



**HELM**

# FEARLESS Herbicide

**ACETOCHLOR GROUP 15 HERBICIDE**

**FEARLESS Herbicide is an emulsifiable herbicide for weed control in Field Corn, Production Seed Corn, Silage Corn, Popcorn, Miscanthus and other non-food perennial bioenergy crops.**

<b>ACTIVE INGREDIENT:</b>	(% by weight)
*Acetochlor.....	75.9%
OTHER INGREDIENTS:.....	24.1%
TOTAL: .....	100.0%

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

**EPA Reg. No. 74530-84**  
**EPA Est. No. 524-IA-1**

**KEEP OUT OF REACH OF CHILDREN  
WARNING / AVISO!**

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

**See label booklet for First Aid, Precautionary Statements and Directions for Use including Storage and Disposal.**

**NET CONTENT**

**2.5 Gallon**

Manufactured For  
**HELM Agro US, Inc.**  
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Tampa, FL 33602  
Phone: 813.621.8846  
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helmagro.com

Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.

Use only according to label instructions. Read the entire label before using this product

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

Read "LIMIT OF WARRANTY AND LIABILITY", which appears in the label booklet, before buying or using. If terms are not acceptable, return at once unopened.

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

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## PRODUCT INFORMATION

### 1.0 INGREDIENTS

ACTIVE INGREDIENT:

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OTHER INGREDIENTS .....24.1%

100.0%

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

### 2.0 IMPORTANT PHONE NUMBERS

IN CASE OF AN EMERGENCY INVOLVING THIS HERBICIDE PRODUCT, OR FOR MEDICAL ASSISTANCE, CALL COLLECT, DAY OR NIGHT, CHEMTREC 1-800-424-9300

### 3.0 PRECAUTIONARY STATEMENTS

#### 3.1 Hazards to Humans and Domestic Animals

## KEEP OUT OF REACH OF CHILDREN WARNING! AVISO!

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

CAUSES SUBSTANTIAL BUT TEMPORARY EYE AND SKIN IRRITATION.

HARMFUL IF SWALLOWED OR INHALED.

MAY CAUSE ALLERGIC SKIN REACTION.

Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist.

Wash thoroughly with soap and water after handling.

#### FIRST AID

<b>IF IN EYES</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li></ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Sensitized persons should avoid further contact and reuse of contaminated clothing.</li></ul>
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"><li>• Call poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li></ul>

#### Hot Line Number

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For chemical emergency: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300.

#### Personal Protective Equipment (PPE):

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

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

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

#### User Safety Recommendations:

Users should:

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

## 3.2 Environmental Hazards

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

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

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

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This product can only be used in accordance with the Directions for Use on this label or in separately published Helm Agro Supplemental Labeling. It is the pesticide user's responsibility to ensure that all products used in tank mixtures are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

Do not apply to sweet corn.

Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.

### Agricultural Use Requirements

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

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

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

## 4.0 STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

**PESTICIDE STORAGE:** Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination.

**PESTICIDE DISPOSAL:** To avoid wastes, use all material in this container, including rinsate, by application in accordance with label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable federal, state and local regulations and procedures.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** This product may be stored at temperatures down to 30°F below 0°F.

**PESTICIDE DISPOSAL:** Open dumping is prohibited. Wastes resulting from the use of this product are toxic. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of Federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to Federal, state, or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

### CONTAINER HANDLING:

**Non-refillable Container (five gallons or less):** Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

**Non-refillable Container (greater than five gallons):** Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

**Refillable Container (greater than 55 gallons):** Refillable container. Refill this container with acetochlor only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. For final disposal, offer for recycling or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

## 5.0 PRODUCT INFORMATION

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

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

Read and carefully observe precautionary statements and all other information appearing on the labeling of all products used in mixtures and sequential treatments. Use according to the most restrictive label directions in the mixture.

### 5.1 Use Restrictions

Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.

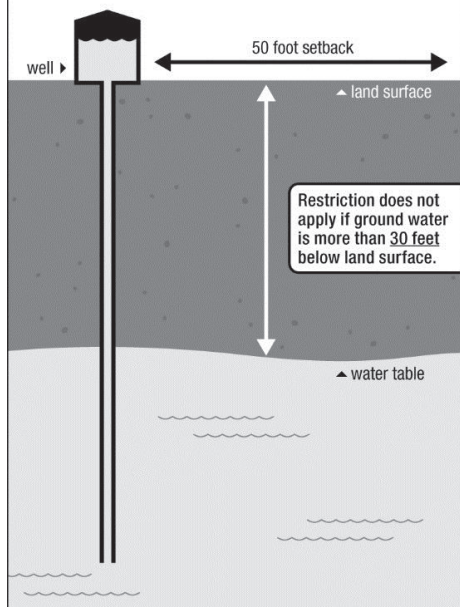
This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the ground water is shallow, may result in ground water contamination. On the following soil types, do not apply this product within 50 feet of any well where the depth to ground water is 30 feet or less: sands with less than 3 percent organic matter; loamy sands with less than 2 percent organic matter; or sandy loams with less than 1 percent organic matter. See the figure for additional clarification.

**Restriction does not apply for areas more than 50 feet from a well.**

#### The acetochlor soil restriction is as follows:

On the following soil types, **do not apply** acetochlor within 50 feet of any well where the depth to ground water is 30 feet or less:

- sands with less than 3 percent organic matter;
- loamy sands with less than 2 percent organic matter; or
- sandy loams with less than 1 percent organic matter.



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

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

Do not use more than 3 lbs. acetochlor and 2.5 lbs. atrazine per acre per calendar year.

Do not flood irrigate to apply or incorporate this product.

Product must be used in a manner that 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, unless otherwise directed by approved supplemental labeling in possession of the user at the time of application.

Do not dispose excess pesticide, spray mixtures or rinsate directly to waters 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:

Do not treat 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, unless otherwise directed by approved supplemental labeling in possession of the user at the time of application.

Flush sprayer with clean water after use.

## SPRAY MANAGEMENT:

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

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

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

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

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

## ROTATIONAL CROPS:

- If a crop treated with this product is lost, field corn, seed corn, silage corn, popcorn, or milo (sorghum) may be replanted immediately. When planting milo (sorghum), only use seed properly treated with seed protectant or safener. Do not exceed a total of 3.0 pounds per acre of active ingredient if additional product is applied.
- Nongrass animal feeds such as alfalfa, clover, kudzu, lespedeza, lupin, sainfoin, trefoil, and *Vetch* spp. may be planted 9 months after application. Wheat may be planted 4 months after application.
- Rotate the next season to the following crops: soybeans, corn (all types), cotton, milo (sorghum), tobacco, sugar beets, sunflowers, potatoes, barley, buckwheat, , millet (pearl and proso), oats, rye, teosinte triticale, wild rice, dried shelled bean group *Lupinus* spp. (including grain lupin, sweet lupin and white lupin); *Phaseolus* spp. (includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean, tepary bean, bean); *Vigna* spp. (includes azuki bean, blackeyed pea, catjang, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea and urd bean); broad bean (dry) chickpea, guar, lablab bean, lentil, pea (*Pisum* spp., includes field pea); pigeon pea.

## ROTATION TO NON-FOOD WINTER COVER CROPS

Following harvest of food crops treated with FEARLESS Herbicide, only non-food or non-feed winter cover crops (with the exception of wheat) may be planted. Do not graze or harvest rotational cover crops for food or animal feed for 18 months following the last application of FEARLESS Herbicide. This prohibition does not apply to wheat, which may be planted 4 months following the last application of FEARLESS Herbicide, or to nongrass animal feeds, which may be planted 9 months after the last application of FEARLESS Herbicide.

## 6.0 WEED RESISTANCE MANAGEMENT

ACETOCHLOR	GROUP	15	HERBICIDE
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Acetochlor, the active ingredient in this product, is a Group 15 herbicide based on the mechanism of action classification system of the Weed Science Society of America. Any weed population can contain plants naturally resistant to Group 15 herbicides. Weed species resistant to Group 15 herbicides may be effectively managed utilizing another herbicide from a different Group, (either alone or in a mixture according to label directions), by using other cultural or mechanical methods of weed control, or by a combination of the two.

Consult your local company representative, state cooperative extension agent, professional consultant or other qualified authority to determine appropriate actions for controlling specific resistant weeds.

### Weed Management Practices

Resistant populations arise when rare individual plants are uncontrolled by a normal dose of a given herbicide under normal environmental conditions. In the absence of other control measures these individuals survive, produce seed, and eventually become the dominant biotype in the field through continuous selection. The best means of reducing this selection is to use diverse weed control practices such as multiple herbicides with different mechanisms of action for the target weed, and often in combination with various mechanical and cultural practices.

To minimize the occurrence of herbicide-resistant biotypes, including those resistant to Group 15 herbicides, implement the following weed management practice options that are practical to your situation. These management practices are applicable to reduce the spread of confirmed resistant biotypes (managing existing resistant biotypes) and to reduce the potential for selecting for resistance in new species (proactive resistance management).

- Use a diversified approach toward weed management focused on preventing weed seed production and reducing the number of weed seeds in the soil.
- Plant crops into fields that are as weed-free as possible and then keep them as weed-free as possible.
- Plant crop seed that is as weed-free as possible.
- Scout fields routinely, before and after herbicide application.
- Use multiple herbicide mechanisms of action that are effective against the most troublesome weeds in your field and against those with known resistance.
- Apply herbicides at application rates listed on the label when weeds are within the size range indicated on the label.
- Emphasize cultural practices that suppress weeds by using crop competitiveness.
- Use mechanical and biological weed management practices where appropriate.
- Prevent field-to-field and within-field movement of weed seed or vegetative propagules.
- Manage weed seed at harvest and after harvest to prevent a buildup of the weed seedbank.

### Management of Herbicide-Resistant Biotypes

Appropriate testing is needed to determine if a weed is resistant to Group 15 herbicides. Contact your Helm Agro representative or your local State Cooperative Extension Agency to determine if resistance in any particular weed biotype has been confirmed in your area, or visit on the Internet -[www.weedresistancemanagement.com](http://www.weedresistancemanagement.com)- or [www.weedscience.org](http://www.weedscience.org).

Specifically, glyphosate resistant weeds can be controlled or managed by applying this product in combination with herbicides labeled for control of the targeted weed in the crops specified on this label. For more information, see the "WEEDS CONTROLLED" section of this label.

Since the occurrence of resistant weeds is difficult to detect prior to use, Helm Agro accepts no liability for any losses that result from the failure of FEARLESS Herbicide to control resistant weeds.

**Report any incidence of repeated non-performance of this product on a particular weed to your Helm Agro representative, local retailer, or county extension agent.**

## 7.0 SOIL TEXTURE

Applicators should evaluate soil conditions carefully to assure that they choose the correct label rate. The specified 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.

## 8.0 MIXING, SPRAYING AND HANDLING INSTRUCTIONS

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

### 2.5 Gallon Containers

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

### Bulk Containers

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

## 8.1 Equipment Cleaning and Repair

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

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

## 8.2 Sprayer Compatibility

Always predetermine the compatibility of this product or labeled mixtures of this product with water carrier or sprayable fluid fertilizer carrier by mixing small proportional quantities in advance. See the "Standard Sprayable Fluid Fertilizer Compatibility Test" section in this label to determine the compatibility of this product and the labeled tank mixtures specified for use with sprayable fluid fertilizer carrier.

Mix this product or labeled tank mixture of this product with the appropriate carrier as follows:

1. Place a 20- to 35-mesh screen or wetting basket over filling port.
2. Through the screen, fill the sprayer tank one-half full with appropriate carrier.
3. If a compatibility agent is necessary to improve mixing or to prevent the formation of undesirable and unsprayable gels or precipitates, while agitating add it to the carrier already in the tank. Use only compatibility agents cleared by FDA for this use. Read and follow all directions for use, cautionary statements and all other information appearing on the selected compatibility agent label. Check for adequate agitation.
4. If a wettable powder or dry flowable formulation is used, make slurry with water, and add it slowly through the screen into the tank. Continue agitation.
5. If a flowable formulation is used, add slowly through screen into the tank. Mixing and compatibility may be improved when flowable is premixed one part flowable with one part water and added slowly to the tank in diluted form.
6. Add this product slowly through the screen into the tank. Mixing and compatibility may be improved when this product is prediluted with two parts of water and added to the tank in diluted form.
7. Complete filling the sprayer tank with carrier. If glyphosate or paraquat is used, add the required amount near the end of the filling process. Remove hose from tank immediately after filling to avoid siphoning back into the water source.

Maintain good agitation at all times until the contents of the tank are sprayed.

**NOTE:** If spray mixture is allowed to settle at any time, thorough agitation is required to resuspend the mixture before spraying is resumed.

Keep bypass line on or near bottom of tank to minimize foaming. Screen size in nozzle or line strainers should be no finer than 50-mesh. Carefully select proper nozzle to avoid spraying a fine mist. Check for even distribution of spray droplets. For best results with ground application, use flat-fan or whirl-chamber nozzle. To reduce loss of chemical due to drift of a fine mist, apply at pressures less than 40 psi.

## 8.3 Standard Sprayable Fluid Fertilizer Compatibility Test

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

### A. Materials Required For A Compatibility Test

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

## B. Procedure

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

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

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

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

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

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

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

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

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

## C. Observations and Decisions

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

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

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

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

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

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



## 9.0 APPLICATION SYSTEMS

### 9.1 Ground Broadcast Treatment

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

### 9.2 Ground Band Treatment

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

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

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

### 9.3 Application With Dry Bulk Fertilizer

The herbicide-fertilizer impregnation process must be completed only by commercial fertilizer or chemical dealerships properly equipped for this procedure. Dry bulk fertilizer may be impregnated with this product or the tank mixtures of this product. Follow all directions for use and precautions on the respective tank mix product labels regarding use rates, soil texture, application methods, and rotational restrictions. This product and these tank mixtures must be applied with a minimum of 200 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 specified in this label for the crop, weed and soil type treated. Refer to the table for broadcast rate per acre to determine the application rate per acre for the herbicide treatment to be applied.

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

Fertilizer Rate (pounds/acre)	Acres Covered (per ton)	Pints of FEARLESS Herbicide / Ton Dry Bulk Fertilizer					
		1.5 (pints)	1.75 (pints)	2.0 (pints)	2.5 (pints)	2.75 (pints)	3.0 (pints)
		Pints Herbicide/Ton Fertilizer					
200	10	15	17.5	20	25	27.5	30
300	6.7	10	11.7	13.4	16.8	18.4	20.1
400	5	7.5	8.8	10	12.5	13.8	15
500	4	6	7	8	10	11	12
600	3.3	5	5.8	6.6	8.3	9.1	9.9
700	2.9	4.4	5.1	5.8	7.3	8	8.7

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

Pints of FEARLESS Herbicide/Acre X 2000 Pounds Fertilizer/Acre	=	Pints of FEARLESS Herbicide per Ton of Dry Bulk Fertilizer
-------------------------------------------------------------------	---	------------------------------------------------------------

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. FEARLESS Herbicide may also be impregnated on dry bulk fertilizer in the field while the fertilizer is being spread using a pneumatic applicator equipped to impregnate herbicides.

If the dry fertilizer used has inadequate absorptive capacity, use a higher absorptive material such as Agsorb or Micro-Cel, to provide a free-flowing mixture.

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

FERTILIZER (N-P-K)
Ammonium sulfate (21-0-0)
Ammonium phosphate-sulfate (16-20-0)
Diammonium phosphate (18-46-0)
Monoammonium phosphate (11-56-0)
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.

**Precaution:** To avoid potential for explosion, do not impregnate this product on ammonium sorbate nitrate, potassium nitrate, or sodium nitrate fertilizer or fertilizer blends. Do not impregnate on a single (0-20-0) or triple (0-46-0) super phosphate. Do not attempt to impregnate this product on agricultural limestone as the herbicide will not be adequately absorbed. 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.

## 10.0 APPLICATION TIMING AND METHODS

### 10.1 Early Preplant Surface Application

This product and some labeled tank mixtures of this product may be applied in no-till and other conservation tillage systems before weeds emerge and up to 45 days before planting field corn or silage corn. Split applications can be made 30 to 45 days prior to planting with 60 percent of the specified 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 a single application. If weeds are present at the time of application, apply this product in a 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.

### 10.2 Preplant Incorporation Application

FEARLESS Herbicide and many of the labeled tank mixtures may be mixed into the top 2 inches of the soil using shallow incorporation equipment any time within 14 days prior to planting. Apply the specified treatment rate to the soil surface as a broadcast application. Improper incorporation, excessive crop residues, or poor soil tillage may result in erratic, streaked, or otherwise unsatisfactory weed control. Do not mix FEARLESS Herbicide deeper than 2 inches into the soil and avoid moving or shaping soil after incorporation.

Shallowly incorporate the treatment into the upper 1 to 2 inches of the soil. Equipment should be operated at manufacturer's designed speed for incorporation to ensure adequate mixing and distribution of the herbicide treatment in the soil. Equipment design including any drag attachments must be adequate to avoid soil ridging which may result in streaked or reduced weed control. Equipment should be set to work the soil NO DEEPER THAN 4 INCHES. Soil conditions, including moisture content and crop residue levels, must be suitable to allow thorough and uniform mixing.

### 10.3 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 1/4 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.

### 10.4 Postemergence Surface Application

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

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

### 10.5 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.

## 11.0 WEEDS CONTROLLED

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

## 11.1 Annual Grasses

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

NOTE: C = Control

R = Reduced Competition

	FEARLESS Herbicide plus					
	FEARLESS Herbicide		ATRAZINE	DICAMBA	SIMAZINE	IMAZETHAPYR
<b>Barnyardgrass</b> <i>Echinochloa crus-galli</i>	C		C	C	C	C
<b>Crabgrass</b> <i>Digitaria ischaemum</i> <i>Digitaria sanguinalis</i>	C		C	C	C	C
<b>Crowfootgrass</b> <i>Dactyloctenium aegyptium</i>	C		C	C	C	C
<b>Cupgrass, prairie</b> <i>Eriochloa contracta</i>	C		C	C	C	C
<b>Cupgrass, woolly<sup>1</sup></b> <i>Eriochloa villosa</i>	C		C	C	C	C
<b>Foxtail, giant</b> <i>Setaria faberi</i>	C		C	C	C	C
<b>Foxtail, green, robust purple, robust white</b> <i>Setaria viridis</i>	C		C	C	C	C
<b>Foxtail, yellow</b> <i>Setaria lutescens</i>	C		C	C	C	C
<b>Goosegrass</b> <i>Elysiene indica</i>	C		C	C	C	C
<b>Johnsongrass, seedling</b> <i>Sorghum halepense</i>	R		R	R	R	C
<b>Millet, foxtail</b> <i>Setaria italica</i>	R		R	R	R	R
<b>Millet, proso<sup>2</sup></b> <i>Panicum miliaceum</i>	R		R	R	R	R
<b>Oats, wild</b> <i>Avena fatua</i>	R		C	R	C	R
<b>Panicum, browntop</b> <i>Panicum fasciculatum</i>	C		C	C	C	C
<b>Panicum, fall</b> <i>Panicum dichotomiflorum</i>						
<b>Panicum, Texas</b> <i>Panicum texanum</i>	R		R	R	R	R
<b>Rice, red</b> <i>Oryza sativa</i>	C		C	•	C	C
<b>Sandbur; Grassbur</b> <i>Cenchrus incertus</i>	R		R	•	R	R
<b>Shattercane; Wild cane<sup>2</sup></b> <i>Sorghum bicolor</i>	R		R	•	R	R
<b>Signalgrass, broadleaf</b> <i>Brachiaria platyphylla</i>	C			C	C	C
<b>Sprangletop, red</b> <i>Leptochloa filiformis</i>	C		C	C	C	C
<b>Wheat, volunteer</b> <i>Triticum aestivum</i>	R		C	R	C	R
<b>Witchgrass</b> <i>Panicum capillare</i>	C		C	C	C	C

<sup>1</sup> Use 3 to 3.4 pints per acre of this product applied alone or in tank-mix combinations for best results. Control can be erratic especially under dry weather conditions. Control escaped weeds with cultivation or application of an appropriate EPA-registered postemergence herbicide. Contact the local Helm representative for details regarding a complete woody cupgrass management program.

<sup>2</sup> Use 3 to 3.4 pints per acre of this product to reduce competition from this weed.

## 11.2 Annual Broadleaves

NOTE: C = Control

R = Reduced Competition

	FEARLESS Herbicide plus					
	FEARLESS Herbicide		ATRAZINE	DICAMBA	SIMAZINE	IMAZETHAPYR
<b>Beggarweed, Florida</b> <i>Desmodium tortuosum</i>	R		C	•	•	R
<b>Carpetweed</b> <i>Mollugo verticillata</i>	C		C	C	C	C
<b>Cocklebur<sup>1</sup></b> <i>Xanthium strumarium</i>	•		C	C	R	R
<b>Galinsoga</b> <i>Galinsoga spp.</i>	C		C	C	C	C
<b>Groundcherry, annual</b> <i>Physalis spp.</i>	•		C	•	•	•
<b>Groundcherry, cutleaf</b> <i>Physalis angulata</i>	R		C	C	C	R
<b>Henbit</b> <i>Lamium amplexicaule</i>	C		C	C	C	C
<b>Jimsonweed<sup>8</sup></b> <i>Datura stramonium</i>	R		C	•	R	C
<b>Kochia<sup>2</sup></b> <i>Kochia scoparia</i>	R		C	•	C	C
<b>Lambsquarters<sup>2</sup></b> <i>Chenopodium album</i>	C		C	C	C	C
<b>Morningglory:<sup>1</sup></b> <b>Tall</b> <i>Ipomoea purpurea</i> <b>Pitted</b> <i>Ipomoea lacunosa</i> <b>Ivyleaf</b> <i>Ipomoea hederacea</i> <b>Entireleaf</b> <i>Ipomoea hederacea var. intergriuscula</i> <b>Smallflower</b> <i>Jacquemontia tamnifolia</i>	•		C	R	C	R
<b>Mustard</b> <i>Brassica spp.</i>	•		C	C	C	C
<b>Nightshade, black</b> <i>Solanum nigrum</i> <b>hairy</b> <i>Solanum sarrachoides</i>	C		C	C	C	C
<b>Pigweed; Carelessweed<sup>5</sup></b> <i>Amaranthus spp.</i>	C		C	C	C	C
<b>Purslane</b> <i>Portulaca oleracea</i>	C		C	C	C	C
<b>Pusley, Florida</b> <i>Richardia scabra</i>	C		C	C	C	C
<b>Ragweed, common<sup>3</sup></b> <i>Ambrosia artemisiifolia</i>	C		C	C	C	C
<b>Ragweed, giant<sup>1</sup></b> <i>Ambrosia trifida</i>	•		C	C	C	R
<b>Sicklepod</b> <i>Cassia obtusifolia</i>	•		C	•	R	•

## 11.2 Annual Broadleaves (continued)

NOTE: C = Control

R = Reduced Competition

	FEARLESS Herbicide plus					
	FEARLESS Herbicide		ATRAZINE	DICAMBA	SIMAZINE	IMAZETHAPYR
<b>Sida, prickly; Teaweed</b> <i>Sida spinosa</i>	R		C	•	C	C
<b>Smartweed</b> <i>Polygonum pensylvanicum</i> <i>Polygonum persicaria</i>	R		C	C	C	C
<b>Starbur, bristly</b> <i>Acanthospermum hispidum</i>	R		C	•	R	•
<b>Sunflower, common<sup>1,5</sup></b> <i>Helianthus annuus</i>	•		C	R	R	C
<b>Velvetleaf; Buttonweed<sup>4,6</sup></b> <i>Abitilon theophrasti</i>	R		C	C	R	C
<b>Waterhemp</b> <i>Amaranthus tuberculatus</i>	C		C	C	C	C
<b>SEDGE</b>						
<b>Nutsedge, yellow<sup>5</sup></b> <i>Cyperus esculentus</i>	C		C	•	C	C

<sup>1</sup> Use a minimum of 1.5 quarts atrazine 4L per acre in tank mixture combinations to control this weed. Control can be erratic especially under dry weather conditions. Control escaped weeds with cultivation or application of an appropriate EPA-registered postemergence herbicide.

<sup>2</sup> If triazine-resistant biotypes are suspected, tank mixtures with triazine herbicides may require a post sequential application of a non-triazine herbicide for control.

<sup>3</sup> Use the higher rate in the application rate range for FEARLESS Herbicide alone and in tank mixtures with triazine herbicides if triazine-resistant biotypes are suspected.

<sup>4</sup> Use a minimum of 1.5 quarts atrazine per acre in tank-mixture combinations to control this weed. In areas restricted to 1 pound atrazine per acre (1 quart atrazine 4L) or where less atrazine per acre is desired, on medium- and fine-textured soils, use 2.75 pints of FEARLESS Herbicide in a tank mixture with 1 quart atrazine 4L per acre for control of this weed. Control can be erratic especially under dry weather conditions. Control escaped weeds with cultivation or application of an appropriate EPA-registered postemergence herbicide.

<sup>5</sup> Use 2.5 to 3.4 pints per acre of this product applied alone or in tank mixtures and apply preplant incorporated only for control on medium and fine-textured soils.

<sup>6</sup> When using a tank mixture of FEARLESS Herbicide plus Imazethapyr, these weeds are more consistently controlled by preplant incorporated treatments.

## 12.0 CONSERVATION OR MINIMUM TILLAGE SYSTEMS

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

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

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

The tank-mix recommendations in the "CONVENTIONAL TILLAGE" section of this label may also be followed when using "CONSERVATION OR MINIMUM TILLAGE SYSTEMS". Follow all label precautions; directions and restrictions of tank-mix partners.

## 12.1 At-Planting Applications

When applied as directed under the conditions described, the specified 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.

Refer to specific product labels for crop rotation restrictions and cautionary statements of all products used in these tank mixtures. For mixing instructions, see the "MIXING SPRAYING, AND HANDLING INSTRUCTIONS" section of this label.

This product and tank mixtures with atrazine, simazine, imazethapyr, or atrazine plus simazine herbicides can be tank mixed with glyphosate agricultural herbicides, paraquat herbicides and/or 2,4-D.

Apply these tank mixtures with a glyphosate 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 these tank mixtures with a paraquat 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 application rate ranges to ensure complete coverage. In the absence of emerged vegetation, delete the glyphosate agricultural herbicide, paraquat or 2,4-D portion of these tank mixtures.

### Approved Application Systems

Ground: Broadcast boom

## 12.2 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.

### 12.2.1 Glyphosate Agricultural Herbicides

#### Annual Weeds

Apply glyphosate agricultural herbicides, in these tank mixtures at the proper rate for the weed per the label instructions.

#### Perennial Weeds

At normal application rates in minimum tillage systems, perennial weeds may not be at the proper stage of growth for control. Use of full labeled rates of glyphosate agricultural herbicides, in the mixtures above and under these conditions will provide top kill and reduce competition from emerged perennial grasses and broadleaf weeds.

DO NOT USE THIS MIXTURE FOR BERMUDAGRASS OR JOHNSONGRASS CONTROL.

#### Ammonium Sulfate

The addition of ammonium sulfate in the spray solution may increase the performance of glyphosate agricultural herbicide tank mixtures on emerged annual weeds under adverse growing conditions. When using ammonium sulfate, add 2 percent dry ammonium sulfate by weight or 17 pounds per 100 gallons of water. Ammonium sulfate should be added to the water in the spray tank and completely dissolved prior to adding the herbicide or surfactant. Do not mix ammonium sulfate in fluid fertilizer solutions. The equivalent rate of ammonium sulfate in a liquid formulation may also be used.

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

#### Surfactants

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

### 12.2.2 Paraquat Herbicides

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

#### Broadcast Treatment

Apply paraquat in the specified tank mixtures immediately before, during or after planting but BEFORE CROP EMERGENCE. Use the application rates and timing of application listed in the specific product label. As density of stubble, crop residue or weeds increases, spray gallonage should be increased within the application rate 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 SPECIFIC PARAQUAT HERBICIDE LABEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

### 12.2.3 2,4-D

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

#### Broadcast Treatment

Apply 1 to 2 pints of 2,4-D (amine or low volatile ester) in the specified 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 application rate 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.**

### 12.3 Early Preplant Application

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

DO NOT apply tank mixtures containing a glyphosate agricultural herbicide, paraquat or other contact herbicides by air.

#### 12.3.1 FEARLESS Herbicide

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

#### Approved Application Systems

Ground: Broadcast boom

Dry Bulk Fertilizer Impregnation

## Approved Application Methods

### Single application

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

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

### Split Application

Apply 60 percent of the application 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 specified broadcast rates per acre for single and split applications.

### Application Rates

SOIL TEXTURAL GROUP	Broadcast Rate Per Acre
	FEARLESS Herbicide (pints)
Coarse	1.50 to 2.00
Medium	2.25 to 2.75
Fine	2.75 to 3.00

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

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

## 12.3.2 FEARLESS Herbicide plus Atrazine

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

DO NOT graze treated area or feed treated forage to livestock for 60 days following application of this tank mixture.

The maximum atrazine broadcast application rates for corn:

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

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

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

### Approved Application Systems

Ground: Broadcast boom

Dry Bulk Fertilizer Impregnation

### Single application

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

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

### Split application

Apply 60 percent of the application 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 specified broadcast rates per acre for single and split applications.

### Application Rates

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE		
	FEARLESS Herbicide * (pints)	+	ATRAZINE 4L ** (quarts)
Coarse	1.75		See product label
Medium	1.75 to 2.25		
Fine	2.00 to 2.50		

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

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

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

### 12.3.3 FEARLESS Herbicide plus Atrazine following Simazine

#### Sequential Application

Apply Princep (simazine) prior to weed emergence and no more than 45 days prior to planting. At or immediately following planting, but before crop emergence, apply this tank mixture.

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

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

#### Application Rates

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE		
	FEARLESS Herbicide * (pints)	+	ATRAZINE 4L
Coarse	1.75		See product label
Medium	2.25		
Fine	2.25 to 2.5		

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

### 13.0 CONVENTIONAL TILLAGE

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

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

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

### 13.1 FEARLESS Herbicide

Apply this product in water or sprayable fluid fertilizer solution.

#### Approved Application Systems

Ground: Broadcast boom; banded

Dry Bulk Fertilizer Impregnation

#### Approved Application Methods

#### Preplant Incorporated; Preemergence Surface

#### Postemergence Surface

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

#### Application Rates

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE (pints) *	
	Less than 3% organic matter	3% or more organic matter **
Coarse	1.25 to 1.75	1.75
Medium	1.75 to 2.25	1.75 to 2.25
Fine	1.75 to 2.25	2.25 to 2.75

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

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

### 13.2 FEARLESS Herbicide plus Glyphosate Agricultural Herbicides on Corn Containing Roundup Ready 2 Technology including Roundup Ready Corn 2

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

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS TANK-MIX TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS WHICH DO NOT CONTAIN A GLYPHOSATE TOLERANCE GENE.

#### Approved Application Systems

Ground: Broadcast boom



## Approved Application Methods

### Preemergence Surface

#### Sequential Program

This product may be applied preemergence to corn containing Roundup Ready 2 Technology including Roundup Ready Corn 2 at the ROUNDUP READY RATE of 1.5 pints per acre in a planned preemergence followed by glyphosate agricultural herbicide postemergence sequential program.

#### Postemergence Surface

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

For difficult to control weeds such as fall panicum, barnyardgrass, crabgrass, shattercane, broadleaf signalgrass and Pennsylvania smartweed use the higher rate of glyphosate Agricultural herbicides labeled rates.

#### ROUNDUP READY RATE – FEARLESS Herbicide at 1.5 pints per acre.

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE*		
	FEARLESS Herbicide + (pints)	+	GLYPHOSATE AGRICULTURAL HERBICIDES
Coarse	1.0 to 1.75		Per Labeled Rate
Medium	1.0 to 2.25		Per Labeled Rate
Fine	1.0 to 2.75		Per Labeled Rate

### 13.3 FEARLESS Herbicide Tank-Mixtures for Preemergence Use in Corn

This product may be tank-mixed with the following products for preemergence use in corn. Ensure that the specific product being used in the tank mixture is registered for application preemergence to corn. Read and follow label directions of all products in the tank mixture. The most restrictive label directions apply.

Aim EC, Argos, Balance PRO, Balance Flexx, Banvel, Callisto, Clarity, Distinct, Helosate Plus Advanced, Hornet WDG, Linex 4L, Lorox DF, Marksman, Princep, Python WDG, Resource, Roundup Brand Agricultural herbicides, 2,4-D, (atrazine, carfentrazone-ethyl, clopyralid, dicamba, diflufenzopyr, flumetsulam, flumiclorac pentyl ester, glyphosate, isoxaflutole, linuron, mesotrione, simazine)].

### 13.4 FEARLESS Herbicide Tank-Mixtures for Postemergence Use in Corn

This product may be tank-mixed with the following products for postemergence use in corn. Ensure that the specific product being used in the tank mixture is registered for application postemergence (in-crop) to corn. Read and follow label directions of all products in the tank mixture. The most restrictive label directions apply.

Aim EC, Argos, Balance Flexx, Banvel, Callisto, Clarity, Distinct, Helosate Plus Advanced, Hornet WDG, Impact, Linex 4L, Lorox DF, Marksman, Resource, Roundup Brand Agricultural herbicides, 2,4-D, (atrazine, carfentrazone-ethyl, clopyralid, dicamba, diflufenzopyr, flumetsulam, flumiclorac pentyl ester, glyphosate, isoxaflutole, linuron, mesotrione, topramezone)].

## 14.0 MISCANTHUS AND OTHER NON-FOOD PERENNIAL BIOENERGY CROPS

For weed control in Miscanthus and other non-food perennial bioenergy crops, apply FEARLESS Herbicide at 1.3-1.7 pints per acre after the crop has been transplanted or after fully emerged to a height of at least 2-3 inches.

Up to two applications of FEARLESS Herbicide may be made each year. The total amount of this product applied each year must not exceed 3.4 pints per acre.

#### RESTRICTIONS:

Do not allow the Miscanthus or other non-food perennial bioenergy crop treated with FEARLESS Herbicide to be grazed or used as animal feed.

## 15.0 FALL APPLICATIONS

### **Geographic Restriction on Fall Applications: only in Iowa, Minnesota, North Dakota, South Dakota, Wisconsin, north of Route 91 in Nebraska and north of Route 136 in Illinois**

Following soybean harvest, apply to soybean stubble after September 30, when the sustained soil temperature at 4-inch depth is less than 55°F, but before ground freezes. Use on medium- and fine-textured soils with greater than 2.5% organic matter. Only corn may be planted the following spring.

Ground may be tilled before or after application. Do not exceed 2-inch incorporation depth if tilled after application.

If a spring application is made, the total rate of the fall plus spring application must not exceed the maximum labeled rate for corn grown on that soil.

## 16.0 LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

Follow Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Helm Agro US, Inc. or Seller. To the extent of applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Helm and Seller harmless for any claims relating to such factors.

Helm warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Helm, and Buyer and User assume the risk of any such use. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, HELM MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

To the extent consistent with applicable law, in no event shall Helm or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF HELM AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF HELM OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Helm and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of Helm.



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207085-115

REV. 05/15/18\*

Master Label

EPA Reg. No. 74530-84

Approved 3-30-2018

## NOTES





**HELM**

# FEARLESS Herbicide

ACETOCHLOR GROUP 15 HERBICIDE

**FEARLESS Herbicide is an emulsifiable herbicide for weed control in Field Corn, Production Seed Corn, Silage Corn, Popcorn, Miscanthus and other non-food perennial bioenergy crops.**

**ACTIVE INGREDIENT:** ( % by weight)

\*Acetochlor..... 75.9%

OTHER INGREDIENTS: ..... 24.1%

TOTAL: ..... 100.0%

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

EPA Reg. No. 74530-84

EPA Est. No. 62171-MS-001

**KEEP OUT OF REACH OF CHILDREN  
WARNING / AVISO!**

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

See label booklet for First Aid, Precautionary Statements and Directions for Use including Storage and Disposal.

NET CONTENT

**2.5 Gallon**

Manufactured For

**HELM Agro US, Inc.**

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