UNITED STATES	U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (H7505C) 401 "M" St., S.W. Washington, D.C. 20460	BPA Reg. Number: 524-422	Date of Issuance: AUG 2 5 2004
THE PROTECTOR	NOTICE OF PESTICIDE:	Term of Issuance Unconditi	-
(under FIFRA, as am	<u>x</u> Reregistration	Name of Pestici Freedom H	
Monsanto Co	et, N. W., Suite 450 East		
be submitted to and	abeling differing in substance from that accepted in accepted by the Registration Division prior to us this product always refer to the above EPA registra	se of the label in con	
	formation furnished by the registrant, the above na tered under the Federal Insecticide, Fungicide and		eby
In order to protect cancel the registra with the registrati	no way to be construed as an endorsement or recomm the health and the environment, the Administrator, or ation of a pesticide in accordance with the Act. The lon of a product under this Act is not to be constru- te name or to its use if it has been covered by oth	n his motion, may at a The acceptance of any rued as giving the req	any time suspend or name in connection
product listed ab	sponse to the Reregistration Eligibility Docur ove with the provision that you make the foll roduct for shipment.		-
	"Reformulation is Prohibited" must be delete ved statement "This is an end use product. M eformulation."		- 1
•	the following bulk container language into yo may use the language previously approved un	•	- I
Bulk Container I	anguage		
Incorporate the f	ollowing Bulk Container Language into your	Storage and Dispo	sal section.
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Container Dispos	sai (Buik and Minibuik)		1
use, and return th registrant at the t	ner is empty, replace the cap and seal all open the container to the point of purchase, or to an time of purchase of this product. If not returned on, triple rinse or pressure rinse the empty co	alternate location of point of	lesignated by the urchase or to a
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# Instructions for Users and Refillers

The 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 (insert company name) at (insert phone number). Cleaning is not necessary prior to refilling with the same product. Clean container before final disposal. Disposal of this container must be in compliance with state and local regulations.

# Instructions for Refillers

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

3. Add the statement "Do not apply this product with chemigation equipment." to the General Information section of your label. This statement is required by the Alachlor RED Table 78 as revised February 11, 2002.

4. On page 17, revise the first sentence under Soybeans to read "Do not make more than one application per year or exceed a total of 4.5 pounds Freedom (3.0 pounds active ingredient alachlor).

Enclosed is a copy of your label stamped "Acceptable With Comments". This action is taken under the authority of section 4(g)(2)(C) of the Federal Insecticide, Fungicide and Rodenticide Act, as amended. Reregistration under this section does not eliminate the need for continual reassessment of pesticides. EPA may require submission of data at any time to maintain registration of your product.

Please submit two (2) copies of labeling bearing the above changes before you release the product for shipment.

### RESTRICTED USE PESTICIDE

due to groundwater concerns. For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

### FREEDOM® HERBICIDE by MONSANTO

Emulsifiable herbicide for weed control in soybeans only.

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

EPA Reg. No. 524-422

#### Complete Directions for Use

### 2003

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.

**REFORMULATION IS PROHIBITED.** See individual container label for repackaging limitations.

#### 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 on 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.

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.

PRECAUTIONARY STATEMENTS	
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 injury or skin irritation. Harmful if swallowed or inhaled. Do not get in eyes, on skin or on clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. This product may cause skin sensitization reactions in some people.

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# ACCEPTED with COMMENTS In EPA Lotter Dates

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Under the Federal Insorticity, Fungicide, and Rodensicite Act. as amended, for the posticito registered under BPA Reg. No. 524-422 08/14/2003

### 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.

#### 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 b 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 physician, 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 Freedom herbicide, EPA Registration No. 524-422.

### NOTE TO PHYSICIAN

• Probable mucosal damage may contraindicate the use of gastric lavage. This product may post an aspiration pneumonia hazard. Contains petroleum distillate.

#### Personal Protective Equipment (PPE)

Some materials that are chemical resistant to this product are made of barrier laminate or viton. If you want more options, follow the instruction for category G on an EPA chemical resistance category selection chart.

Mixers and loaders using engineering controls (see requirements below) and applicators must wear:

- Long-sleeved shirt and long pants
- Shoes and socks, and
- Goggles or face shield

In addition to the above, mixers and loaders must wear:

- Chemical resistant gloves, and
- Chemical resistant apron.

Mixers and loaders not using engineering controls and all other handlers exposed to the concentrate must wear:

- Coveralls over short sleeved shirt and short pants,
- Socks and chemical resistant footwear,
- Goggles or face shield,
- Chemical resistant gloves, and
- Chemical resistant apron.

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

### Engineering controls statement

Mixers and loaders supporting aerial applications, or impregnation of dry bulk fertilizer are required to use a mechanical transfer system designed by the manufacturer to transfer liquid pesticide in a manner that prevents the liquid (but not necessarily any vapor) from contacting handlers or other people during the transfer. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPA for agricultural pesticides [40 CFR 170.240(d)(4)]).

IMPORTANT: Mixers and loaders using closed systems must:

- 1) wear the PPE specified above for mixers and loaders and protective eyewear if the system operates under pressure,
- must be provided and have immediately available for use in an emergency, such as a spill or an equipment breakdown, the following PPE: Coveralls, and chemical resistant footwear.

#### 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, Call Collect, day or night, (314) 694-4000.

### Environmental Hazards

Alachlor can contaminate surface water through spray drift. Under some conditions, alachlor may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several weeks postapplication. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

This chemical and/or its metabolites are known to leach through soil into ground water under certain conditions as a result of registered uses. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Do not apply to highly permeable soils (as classified by the USDA Natural Resources Conservation Service) where the depth to groundwater is 30 feet or less.

This pesticide is extremely toxic to freshwater, marine, and estuarine fish; and aquatic invertebrates including shrimp and oyster; and is toxic to terrestrial and aquatic plants and fish. Do not apply in a manner which will directly expose canals, lakes, streams, ponds, marshes or estuaries to aerial drift. Do not contaminate water when disposing of equipment washwaters. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff may be hazardous to aquatic organisms in neighboring areas.

Care must be taken when using this product to prevent back-siphoning into wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

Check valves or antisiphoning devices must be used on all mixing equipment. 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.

Physical or Chemical Hazards

In case of: SPILL or LEAK, soak up, remove and keep away from humans and domestic animals.

ACTIVE INGREDIENTS:*	
Alachlor	1.78
Trifluralin	3.9%
INERT INGREDIENTS:	54.48
	100.0%

Contains petroleum distillates.

\*Contains 320 grams/litre or 2.67 pounds/gallon of 2-chloro-2',6'-diethyl-N-(methoxymethyl)acetanilide and 40 grams/litre or 0.33 pound/gallon of  $(\alpha, \alpha, \alpha$ -trifluoro-2',6'-dinitro-N,N-dipropyl-p-toluidine).

### 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 requirement 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, is: coveralls; chemical-resistant gloves such as or made of any waterproof material, and shoes plus socks.

This product may not be mixed or loaded within 50 feet of perennial or intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be mixed/loaded or used within 50 feet of all wells, including abandoned wells (unless the well has been properly capped or plugged), 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 wash-water, and rain water that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain a minimum of 110% 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 abovespecified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site.

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

### Storage and Disposal

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

PESTICIDE STORAGE: STORE ABOVE 32°F TO KEEP PRODUCT IN SOLUTION.

Below 32°F crystals may form and settle to the bottom. If crystals form, place in a warm room and roll and/or shake the container frequently to redissolve before using. For bulk containers, see the container label for alternate storage information.

**PESTICIDE DISPOSAL**: Wastes of this pesticide may cause eye irritation and may be dangerous. Improper disposal of excess pesticide, spray mixtures, or rinsate is a violation of Federal law. If these wastes cannot be disposed of according to label use instructions, contact your state pesticide or environmental control agency, or the hazardous waste representative at the nearest EPA regional office for guidance.

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. DO NOT CUT OR WELD ON OR NEAR THIS CONTAINER.

#### CONTAINER DISPOSAL:

Wastes of this pesticide may cause eye burns and skin irritation and may be dangerous. Improper disposal of excess pesticide, spray mixtures or rinsate is a violation of Federal law. If these wastes cannot be disposed of according to label use instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

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#### CONTAINER DISPOSAL OPTIONS:

(FOR REFILLABLE PORTABLE CONTAINERS) Do not reuse this container except for refill in accordance with a valid Monsanto Repackaging or Toll Repackaging Agreement. If not refilled or returned to the authorized repackaging facility, triple rinse containers, 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, buy burning. If burned, stay out of smoke.

(See the individual container label for disposal information.)

### GENERAL INFORMATION

- Rotation to crops not specified on this label is prohibited. Rotational crops include: corn (all types), grain sorghum (milo), soybeans, and dry beans.
- Do not apply more than 3 pounds of alachlor active ingredient per acre per year to soybeans. This is equivalent to 4.5 quarts of this product per acre per year.

Freedom is recommended for control of yellow nutsedge and annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label. This product may be applied either as a surface application before or after planting or shallowly incorporated prior to planting to blend the herbicide into the upper 1 to 2 inches of soil.

Performance is often improved when sufficient rainfall or irrigation occurs to moisten the soil within the weed germination zone. If adequate moisture is not received prior to weed emergence, then shallow cultivation is recommended. Refer to the "APPLICATION AND TIMING METHODS" section of this label for details.

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

Do not flood irrigate following application of this product or tank mixtures.

Use of this product in any manner not consistent with this label may result in infury to persons, animals or crops, or other unintended consequences. Keep container closed to prevent spills and contamination.

Drain and thoroughly flush sprayer with clean water after use and also prior to utilizing spray equipment for treating crops other than soybeans.

Do not graze treated area or feed treated soybean forage, hay or straw to livestock following application.

### SOIL TEXTURE

Applicators should evaluate soil and weed conditions carefully to assure that they choose the lowest effective label rate.

The recommended use rates of this product and the other herbicides labeled for use in tank mixtures with this product generally 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

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 are wearing 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

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 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 and Repair

Cleaning and repair of transfer systems or 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 this equipment should be rinsed before being cleaned or repaired. When repairs must be made during transfer or application, the equipment must be shut down and special care should be taken to avoid contact with the pesticide.

### Mixing Instructions

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, precautionary 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 the screen into the tank. Mixing and compatibility may be improved when flowable is premixed one part flowable with one part water and added to the tank in diluted form.
- 6. Add Freedom herbicide 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 Roundup® herbicide or Gramoxone<sup>™</sup> 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 no finer than 50 mesh. Carefully select the correct nozzle to avoid spraying a fine mist. Check for even distribution

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of spray droplets. To reduce loss of chemical due to drift of a fine mist, apply at nozzle pressures below 40 psi.

Certain tank mixtures of Freedom and broadleaf herbicides may be combined with applications of Roundup herbicide or Gramoxone Extra for control of many emerged weeds prior to soybean emergence. Refer to the Roundup or Gramoxone Extra label for a list of emerged weeds controlled by tank mixtures of these products.

### 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 determine 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. TEAspoon (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 herbicides 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".

WITHOUT

WITHOUT

 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

WITH

3. To each jar add the appropriate amount of herbicide(s) listed on the following tables. 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.

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### Add Herbicide(s) To Both Jars And Shake To Mix

WITH

WITHOUT

### Amount To Be Added Per Pint Of Sprayable Fluid Fertilizer (Assuming Volume is 25 gallons/acre)

Herbicide	Rate/Acre	Level TEAspoons	
Wettable	1 lb =	1.5	
Powders	2 lb =	3	
or	3 1b =	4.5	
Dry Flowables	4 1b =	6	
	5 lb =	7.5	

Herbicide	Rate/Acre		Level TEAspo	ons	Milliters
Emulsifiable	1 pint	=	0.5	or	2.4
Concentrates	1 quart	=	1	or	4.7
or Flowables	2 quarts	=	2	or	9.5
or Liquids	3 quarts	=	3	or	14.2
or Solutions	1 gallon	=	4	or	19.0
	5 quarts	=	5	or	23.8

The compatibility test is designed for 25 gallons of spray per acre. 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

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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 using a compatibility agent, fluid fertilizer may be used for 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

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

#### APPLICATION SYSTEMS

#### SPRAY DRIFT MANAGEMENT

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

**For ground boom applications**, apply with nozzle height no more than 4 feet above the ground or crop canopy and when wind speed is 10 mph or less at the application site as measured by an anemometer. Use medium or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles.

**For aerial applications**, the boom width must not exceed 75% of the wingspan or 90% of the rotary blade. Use the upwind swath displacement and apply only when wind speed is 3-10 mph as measured by an anemometer. Use medium or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or the crop canopy.

The applicator also must use all other measures necessary to control drift.

**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. Do not apply during periods of gusty winds, when winds are in an excess of 15 mph or when other conditions favoring drift exist.

Aerial-Fixed wing; helicopter-Apply the recommended rates of this product or approved tank mixtures in 3 to 10 gallons of water per acre. Ensure uniform application. To avoid streaked, uneven or overlapped application, use mechanical marking systems only. HUMAN FLAGGERS PROHIBITED!

See Spray Drift Requirements and Aerial Drift Advisory Information in the **MIXING, SPRAYING AND HANDLING INSTRUCTIONS** portion of this label for further information on reducing spray drift during aerial application.

Application with Dry Bulk Fertilizer- The herbicide-dry 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.

For dry-bulk fertilizer impregnation operations, the maximum amount of alachlor that an individual worker can handle in a single day is 4000 pounds of alachlor active ingredient. This is equivalent to 1498 gallons of this product.

Dry bulk fertilizer may be impregnated with this product or the tank mixtures of this product plus Sencor<sup>TM</sup>. Freedom herbicide and these tank mixtures must be applied with 200 to 450 pounds of dry bulk fertilizer per acre and shallowly incorporated within 7 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 till situations, applications can be made up to 7 days before planting to allow moisture to move the herbicidefertilizer mixture into the soil. The correct amount of herbicide must be applied per acre in the blend recommended in this label for the crop selected and weed species to be controlled.

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 and fertilizer rates per acre.

LIQUID HERBICIDE/ACRE							
Fertilizer Rate (pounds/acre)	Acres Covered (per ton)		3.5 s of herbicide/ bulk fertilize				
200	10	30	35	40			
250	8	24	28	32			
300	6.7	20	23.3	26.6			
350	5.7	17.1	20	22.8			
400	5	15	17.5	20			
450	4.5	13.3	15.6	17.8			

RECOMMENDED QUARTS

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

		pounds or
Recommended herbicide rate		quarts of herbicide
(pounds or guarts/acre x 2000	=	per ton of dry
pounds fertilizer/acre		bulk fertilizer

With In-Plant systems, mix and blend the dry fertilizer and herbicide mixture in a closed rotary drum-type mixer, 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, a highly absorptive material such as  $Agsorb^{m}$ ,  $MP-79^{m}$ , or  $Microcel^{m}$  can be added 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 absorptive material and dry fertilizer should be thoroughly mixed prior to adding liquid herbicide. Generally the drying material weight is no more than 2 to 4 percent of the total weight of the dry fertilizer. The following dry fertilizers may be impregnated with this product or tank mixtures of this product with Sencor 4: ammonium sulfate, ammonium phosphate-sulfate, diammonium phosphate, potassium chloride, single super-phosphate, treble super-phosphate and urea.

**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 dry fertilizer-herbicide mixture uniformly with an adequately calibrated dribble, pneumatic (air flow) or spin applicator. When using spin applicators, the herbicide-dry fertilizer mixture must be spread uniformly. Nonuniform spreading of the dry fertilizer-herbicide mixture may result in unsatisfactory weed control or crop injury.

### APPLICATION TIMING AND METHODS

**Preplant Incorporation-**This product and 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 and shallowly incorporate into the upper 2 inches of soil within 24 hours after application. If weeds emerge after treatment, rotary hoe or shallowly cultivate immediately to improve performance.

1-Pass Incorporation (Surface Blend): Shallowly incorporate (Surface Blend) the treatment into the upper 1 to 2 inches of the soil. Equipment should be operated at manufacturer's designated 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.

Contact Monsanto Company for additional information regarding recommended equipment and methods for Surface Blend application.

**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 and no deeper than the first pass to ensure uniform distribution of the herbicide treatment in the soil.

**Preemergence Surface Application**-This product and all labeled tank mixtures except Freedom plus Command<sup>TM</sup> 4EC, 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 moisture, 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.

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**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.

### WEEDS CONTROLLED

Applicators should evaluate soil and weed conditions carefully to ensure that they choose the lowest effective label rate. When applied as directed under conditions described, this product and tank mixtures of this product will control or reduce competition from the weeds listed.

C = Control			R	= Redi	uced	Compe	tition	<u></u>	
1 Freedom 2 Freedom + Canopy™ 3 Freedom + Command 4EC 4 Freedom + linuron			5 6 7	Fre		+ Sc	rsuit™ epter™ ncor		
	1	2	3	4	5	6	7		
ANNUAL GRASSES				<u></u>		<u> </u>			 
Barnyardgrass	С	С	С	С	С	С	С		
Crabgrass: hairy, smooth	С	С	С	С	С	С	С		
Cupgrass, woolly <sup>1</sup>	R	R	R	•	R	R	R		
Foxtail: giant, green, robust purple, robust white, yellow	С	С	С	С	С	С	С		
Goosegrass	С	С	С	С	С	С	С		
Johnsongrass, seedling <sup>2</sup>	R	R	R	R	С	C	R		
Panicum: browntop, fall	С	Č	C	C R	C R	C R	C		
Panicum, Texas <sup>3</sup> Rice, red <sup>4</sup>	R R	R R	R R	к •	R C	к С	R R		
Sandbur, Grassbur <sup>2</sup>	R	R	R	•	R	R	R		
Shattercane, wild cane <sup>1</sup>	R	R	R	•	R	R	R		
Signalgrass, broadleaf	C	c	c	С	C	С	c		
Sprangletop, red	С	Ċ	Ċ	c	С	С	с		
Witchgrass	С	С	С	С	С	С			 
ANNUAL BROADLEAVES									
Beggarweed, Florida <sup>2</sup>	R	С	•	•	•	•	С		
Carpetweed	С	С	С	С	С	С	С		
Cocklebur	•	С	•	•	C	С	R		
Coffeeweed:									
hemp sesbania	•	C	•	•	•	•	•		
Copperleaf, hophornbeam Galinsoga	• C	C C	•	• C	• C	•	• C		
Galinsoga Groundcherry, annual	•	C	с •	C	C	C C	c		
Groundcherry, cutleaf <sup>5</sup>	ċ	c	c	c	c	C	c		
Jimsonweed	•	c	c	•	c	č	R		
Kochia	•	č	č	•	ē	č	c		
Lambsquarters <sup>5</sup>	R	č	č	с	Ĉ	Č	č		
Morningglory:									
tall <sup>6</sup> , ivyleaf <sup>6</sup> ,	•	С	٠	•	R	R	•		
entireleaf <sup>6</sup> ,	•	С	•	•	R	R	•		

pitted,	•	С	•	•	R	С	•
smallflower	R	С	٠	•	С	С	•
Mustard	•	С	۰Ÿ	С	С	С	•
Nightshade:							
eastern black <sup>4</sup> , hairy <sup>4</sup>	С	С	С	С	C	С	С
Pigweed, Carelessweed	С	С	С	С	С	С	С
Purslane	С	С	С	С	С	С	С
Pusley, Florida	С	С	С	С	С	С	С
Ragweed, common <sup>5</sup>	R	С	С	С	R	С	С
Ragweed, giant	•	R	٠	•	R	R	•
Sicklepod	•	С	•	. •	•	R	R
Sida, prickly; Teaweed <sup>5</sup>	R	С	С	С	С	С	•
Smartweed <sup>5</sup>	R	С	R	С	С	С	С
Starbur, bristly	R	С	•	•	•	С	С
Sunflower, common	•	R	•	•	С	С	•
Velvetleaf; Buttonweed	٠	С	С	R	С	С	R
Waterhemp	С	С	С	С	С	С	С

#### SEDGE

Nutsedge, y	പിറയം	C	<b>~</b>	С	•	<u> </u>	C	~	
Nucseuge, y	errow	L L	С	C	•	<u> </u>	<u> </u>	Ç.	

<sup>1</sup>Apply 4.5 quarts of this product per acre alone or in tank mixture on this weed.

- <sup>2</sup>Apply 4 to 4.5 quarts of this product per acre alone or in tank mixture on this weed.
- <sup>3</sup>Apply 4.5 quarts of this product per acre, followed by sprinkler irrigation if rainfall is not expected.
- <sup>4</sup>Apply 4.5 quarts of this product per acre alone or in tank mixture on this weed. When tank mixed with Pursuit or Scepter, use 3 to 4 quarts of this product per acre.
- <sup>5</sup>Apply 4 to 4.5 quarts of this product per acre when used alone on this weed.
- <sup>6</sup>For best results of these species when using Freedom plus Scepter tank mixture, use preplant incorporated treatments.

For scientific names for the weeds listed above, refer to the appendix at the end of this booklet.

### SOYBEANS

Do not make more than one application per year or exceed a total of 4.5 quarts of Freedom per acre per year.

Do not feed forage, hay or straw from soybeans treated with this product or tank mixtures of this product. Do not ensile soybeans treated with this product.

#### FREEDOM

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.

Freedom 1998-1 Edit & FAIAB 073003

### APPROVED APPLICATION SYSTEMS

Ground-Broadcast boom

Aerial-Fixed wing; helicopter

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.

### APPROVED APPLICATION METHODS

**Preplant Incorporated-**Apply this product within 7 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.

**Preemargence Surface**-Apply this product after planting, before crop and weed emergence and within 5 days of last preplant tillage operation.

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

### Preplant Incorporated Application Rates

SOIL	BROADCAST RATE PH	ER ACRE (QUARTS) **	
TEXTURAL GROUP*	Less than 3% organic matter	3% or more organic matter	
Coarse	3.5 to 4	3.5 to 4	
Medium	3.5 to 4.5	3.5 to 4.5	
Fine	4 to 4.5	4.5	

\*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. Use a minimum of 4.5 quarts per acre for control of yellow nutsedge.

#### Surface Application Rates

SOIL	BROADCAST RATE PI	ER ACRE (QUARTS)**	
TEXTURAL	Less than 3%	3% or more	
GROUP*	organic matter	organic matter	
Coarse	3 to 3.5	3 to 3.5	
Medium	3 to 4.25	3 to 4.25	
Fine	3 to 4.25	3.75 to 4.5	

\*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 infestations. Use a minimum of 4.5 quarts per acre for control of yellow nutsedge.

### FREEDOM plus CANOPY TANK MIXTURE

Apply this tank mixture 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.

**NOTE:** Observe all precautions and limitations on the labels for Freedom and Canopy herbicides, including precautions on soil pH, sensitive soybean varieties, minimum recropping interval and rotational guidelines.

DO NOT plant rice or peanuts within 18 months after application of this tank mixture.

#### APPROVED APPLICATION SYSTEM

#### Ground-Broadcast boom

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

#### APPROVED APPLICATION METHODS

**Preplant Incorporated-**Apply this product within 7 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 of last preplant tillage operation.

**APPLICATION 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.

	BRC	ADCAST RATE	PER ACRE**
	1/2% to organic		3% to 5% organic matter
SOIL TEXTURAL GROUP*	Freedom + (quarts)	Canopy (ounces)	Freedom + Canopy (quarts) (ounces)
Coarse-loamy sand, sandy loam only	2.75 to 3.5	6	3 to 3.5 8
Medium***	2.75 to 3.5	8	3.5 to 4 10
Fine	3.5 to 4	10	3.5 to 4.5 12

#### Preplant Incorporated Application Rates

\*Refer to the "SOIL TEXTURE" section of this label to determine the corresponding soil textural group for the soil to be treated. DO NOT APPLY TO SOIL WITH LESS THAN 1/2% organic matter.

\*\*Use the higher rate of Freedom herbicide in the recommended ranges in areas of heavy grass infestation, heavy crop residue or when broadleaf signalgrass is present. See "WEEDS CONTROLLED" section of this label for specific rate recommendations on seedling johnsongrass, red rice and yellow nutsedge. \*\*\*On medium soils in southeast KS, southwest MO and northeast OK with 1/2 to
3% organic matter, use 5 to 6 ounces Canopy of per acre. On silt loam
soils in TN and KY, use 6 to 8 ounces of Canopy per acre.

**NOTE:** In the states of IA, IL, KS, MO, MN, NE, OK and WI on soils with 1/2 to 4% organic matter, reduced rates of Canopy are recommended for broadleaf weed control. Use 5 ounces of Canopy per acre on coarse soils (loamy sand and sandy loam only); 6 ounces on medium soils; and 6 to 7 ounces on fine soils. Do not apply to soils with greater than 6.8 pH or to soils with less than 1/2% organic matter or greater than 4% organic matter.

For improved control of heavy velvetleaf infestations, add 1/2 pint of Command 4EC herbicide per acre to this tank mixture.

Observe all precautions and limitations on the labels for Canopy and Command 4EC before using this tank mixture.

	BRC	ADCAST RATE	PER ACRE**	
	1/2% to organic		3% to 5% organic	
SOIL TEXTURAL GROUP*	Freedom + (quarts)	Canopy (ounces)	Freedom + (quarts)	Canopy (ounces)
Coarse-loamy sand, sandy loam only	2.5 to 3.5	6	2.5 to 3.5	8
Medium***	2.5  to  3.5 2.5  to  3.5	8	3.0 to 3.75	10
Fine	3.0 to 3.75	10	3.5 to 4.0	12

#### Surface Application Rates

\*Refer to the '"SOIL TEXTURE" section of this label to determine the corresponding soil textural group for the soil to be treated. DO NOT APPLY TO SOIL WITH LESS THAN 1/2% organic matter.

\*\*Use the higher rate of Freedom herbicide in the recommended ranges in areas of heavy grass infestation, heavy crop residue or when broadleaf signalgrass is present. See "WEEDS CONTROLLED" section of this label for specific rate recommendations on seedling johnsongrass, red rice and yellow nutsedge.

\*\*\*On medium soils in southeast KS, southwest MO and northeast OK with 1/2 to
3% organic matter, use 5 to 6 ounces Canopy per acre. On silt loam soils
in TN and KY, use 6 to 8 ounces of Canopy per acre.

**NOTE:** In the states of IA, IL, KS, MO, MN, NE, OK and WI on soils with 1/2 to 4% organic matter, reduced rates of Canopy are recommended for broadleaf weed control. Use 5 ounces of Canopy per acre on coarse soils (loamy sand and sandy loam only); 6 ounces on medium soils; and 6 to 7 ounces on fine soils. Do not apply to soils with greater than 6.8 pH or to soils with less than 1/2% organic matter or greater than 4% organic matter.

### FREEDOM plus COMMAND 4EC TANK MIXTURE

Apply this tank mixture 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.

**NOTE:** Observe all precautions and limitations on the labels for Freedom and Command 4EC herbicides before using this tank mixture.

#### APPROVED APPLICATION SYSTEMS

Ground-Broadcast boom

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

#### APPROVED APPLICATION METHOD

**Preplant Incorporated-**Apply this product within 7 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.

**APPLICATION RATES:** Apply 3 to 3.5 quarts of Freedom herbicide plus 1 pint of Command 4EC per acre. In areas of heavy pigweed and lambsquarters infestation, use 3.5 to 4 quarts of Freedom per acre in the tank mixture.

### FREEDOM plus SENCOR TANK MIXTURES

Apply this tank mixture 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.

**NOTE**: DO NOT use on muck soils or on alkaline soils with greater than 7.4 pH. Crop injury may result if atrazine was applied the year preceding use of this tank mixture.

Observe all precautions and limitations on the labels for Freedom and Sencor herbicides before using this tank mixture.

DO NOT REPLANT CROPS OTHER THAN SOYBEANS FOR 120 DAYS AFTER APPLICATION OF THESE TANK MIXTURES.

### APPROVED APPLICATION SYSTEMS

Ground-Broadcast boom

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Aerial-Fixed wing; helicopter

Dry Bulk Fertilizer Impregnation

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

### APPROVED APPLICATION METHODS

**Preplant Incorporated-**Apply this product within 7 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 of last preplant tillage operation.

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**APPLICATION 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.

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#### Preplant Incorporated Application Rate

	Less tha organic		3% or mo organic	+
SOIL TEXTURAL GROUP*	Freedom + (quarts)	Sencor 4** (pint)	Freedom + (quarts)	Sencor 4** (pint)
Coarse-sandy loam only Medium Fine	2.75 to 3.5 2.75 to 3.5 3.5 to 4	0.5 0.5 to 0.75 0.75 to 1	3 to 3.5 3.5 to 4 3.5 to 4.5	0.75 0.75 1

BROADCAST RATE PER ACRE\*\*

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

\*\*Use the rates listed in this label when using Sencor 4. Use the equivalent rates when using the 50WP or DF formulations of these products. One pint of Sencor 4 equals one pound of the corresponding 50WP formulation or 2/3 pound of the corresponding DF formulation.

**NOTE:** DO NOT use on sand or loamy sand soil. Use 1.5 pints of or Sencor 4 per acre in this tank mixture when applying on heavy clay soils of the Mississippi Delta. Use 4.5 quarts of Freedom herbicide in this tank mixture on medium or fine textured soils to control black or hairy nightshade.

For improved control of heavy velvetleaf infestations, add 1/2 pint of Command 4EC herbicide per acre to this tank mixture.

Observe all precautions and limitations on the labels for Sencor and Command 4EC before using these tank mixtures.

#### Surface Application Rate

		BROADCAST RATE PER	ACRE**	
	Less than 3% organic matte	er	3% or more organic matte	r
SOIL TEXTURAL GROUP*	Freedom + (quarts)	Sencor 4** (pint)	Freedom + (quarts)	Sencor 4** (pint)
Coarse-sandy loam only Medium Fine	2.5 to 3.5 2.5 to 3.5 3.0 to 3.75	0.5 0.5 to 0.75 0.75 to 1	2.5 to 3.5 3.0 to 3.75 3.5 to 4.0	0.75 0.75 1

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

\*\*Use the rates listed in this label when using Sencor 4. Use the equivalent rates when using the 50WP or DF formulations of these products. One pint of or Sencor 4 equals one pound of the corresponding 50WP formulation or 2/3 pound of the corresponding DF formulation.

**NOTE:** DO NOT use on sand or loamy sand soil. Use 1.5 pints of or Sencor 4 per acre in this tank mixture when applying on heavy clay soils of the Mississippi Delta. Use 4.5 quarts of Freedom herbicide in this tank mixture on medium or fine textured soils to control black or hairy nightshade.

For improved control of heavy velvetleaf infestations, add 1/2 pint of Command 4EC herbicide per acre to this tank mixture.

Observe all precautions and limitations on the labels for Sencor 4 and Command 4EC before using these tank mixtures.

### FREEDOM plus PURSUIT TANK MIXTURE

Apply this tank mixture 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.

**NOTE:** Observe all precautions and limitations on the labels for Freedom and Pursuit herbicides before using this tank mixture including precautions on minimum recropping interval and rotational guidelines.

APPROVED APPLICATION SYSTEMS

Ground-Broadcast boom

Aerial-Fixed wing; helicopter

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

**Preplant Incorporated**-Apply this product within 7 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 of last preplant tillage operation.

**APPLICATION 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. See the "WEEDS CONTROLLED" section of this label for recommended rates and application methods for control of certain weeds.

### BROADCAST RATE PER ACRE\*\*

SOIL	Less than 3% organic matter	3% or more organic mat	ter
GROUP*	Freedom	Freedom	Pursuit
	(quarts)	(quarts)	(ounces)
Coarse	2.5 to 3	2.5 to 3	4
Medium	2.5 to 3	2.75 to 3.25	4
Fine	2.75 to 3.25	3 to 3.5	4

\*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 of Freedom herbicide in the recommended ranges in areas of heavy grass infestations, heavy crop residue or when the following weeds are present: fall panicum, barnyardgrass, broadleaf signalgrass, seedling johnsongrass, red rice or yellow nutsedge.

### FREEDOM plus SCEPTER TANK MIXTURE

Apply this tank mixture 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.

**NOTE:** Observe all precautions and limitations on the labels for Freedom and Scepter herbicides before using this tank mixture including precautions on minimum recropping interval and rotational guidelines.

### APPROVED APPLICATION SYSTEMS

Ground-Broadcast boom

Aerial-Fixed wing; helicopter

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

### APPROVED APPLICATION METHODS

**Preplant Incorporated-**Apply this product within 7 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 of last preplant tillage operation.

**APPLICATION 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. See the "WEEDS CONTROLLED" section of this label for recommended rates and application methods for control of certain weeds.

<u></u>	BROADCA	ST RATE PER ACRE**	
	Less than 3% organic matter	3% or mo organic ma	
SOIL TEXTURAL GROUP*	Freedom (quarts)	Freedom (quarts)	Scepter*** (pints)
Coarse Medium Fine	2.5 to 3 2.5 to 3 2.75 to 3.25	2.5 to 3 2.75 to 3.25 3 to 3.5	1/2 to 2/3 1/2 to 2/3 1/2 to 2/3

\*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 of Freedom herbicide in the recommended ranges in areas of heavy grass infestation, heavy crop residue or when the following weeds are present: fall panicum, barnyardgrass, broadleaf signalgrass, seedling johnsongrass, red rice or yellow nutsedge.

\*\*\*Use the higher rates of Scepter in the recommended ranges when red rice, sicklepod, Florida beggarweed or velvetleaf are present.

For improved control of heavy velvetleaf infestation, add 1/2 pint of Command 4EC herbicide per acre to this tank mixture.

Observe all precautions and limitations on the labels for Scepter and Command 4EC before using these tank mixtures.

Conservation or Minimum Tillage Systems TANK MIXTURES

#### SOYBEANS ONLY

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 soybeans will be planted directly into a cover crop, stale seedbed, or in previous crop residues such as wheat stubble.

These tank mixtures will not control regrowth from perennial weeds.

DO NOT APPLY BY AIR.

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

Freedom and the following tank-mixtures can be tank-mixed with Roundup or Gramoxone Extra.

#### FREEDOM

#### FREEDOM plus CANOPY

### FREEDOM plus SENCOR

### FREEDOM plus LINURON

#### FREEDOM plus PURSUIT

#### FREEDOM plus SCEPTER

Apply the tank mixtures with Roundup 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 increases, spray gallonage and rate should be increased within the recommended ranges to ensure complete coverage. In the absence of emerged vegetation delete the Roundup or Gramoxone Extra portion of these mixes.

### CONTROL OR SUPPRESSION OF EMERGED WEEDS

#### ROUNDUP

Annual Weeds-Apply 1 to 2 pints of Roundup per acre in these tank mixtures when weeds are less than 6 inches tall. Use 2 pints of Roundup per acre for control of fall panicum, barnyardgrass, crabgrass and shattercane up to 2 inches tall; Pennsylvania smartweed up to 6 inches tall; 3 pints on other annual weeds 6 to 12 inches tall. For emerged annual weeds controlled, see the "WEEDS CONTROLLED" section of the label for Roundup.

**Perennial Weeds**-At normal application dates in minimum tillage systems, perennial weeds may not be at the proper stage of growth for control. See the ''GENERAL INFORMATION'' section of the label for Roundup for the proper stage of growth for perennial weeds. Use of 2 to 4 quarts of Roundup per acre in this tank mixture under these conditions provides top kill and reduces competition from many emerged perennial grasses and broadleaf weeds. For perennial weeds controlled, see the "WEEDS CONTROLLED" section of the label for Roundup.

To obtain control of perennial weeds, follow recommendations on the label for Roundup for stage of growth and rate of application.

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

**NOTE:** When using these tank mixtures, do not exceed 4 quarts of Roundup herbicide per acre.

Ammonium Sulfate-The addition of ammonium sulfate in the spray solution may increase the performance of Roundup 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

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Following use of ammonium sulfate, thoroughly rinse the spray system with clean water to reduce corrosion.

Surfactants-Nonionic surfactants which are labeled for use with herbicides may be used with Roundup. Do not reduce rates of Roundup when adding surfactant. Use 0.5 percent surfactant concentrate (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 tank-mixture with labeled Freedom tank-mixtures controls many emerged annual weeds and suppresses many emerged perennial weeds.

**Broadcast Treatment**—Apply 1.5 to 3 pints of Gramoxone Extra in this tank mixture immediately before, during or after planting but BEFORE CROP EMERGENCE. Use 1.5 to 2 pints when weeds are 1 to 3 inches tall, 2 to 2.5 pints when weeds are 3 to 6 inches tall and 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 in crops) containing at least 75 percent surface active agent at 8 fluid ounces per 100 gallons of diluted spray. REFER TO THE LABEL FOR GRAMOXONE EXTRA FOR PRECAUTIONARY STATEMENTS.

### PREEMERGENCE WEED CONTROL

#### FREEDOM

For weeds controlled preemergence, see the "WEEDS CONTROLLED" section of this label.

See the following table for recommended rates of Freedom on various soil types.

	BROADCAST RATE PER ACRE (QUARTS)	<u></u>
SOIL TEXTURAL GROUP*	Freedom	
Coarse	3.75	
Medium	4.5	
Fine	4.5	

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

### FREEDOM plus CANOPY

For weeds controlled preemergence see the "WEEDS CONTROLLED" section of this label for Freedom plus Canopy.

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**NOTE:** Observe all precautions and limitations on the Freedom and Canopy labels including precautions on soil pH, sensitive soybean varieties and rotational crop restrictions.

See the following table for recommended rates of Freedom and Canopy in this tank mixture.

	BROADCAST RATE PER ACRE**		
SOIL TEXTURAL GROUP*	Freedom (quarts)	+ Canopy (ounces)	
Coarse-sandy		_	
loam only	2.5 to 3.5	6	
Medium	3 to 3.75	8	
Fine	3.75 to 4.5	10	

\*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 of Freedom and Canopy in areas of heavy weed infestation.

#### FREEDOM plus SENCOR

For weeds controlled preemergence, see the "WEEDS CONTROLLED" section of this label for Freedom plus or Sencor 4.

See the following table for recommended rates of Freedom plus Sencor 4 in this tank mixture on various soil types.

	BROADCA	ST RATE PER	ACRE**	
SOIL TEXTURAL GROUP*	Freedom (quarts)	+	Sencor 4** (pints)	
Coarse-sandy				
loam only	2.5 to 3.5		0.5 to 0.75	
Medium	3 to 3.75	5	0.75 to 1	
Fine	3.75 to 4.5		1 to 1.5***	

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

\*\*Use the rates listed in this label when using Sencor 4. Use the equivalent rates when using the 50WP or DF formulations of these products. One pint of Sencor 4 equals one pound of the corresponding 50WP formulation or 2/3 pound of the corresponding DF formulation.

\*\*\*On the heavy clay soil of the Mississippi Delta, use 1.5 pints of Sencor 4
 per acre.

Use the higher rate of Freedom in the recommended ranges in areas of heavy grass infestations or when fall panicum or crabgrass will be present.

Use the higher rate of Sencor in the recommended ranges on soils with greater than 3% organic matter.

DO NOT use this mixture on sand or loamy sand soils as crop injury from Sencor 4 may occur.

DO NOT use on muck soils.

DO NOT apply on alkaline soils with a pH greater than 7.4.

Crop injury may occur if atrazine was applied the year before use of this tank mixture.

DO NOT REPLANT CROPS OTHER THAN SOYBEANS FOR 120 DAYS AFTER APPLICATION OF THESE TANK MIXTURES.

#### FREEDOM plus LINURON

For weeds controlled preemergence, see the "WEEDS CONTROLLED" section of this label for Freedom plus linuron.

See the following table for recommended rates of Freedom and linuron in this tank mixture.

	BROADCAST RATE	PER A	CRE**	
SOIL TEXTURAL GROUP*	Freedom (quarts)	+	linuron 4L** (quarts)	
Coarse-sandy				
loam only	2.5 to 3.5		0.5 to 0.75	
Medium	3 to 3.75		0.75 to 1	
Fine	3.75 to 4.5		1 to 1.5	

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

\*\*Use the rates listed on this label when using linuron 4L. Use equivalent rates when using linuron 50WP or 50% dry flowable formulation. One quart of linuron 4L equals 2 pounds of linuron 50WP or 2 pounds of linuron 50% dry flowable.

Use the higher rate of Freedom in the recommended ranges in areas of heavy grass infestation or when fall panicum or crabgrass will be present.

Use the higher rate of linuron in the recommended ranges on soils with greater than 3% organic matter.

DO NOT use this tank mixture on sand or loamy sand or on soil with less than 1% organic matter as crop injury from linuron may occur.

### FREEDOM plus PURSUIT

For weeds contolled preemergence, see the "WEEDS CONTROLLED" section of this label for Freedom plus Pursuit.

**NOTE:** Observe all precautions and limitations on the Freedom and Pursuit labels before use of this tank mixture including minimum recropping interval and rotational guidelines.

	BROADCAST RATE PE	ER ACRE**
SOIL TEXTURAL GROUP*	Freedom + (quarts)	Pursuit (ounces)
Coarse Medium Fine	2.5 to 3.5 3 to 3.75 3.75 to 4.5	4 4 4

See the following table for recommended rates of Freedom and Pursuit in this tank mixture.

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

\*\*Use the higher rate of Freedom in areas of heavy weed infestations.

### FREEDOM plus SCEPTER

For weeds contolled preemergence, see the "WEEDS CONTROLLED" section of this label for Freedom plus Scepter.

**NOTE:** Observe all precautions and limitations on the Freedom and Scepter labels before use of this tank mixture including minimum recropping interval and rotational guidelines.

See the following table for recommended rates of Freedom and Scepter in this tank mixture.

	BROADCAST RATE PER ACRE**	
SOIL TEXTURAL GROUP*	Freedom + (quarts)	Scepter (pints)
Coarse	2.5 to 3.5	2/3
Medium Fine	3 to 3.75 3.75 to 4.5	2/3 2/3

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

\*\*Use the higher rate of Freedom in areas of heavy weed infestations.

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#### APPENDIX

LIST OF COMMON AND SCIENTIFIC NAME OF ANNUAL GRASSES AND BROADLEAF WEEDS.

#### ANNUAL GRASSES

Barnyardgrass

Echinochloa crus-galli

### Crabgrass:

Digitaria ischaemum Digitaria sanguinalis

Cupgrass, woolly Eriochloa villosa

Foxtail, giant Setaria faberi

Foxtail, green, robust purple, robust white Setaria viridis

# Foxtail, yellow

Setaria lutescens

Goosegrass Eleusine indica

Johnsongrass Sorghum halepense

Panicum, browntop Panicum fasciculatum

**Panicum, fall** Panicum dichotomiflorum

Panicum, Texas Panicum texanum

Rice, red Orvza sativa

Sandbur, Grassbur Cenchrus incertus

Shattercane, wild cane Sorghum bicolor

Signalgrass, broadleaf Brachiaria platyphylla

### Sprangletop, red Leptochloa filiformis

Witchgrass Panicum capillare

### ANNUAL BROADLEAVES

Beggarweed, Florida Desmodium tortuosum

### Carpetweed Mollugo verticillata

Cocklebur Xanthium strumarium

**Coffeeweed** Hemp sesbania Sesbania exaltata

**Copperleaf**, hophornbeam Acalypha spp.

**Galinsoga** Galinsoga spp.

**Groundcherry, annual** *Physalis spp.* 

**Groundcherry, cutleaf** *Physalis angulata* 

**Jimsonweed** Datura stramonium

Kochia Kochia scoparia

Lambsquarters

Chenopodium album

Morningglory: Tall

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Ipomoea purpurea

**Pitted** Ipomoea lacunosa

**Ivyleaf** Ipomoea hederacea

Entireleaf Ipomoea hederacea var. intergriuscula

Smallflower Jacquemontia tamnifolia

Mustard

Brassica spp.

Nightshade, black Solanum nigrum

Nightshade, hairy Solanum sarrachoides

**Pigweed, Carelessweed** Amaranthus spp.

**Purslane** Portulaca oleracea

**Pusley, Florida** Richardia scabra

Ragweed, common Ambrosia artemisifolia

Ragweed, giant Ambrosia trifida

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Sicklepod Cassia obtusifolia

**Sida, prickly; Teaweed** Sida spinosa

Smartweed Polygonum pensylvanicum Polygonum persicaria

Starbur, bristly Acanthospermum hispidum

Sunflower, commonn Helianthus annuus

Velvetleaf, Buttonweed Abutilon theophrasti

# Waterhemp

Amaranthus tuberculatos

SEDGE

Nutsedge, yellow Cyperus esculentus

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