-332-3111.

Storage and Disposal

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

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

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is destroyed. See the individual container label for disposal information.

Container Label Statements:

(FOR REFILLABLE PORTABLE CONTAINERS)

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

(FOR BULK CONTAINERS)

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

(FOR PLASTIC 1-WAY CONTAINERS & BOTTLES)

Do not reuse container. Triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(FOR DRUMS)

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

GENERAL INFORMATION

This product is recommended for control of yellow nutsedge and many annual grasses and broadleaf weeds. 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 cautionary statements and all other information appearing on the labeling of all products used in mixtures and sequential treatments.

NOTE: Use this product for weed control in corn only. CORN (ALL TYPES INCLUDING SWEET CORN), MILO (SORGHUM), OR SOYBEANS CAN BE PLANTED THE YEAR FOLLOWING THE USE OF THIS PRODUCT. IF SOYBEANS OR OTHER NONLABELED CROPS ARE TO BE PLANTED THE FOLLOWING YEAR, THERE IS

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THE POSSIBILITY OF CROP INJURY DUE TO CARRYOVER OF ATRAZINE. Do not plant soybeans in areas where furrow irrigation is practiced.

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 where depth to ground water is 30 feet or less: sands with less than 3% organic matter; loamy sands with less than 2% organic matter; or sandy loams with less than 1% organic matter.

This product may not be mixed/loaded, or used within 50 ft. of all wells including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain a minimum of 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

This product may not be mixed or loaded within 50 ft. of intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be applied within 66 feet of all points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66-foot buffer or set-back from runoff points must be planted to a crop or seeded with grass or other suitable crop. Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or higher set-backs) which are different from the label, the more restrictive/protective requirements apply.

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 3-10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid application when gusts approach 15 mph.

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. Keep container closed to prevent spills and contamination.

Flush sprayer with clean water after use.

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

Tile-Terraced Fields Containing Standpipes

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

1. Do not apply this product within 66 ft. of standpipes in tile-outletted terraced fields.
2. Apply this product to the entire tile-outletted terraced field and immediately incorporate it to a depth of 2 to 3 inches in the entire tile-outletted terraced field.
3. Apply this product to the entire tile-outletted terraced field under a no-till practice only when a high crop residue management practice is used. High crop residue management practice is described as a crop management practice where little or no crop residue is removed from the field during or after crop harvest.

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.

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 (front panel) and do not use this product until you have the necessary protective clothing.

2.5 Gallon Containers

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

Equipment Cleaning & Repair

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

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

Always predetermine the compatibility of this product or labeled tank 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 the 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 pre-mixed one part flowable with one part water and added 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 carrier 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 by-pass line on or near bottom of tank to minimize foaming. Screen size in nozzle or line strainers should be 50 mesh. Carefully select proper nozzle to avoid spraying a fine mist. Check for even distribution of spray droplets. To reduce loss of the chemical due to drift of a fine mist, apply at nozzle pressures below 40 psi.

**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).

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- 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".



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"



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.



Amount to Be
Added Per Pint of
Sprayable Fluid Fertilizer
(Assuming Volume is 25 gal/A)

HERBICIDE	RATE/A		Level TEAspoons
Wettable	1 lb.	=	1.5
Powders	2 lb.	=	3.0
or	3 lb.	=	4.5
Dry Flowables	4 lb.	=	6.0
	5 lb.	=	7.5

HERBICIDE	RATE/A		Level TEAspoons		Milliliters
Emulsifiable	1 pint	=	0.5	or	2.4
Concentrates or	1 quart	=	1	or	4.7
Flowables or	2 quarts	=	2	or	9.5
Liquids or	3 quarts	=	3	or	14.2
Solutions	1 gallon	=	4	or	19.0
	5 quarts	=	5	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.

APPLICATION INFORMATION APPLICATION SYSTEMS

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 mph or when other conditions favoring drift exist. **Band Treatment**—Apply a broadcast equivalent rate and volume per acre. To determine these:

$$\begin{array}{l}
 \text{Band width} \\
 \text{in inches} \\
 \text{Row width} \quad \quad \quad \times \\
 \text{in inches}
 \end{array}
 \quad = \quad
 \begin{array}{l}
 \text{Broadcast} \\
 \text{RATE} \\
 \text{per acre}
 \end{array}
 \quad = \quad
 \begin{array}{l}
 \text{Band RATE} \\
 \text{per acre}
 \end{array}$$

$$\begin{array}{l}
 \text{Band width} \\
 \text{in inches} \\
 \text{Row width} \quad \quad \quad \times \\
 \text{in inches}
 \end{array}
 \quad = \quad
 \begin{array}{l}
 \text{Broadcast} \\
 \text{VOLUME} \\
 \text{per acre}
 \end{array}
 \quad = \quad
 \begin{array}{l}
 \text{Band VOLUME} \\
 \text{per acre}
 \end{array}$$

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:

RECOMMENDED QUARTS LIQUID HERBICIDE/ACRE

16/24

Fertilizer Rate (Lb/Acre)	Acres Covered (Per Ton)	(Quarts of Herbicide/Ton Dry Bulk Fertilizer)		
		1.4	1.8	2.3
200	10.0	14.0	18.0	23.0
250	8.0	11.2	14.4	18.6
300	6.7	9.4	12.0	15.5
350	5.7	8.0	10.3	13.3
400	5.0	7.0	9.0	11.7
450	4.5	6.2	8.0	10.4

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

Recommended Herbicide Rate
Quarts/Acre X 2000
 Pounds Fertilizer/Acre = Quarts 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™, MP-79™ or Microcel™, 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.

Ammonium sulfate	21-0-0
Ammonium phosphate-sulfate	16-20-0
Diammonium phosphate	18-46-0
Potassium chloride	0-0-60
Potassium sulfate	0-0-52
*Urea	46-0-0

*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.

APPLICATION TIMING AND METHODS

NOTE: Only one treatment of this product may be applied to a labeled crop.

Early Preplant Surface—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.

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 1/3 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.

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 the 2-leaf grass stage 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.

Preplant Incorporation—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 (Surface Blend): 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.

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.

WEEDS CONTROLLED

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

- Barnyardgrass**
Echinochloa crus-galli
- Crabgrass**
Digitaria ischaemum
Digitaria sanguinalis
- Foxtail, giant**
Setaria faberi

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

Foxtall, yellow
Setaria lutescens

Goosegrass
Eleusine indica

Oat, wild
Avena fatua

Panicum, browntop
Panicum fasciculatum

Panicum, fall
Panicum dichotomiflorum

Rice, red
Oryza sativa

Signalgrass, broadleaf
Brachiaria platyphylla

Sprangletop, red
Leptochloa filiformis

Wheat, volunteer
Triticum aestivum

Witchgrass
Panicum capillare

ANNUAL BROADLEAVES

Beggarweed, Florida
Desmodium tortuosum

Carpetweed
Mollugo verticillata

Cocklebur*
Xanthium strumarium

Galinsoga
Galinsoga spp.

Groundcherry, annual
Physalis spp.

Groundcherry, cutleaf
Physalis angulata

Henbit
Lamium amplexicaule

Jimsonweed
Datura stramonium

Kochia**
Kochia scoparia

Lambsquarters
Chenopodium album

Morningglory, annual*
Ipomoea purpurea

Mustard
Brassica spp.

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Nightshade, black

Solanum nigrum

Nightshade, hairy

Solanum sarrachoides

Pigweed, Carelessweed

Amaranthus spp.

Purslane

Portulaca oleracea

Pusley, Florida

Richardia scabra

Ragweed, common

Ambrosia artemisiifolia

Sida, prickly; Teaweed

Sida spinosa

Smartweed

Polygonum pensylvanicum

Polygonum persicaria

Velvetleaf, Buttonweed*

Abutilon theophrasti

Waterhemp

Amaranthus tuberculatus

* Control of these weeds can be erratic especially under dry weather conditions. Control escaped weeds with cultivation or application of an appropriate EPA-registered postemergence herbicide.

** Triazine-resistant biotypes may require a post sequential application of a non-triazine herbicide for control.

SEDGE

Nutsedge, yellow*

Cyperus esculentus

*Preplant incorporate for control.

When applied immediately after planting and within 5 days of last tillage, this product at a rate of 2.3 to 2.7 quarts per acre on a broadcast basis will reduce competition from the following HARD-TO-CONTROL weeds.

ANNUAL GRASSES

Cupgrass, woolly

Eriochloa villosa

Johnsongrass, seedling

Sorghum halepense

Millet, proso

Panicum miliaceum

Panicum, Texas

Panicum texanum

Sandbur, Grassbur

Cenchrus incertus

Shattercane, wildcane

Sorghum bicolor

ANNUAL BROADLEAVES

Ragweed, giant

Ambrosia trifida

Sicklepod

Cassia obtusifolia

Sunflower, common

Helianthus annuus

NOTE: For hard-to-control weeds, additional amounts of Harness® herbicide and/or atrazine may be added to the recommended treatment rates for this product to provide improved control. For more consistent control of common cocklebur, annual morningglory or velvetleaf, additional atrazine may be applied so that the total atrazine rate is at least 1.5 quarts per acre on medium textured soil with less than 3 percent organic matter, and 1.5 to 2 quarts on medium and fine textured soils with 3 percent or greater organic matter content. For more consistent control of woolly cupgrass additional Harness may be applied so that the total acetochlor rate is 3.0 pounds per acre. The following table shows the amounts of Harness herbicide and/or atrazine that can be added to specific treatment rates of this product.

NOTE: The maximum application rate of atrazine is 2.5 pounds active ingredient per acre per calendar year (2.5 quarts per acre atrazine 4L). On highly erodible soils (as defined by the Soil Conservation Service) with less than 30 percent residue cover, the maximum rate of atrazine is 1.6 pounds active ingredient (1.6 quarts per acre of atrazine 4L). On soils not highly erodible or on highly erodible soils with more than 30 percent plant residue cover, the maximum rate of atrazine is 2 pounds active ingredient per acre (2 quarts per acre of atrazine 4L). If there has been a previous application of a product containing atrazine, do not exceed a total of 2.5 pounds of atrazine active ingredient per acre per calendar year. The maximum application rate of acetochlor for corn is 3 pounds active ingredient per acre per calendar year.

APPLICATION RATE

HARNESS® XTRA (quarts)	ADDITIONAL PRODUCT (maximum)	
	HARNESS® (pints)	ATRAZINE (quarts)
1.4	2.0	1.1
1.8	1.8	0.8
2.3	1.3	0.5

FIELD CORN, PRODUCTION SEED CORN, SILAGE CORN AND POPCORN

HARNESS XTRA

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

APPROVED APPLICATION SYSTEMS

Ground—Broadcast boom; banded
Dry Bulk Fertilizer Impregnation

Reference: The "APPLICATION SYSTEMS" section of this label provides detailed information on the proper application of this product using the system selected.

APPROVED APPLICATION METHODS

Preplant Incorporated—Apply this product within 14 days prior to planting and shallowly incorporate or Surface Blend into the upper 1 to 2 inches of soil. Irrigation within 10 days following planting may improve weed control.

Preemergence Surface—Apply this product after planting, before crop and weed emergence and within 5 days after last preplant tillage operation.

Postemergence Surface— Apply this product before weeds reach the 2-leaf stage and the corn is no more than 11 inches in height. Applications made to weeds 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. **DO NOT** make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

Reference: The "APPLICATION TIMING AND METHODS" section of this label provides detailed information and procedures for the application timing and method selected.

RECOMMENDED RATES: Refer to the following table 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

	BROADCAST RATE PER ACRE (QUARTS)
SOIL	

TEXTURAL GROUP*	Less than 3% organic matter	3% or more organic matter
Coarse**	1.4	1.7
Medium	1.7 to 2.4	2.3 to 2.6
Fine	2.3 to 2.6	2.3 to 3.0

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse textured soils and 2.3 to 3.0 quarts of this product per acre on medium and fine textured soils. Do not exceed 2.5 quarts of HARNESS XTRA per acre on highly erodible soils with less than 30 percent plant residue cover.

*Refer to the "SOIL TEXTURE" section of this label to determine the corresponding textural group for the soil to be treated.

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

**HARNESS XTRA HERBICIDE plus ROUNDUP ULTRAMAX™ HERBICIDE
CORN CONTAINING THE ROUNDUP READY® GENE**

This product may be used in Roundup Ready corn, or corn that contains the Roundup Ready gene. A minimum of 1 quart per acre of this product is required. Use the full labeled rate of this product when the application is 14 days or more prior to planting or when the following grasses may be expected: barnyardgrass, shattercane, seedling johnsongrass or sandbur.

Preemergence Sequential Program

This product may be used at a reduced rate preemergence in a sequential program with Roundup UltraMAX, or other Roundup agricultural herbicide labeled for use in Roundup Ready corn. Use 50% to 100% of the labeled rate of this product for the appropriate soil texture and organic matter, per the Application Rate Table. Apply a sequential application of Roundup UltraMAX or other Roundup agricultural herbicide labeled for use in Roundup Ready corn, per the label instructions.

If weeds are present at the time of preemergence application, tankmix Roundup UltraMAX or other Roundup agricultural herbicide to control emerged vegetation.

Postemergence Tankmix

This product may be used at a reduced rate postemergence in a tankmix program with Roundup UltraMAX, or other Roundup agricultural herbicide labeled for use in Roundup Ready corn. Use 50% to 100% of the labeled rate of this product for the appropriate soil texture and organic matter, per the Application Rate Table. Combine in a tankmix with Roundup UltraMAX or other Roundup agricultural herbicide labeled for use in Roundup Ready corn, per the label instructions.

HARNESS XTRA + 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.

APPROVED APPLICATION SYSTEMS

Ground-Broadcast boom; banded

Reference: The "APPLICATION SYSTEMS" section of this label provides detailed information on the proper application of this product using the system selected.

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 grasses exceed 3 inches in height may not provide satisfactory control. Always add a nonionic surfactant at 0.25% v/v. This tank mixture will not control certain emerged broadleaf weeds. Addition of Banvel® or Permit® 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.

Reference: The "APPLICATION TIMING AND METHODS" section of this label provides detailed information and procedures for the application timing and method selected.

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

SOIL TEXTURAL GROUP*	BROADCAST RATE PER ACRE			
	Less than 3% organic matter		3% or more organic matter	
	Harness Xtra (quarts)	+ Accent (ounces)	Harness Xtra (quarts)	+ Accent (ounces)
Coarse**	1.4	1/2 to 2/3	1.7	1/2 to 2/3
Medium	1.7 to 2.3	1/2 to 2/3	2.3	1/2 to 2/3
Fine	2.3	1/2 to 2/3	2.3 to 3.0	1/2 to 2/3

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse textured soils and 2.3 to 3.0 quarts of this product per acre on medium and fine textured soils. Do not exceed 2.5 quarts of HARNNESS XTRA per acre on highly erodible soils with less than 30 percent plant residue cover.

* Refer to the "SOIL TEXTURE" section of this label to determine the corresponding textural group for the soil to be treated.

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

HARNNESS XTRA plus BALANCE PRO (TANK MIXTURE)

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

BROADCAST RATE PER ACRE (quarts of Harness Xtra and ounces of Balance PRO)

SOIL TEXTURE	< 3% ORGANIC MATTER		> 3% ORGANIC MATTER	
	Harness Xtra	+ Balance PRO	Harness Xtra	+ Balance PRO

	(quarts)		(ounces)		(quarts)		(ounces)
COARSE *	1.00 to 1.4	+	1.0 to 1.88		1.25 to 1.7	+	1.0 to 1.88
MEDIUM	1.25 to 2.4	+	1.0 to 2.50		1.75 to 2.4	+	1.5 to 3.00
FINE	1.75 to 2.4	+	1.5 to 2.75		1.75 to 2.4	+	2.0 to 3.50

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

HARNESS XTRA 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

Reference: The "APPLICATION SYSTEMS" section of this label provides detailed information on the proper application of this product using the system selected.

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.

Postemergence Surface—Apply this tank-mixture before grasses have reached the 2-leaf stage and the corn is less than 8 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. DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

Reference: The "APPLICATION TIMING AND METHODS" section of this label provides detailed information and procedures for the application timing and method selected.

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.

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

BROADCAST RATE PER ACRE

SOIL TEXTURAL GROUP*	2 to 3% organic matter			3% or more organic matter		
	Harness Xtra (quarts)	+	Banvel (pints)	Harness Xtra (quarts)	+	Banvel (pints)
Coarse**	1.4		1.0	1.7		1.0
Medium	1.7 to 2.3		1.0	2.3		1.0
Fine	2.3		1.0	2.3 to 3.0		1.0

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse textured soils and 2.3 to 3.0 quarts of this product per acre on medium and fine textured soils. Do not exceed 2.5 quarts of HARNESS XTRA per acre on highly erodible soils with less than 30 percent plant residue cover.

* Refer to the "SOIL TEXTURE" section of the label to determine the corresponding textural group for the soil to be treated.

** On coarse-textured soils containing 2% or more organic matter, use HARNESS XTRA plus Banvel only on sandy loam. Do not use on sand and loamy sand with less than 2% organic matter. Refer to the "USE RESTRICTIONS" section of this label for restrictions.

HARNESS XTRA 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

Harness may be tank mixed with 3 ounces of Callisto for postemergence applications:

- Use the labeled rates of Harness Xtra 5.6L 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 Harness Xtra 5.6L 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.

HARNESS XTRA 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 in the "WEEDS CONTROLLED" section of this label.

APPROVED APPLICATION SYSTEMS

Ground—Broadcast boom; banded

Reference: The "APPLICATION SYSTEMS" section of this label provides detailed information on the proper application of this product using the system selected.

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.

Postemergence Surface— Apply this tank-mixture before grasses have reached the 2-leaf stage and the corn is less than 8 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. DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

Reference: The "APPLICATION TIMING AND METHODS" section of this label provides detailed information and procedures for the application timing and method selected.

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.

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

SOIL TEXTURAL GROUP*	BROADCAST RATE PER ACRE**			
	2% to 3% organic matter		3% or more organic matter	
	Harness Xtra (quarts)	+ Marksman (pints)	Harness Xtra (quarts)	+ Marksman (pints)
Coarse***	1.4	2.5 to 3.5	1.7	2.5 to 3.5
Medium	1.7 to 2.3	2.5 to 3.5	2.3	2.5 to 3.5
Fine	2.3	2.5 to 3.5	2.3	2.5 to 3.5

* Refer to the "SOIL TEXTURE" section of the label to determine the corresponding textural group for the soil to be treated.

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

***On coarse-textured soils containing 2% or more organic matter, use HARNCESS XTRA plus Marksman only on sandy loam. Do not use on sand and loamy sand with less than 2% organic matter. Refer to the "USE RESTRICTIONS" section of this label for restrictions.

HARNCESS XTRA plus PERMIT®

Apply this tank-mixture in water after crop emergence to provide preemergence and postemergence control of certain grass and broadleaf weeds. Refer to the Permit herbicide label for specific weeds controlled postemergence.

APPROVED APPLICATION SYSTEMS

Ground—Broadcast boom; banded

Reference: The "APPLICATION SYSTEMS" section of this label provides detailed information on the proper application of this product using the system selected.

APPROVED APPLICATION METHODS

Postemergence Surface—Apply this tank-mixture after corn emergence up to 11 inches in height and before grass weeds reach the 2-leaf stage. 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

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

Reference: The "APPLICATION TIMING AND METHODS" section of this label provides detailed information and procedures for the application timing and method selected.

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

SOIL TEXTURAL GROUP*	BROADCAST RATE PER ACRE**				
	Less than 3% organic matter		3% or more organic matter		
	Harness Xtra (quarts)	Permit (ounces)	Harness Xtra (quarts)	Permit (ounces)	
Coarse***	1.4	0.67	1.7	0.67	
Medium	1.7 to 2.3	0.67	2.3	0.67	
Fine	2.3	0.67	2.3 to 3.0	0.67	

* Refer to the "SOIL TEXTURE" section of the label to determine the corresponding textural group for the soil to be treated.

** In areas of heavy weed infestation use up to 2.3 quarts of this product per acre on coarse textured soils and 2.3 to 3.0 quarts of this product per acre on medium and fine textured soils. Do not exceed 2.5 quarts of HARNESS XTRA per acre on highly erodible soils with less than 30 percent plant residue cover.

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

**HARNESS XTRA plus PROWL®
(TANK MIXTURE)**

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

APPROVED APPLICATION SYSTEMS

Ground—Broadcast boom; banded

Dry Bulk Fertilizer Impregnation

Reference: The "APPLICATION SYSTEMS" section of this label provides information on the proper application of this tank mixture using the system selected.

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.

Reference: The "APPLICATION TIMING AND METHODS" section of this label provides detailed information and procedures for the application timing and method selected.

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

APPLICATION RATES

SOIL TEXTURAL GROUP*	BROADCAST RATE PER ACRE (QUARTS)					
	Less than 3% organic matter			3% or more organic matter		
	Harness Xtra	+	Prowl**	Harness Xtra	+	Prowl**
Coarse***	1.4		0.8	1.7		0.8 to 1.0
Medium	1.7 to 2.3		0.8 to 1.0	2.3		1.0
Fine	2.3		1.0	2.3 to 3.0		1.0

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse textured soils and 2.3 to 3.0 quarts of this product per acre on medium and fine textured soils. Do not exceed 2.5 quarts of HARNESS XTRA per acre on highly erodible soils with less than 30 percent plant residue cover.

* Refer to the "SOIL TEXTURE" section of this label to determine the corresponding textural group for the soil to be treated.

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

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

HARNESS XTRA plus PURSUIT®

Apply this tank-mixture either before or after crop emergence to provide preemergence and postemergence control of certain grass and broadleaf weeds. Refer to the Pursuit herbicide label for specific weeds controlled postemergence.

APPROVED APPLICATION SYSTEMS

Ground—Broadcast boom; banded

Reference: The "APPLICATION SYSTEMS" section of this label provides detailed information on the proper application of this product using the system selected.

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.

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. Contour™ or Resolve™ herbicide may be substituted for Pursuit in this tank-mixture. Refer to these product labels for recommended use rates. 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.

Reference: The "APPLICATION TIMING AND METHODS" section of this label provides detailed information and procedures for the application timing and method selected.

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 HARNESS XTRA AND PURSUIT LABELS BEFORE USE OF THIS

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TANK MIXTURE INCLUDING PRECAUTIONS ON MINIMUM RECROPPING INTERVAL AND ROTATIONAL GUIDELINES.

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

SOIL TEXTURAL GROUP*	BROADCAST RATE PER ACRE			
	Less than 3% organic matter		3% or more organic matter	
	Harness Xtra + (quarts)	Pursuit (ounces)	Harness Xtra + (quarts)	Pursuit (ounces)
Coarse**	1.4	4	1.7	4
Medium	1.7 to 2.3	4	2.3	4
Fine	2.3	4	2.3 to 3.0	4

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse textured soils and 2.3 to 3.0 quarts of this product per acre on medium and fine textured soils. Do not exceed 2.5 quarts of HARNNESS XTRA per acre on highly erodible soils with less than 30 percent plant residue cover.

* Refer to the "SOIL TEXTURE" section of this label to determine the corresponding textural group for the soil to be treated.

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

**Conservation or Minimum Tillage Systems
TANK MIXTURES**

**AT-PLANTING APPLICATIONS
FIELD CORN, PRODUCTION SEED CORN,
SILAGE CORN AND POPCORN**

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 precautionary statements of all products used in these tank mixtures.

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

HARNNESS XTRA and the following tank mixtures can be tank mixed with Roundup agricultural herbicides, Gramoxone Extra and/or 2,4-D.

**HARNNESS XTRA
HARNNESS XTRA plus PRINCEP®**

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.

**CONTROL OR SUPPRESSION
OF EMERGED WEEDS
ATTENTION**

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.

ROUNDUP UltraMAX HERBICIDE

Annual Weeds—Apply 13 to 20 ounces of Roundup UltraMax herbicide per acre, or equivalent rates of other Roundup agricultural herbicides, in these tank mixtures when weeds are less than 6 inches tall. Use 26 ounces of Roundup UltraMax herbicide per acre, or equivalent rates of other Roundup agricultural herbicides, for control of fall panicum, barnyardgrass, crabgrass and shattercane up to 2 inches tall; Pennsylvania smartweed up to 6 inches tall; other annual weeds 6 to 12 inches tall.

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 1.6 to 3.25 quarts of Roundup UltraMax 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 3.25 quarts of Roundup UltraMax 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.

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, predissolve the ammonium sulfate in water and filter prior to adding to the spray tank.

Surfactants—Nonionic surfactants which are labeled for use with herbicides may be used with some Roundup agricultural herbicides. Do not reduce rates of the Roundup agricultural herbicide when adding surfactant. Use 0.5 percent surfactant concentration (2 quarts per 100 gallons of spray solution) when using surfactants which 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.

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 these 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.**

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 these 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.

PREEMERGENCE WEED CONTROL

HARNESS XTRA

For weeds controlled preemergence, see the "WEEDS CONTROLLED" section of this label. For recommended rates of this product with tank mixtures of Roundup agricultural herbicides or Gramoxone Extra, see the following table.

APPLICATION RATES

BROADCAST RATE PER ACRE (QUARTS)	
SOIL TEXTURAL GROUP*	Harness Xtra
Coarse**	1.7
Medium	2.3 to 2.6
Fine	2.3 to 3.0

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse textured soils and 2.3 to 3.0 quarts of this product per acre on medium and fine textured soils. Do not exceed 2.5 quarts of HARNESS XTRA per acre on highly erodible soils with less than 30 percent plant residue cover.

* Refer to the "SOIL TEXTURE" section of the label to determine the corresponding textural group for the soil to be treated.

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

**HARNESS XTRA plus BALANCE PRO
(TANK MIXTURE)**

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

BROADCAST RATE PER ACRE (quarts of Harness Xtra and ounces of Balance PRO)

SOIL TEXTURE	< 3% ORGANIC MATTER		> 3% ORGANIC MATTER	
	Harness Xtra + (quarts)	Balance PRO (ounces)	Harness Xtra + (quarts)	Balance PRO (ounces)
COARSE *	1.00 to 1.4	+ 1.0 to 1.88	1.25 to 1.7	+ 1.0 to 1.88
MEDIUM	1.25 to 2.4	+ 1.0 to 2.50	1.75 to 2.4	+ 1.5 to 3.0
FINE	1.75 to 2.4	+ 1.5 to 2.75	1.75 to 2.4	+ 2.0 to 3.5

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

HARNESS XTRA 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

Harness may be tank mixed with 3 ounces of Callisto for postemergence applications:

- Use the labeled rates of Harness Xtra 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 Harness Xtra 5.6L 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.

HARNESS XTRA plus PRINCEP

For additional preemergence control of heavy weed infestations and/or hard-to-control weeds listed in the "WEEDS CONTROLLED" section of this label, refer to the following rate table to determine the recommended rates for this tank mixture on various soil types.

APPLICATION RATES

BROADCAST RATE PER ACRE (QUARTS)

SOIL TEXTURAL GROUP*	Harness Xtra +	Princep 4L**
Coarse***	1.7	0.8 to 1.0
Medium	2.3	1.0 to 1.5
Fine	2.3 to 3.0	1.0 to 1.5

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse textured soils and 2.3 to 3.0 quarts of this product per acre on medium and fine textured soils. Do not exceed 2.5 quarts of HARNESS XTRA per acre on highly erodible soils with less than 30 percent plant residue cover.

* Refer to the "SOIL TEXTURE" section of this label to determine the corresponding textural group for the soil to be treated.

** Use rates listed in this label using Princep 4L. Use equivalent rates when using the Princep Caliber 90 formulation. One quart of Princep 4L equals 1.1 pounds of Princep Caliber 90. Use the higher rates in the recommended ranges in areas of heavy weed infestation.

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

NOTE: LAND TREATED WITH PRINCEP SHOULD NOT BE PLANTED TO ANY CROP EXCEPT FOR 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.

EARLY PREPLANT APPLICATION

For use in no-till and other conservation tillage systems.

If emerged weeds are present at the time of treatment, a Roundup agricultural herbicides, 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 HARNESS XTRA, Roundup agricultural herbicides, Gramoxone Extra, 2,4-D and other postemergence herbicides before use of these products.

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

HARNESS XTRA

This product, when applied as a single application (alone or in a tank-mix combination with Princep), split application, or as sequential application to Princep in early preplant programs 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

Reference: The "APPLICATION SYSTEMS" section of this label provides detailed information on the application of this product using the system selected. **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. On coarse textured soils applications should not be made more than 2 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.

APPLICATION RATES

BROADCAST RATE PER ACRE (QUARTS)**	
SOIL TEXTURAL GROUP*	Harness Xtra
Coarse***	1.7 to 2.3
Medium	2.3 to 3.0
Fine	2.3 to 3.0

This product may also be tank mixed with 1 to 1.25 quarts per acre of Princep to provide improved control of fall panicum and crabgrass.

NOTE: Do not exceed a total of 1.6 pounds of atrazine per acre on highly erodible soils with less than 30 percent plant residue cover.

* Refer to the "SOIL TEXTURE" section of this label to determine the corresponding soil textural group for the soil to be treated.

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

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

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

Sequential application—Application of this product following Princep should be utilized for the control of fall panicum, crabgrass or broadleaf signal grass. 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 product.

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

APPLICATION RATES

BROADCAST RATE PER ACRE (QUARTS)**	
SOIL TEXTURAL GROUP*	Harness Xtra
Coarse***	1.7
Medium	2.3
Fine	2.3 to 3.0

NOTE: Do not exceed a total of 1.6 pounds of atrazine per acre on highly erodible soils with less than 30 percent plant residue cover.

* Refer to the "SOIL TEXTURE" section of this label to determine the corresponding soil textural group for the soil to be treated.

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

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

When using Princep Caliber 90 use equivalent rates. One quart of Princep 4L equals 1.1 pounds of Princep Caliber 90.

NOTE: LAND TREATED WITH PRINCEP SHOULD NOT BE PLANTED TO ANY CROP EXCEPT FOR 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.

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

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