FREEDOM® HERBICIDE by MONSANTO

Emulsifiable herbicide for weed control in soybeans only.

#### **RESTRICTED USE PESTICIDE**

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

The use of this product may be hazardous to your health. This product contains alachlor which has been determined to cause tumors in laboratory animals.

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

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Complete Directions for Use

@Freedom is a registered trademark of Monsanto Company.

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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.

#### 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 these 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 base1 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!

CAUSES SUBSTANTIAL BUT TEMPORARY EYE INJURY. CAUSES SKIN IRRITATION. HARMFUL IF SWALLOWED. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SLIN REACTION.

Do not get in eyes, on skin or on clothing.

Avoid breathing vapors or spray mist.

Wear goggles or face shield, rubber gloves, long trousers, longsleeved shirt or jacket of tightly woven material along with boots (waterproofed) high enough to cover ankles when transferring and mixing, and when adjusting, repairing or cleaning equipment. Wear rubber boots when pouring from open containers or when reentry is made into fields following application when the field is still wet. Clothing which comes in contact with this product must be washed

before reuse. Clothing or other materials which become drenched with the concentrated pesticide must be disposed of in a sanitary landfill, by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Wash thoroughly with soap and water after handling.

#### FIRST AID: IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Get medical attention.

IF ON SKIN, immediately flush with plenty of water while removing contaminated clothing. As soon as soap is available, wash skin thoroughly with soap and water. Wash clothing before reuse. Sensitized persons should avoid further contact and reuse of contaminated clothing. Get medical attention.

IF SWALLOWED, do NOT induce vomiting. Give large quantities of water. Get medical attention. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED, remove individual to fresh air. Get medical attention if breathing difficulty develops.

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

#### Environmental Hazards

This product contains alachlor which has been identified in limited ground water sampling and there is the possibility that it can leach through the soil to ground water, especially where soils are coarse and ground water is near the surface. Following application, and during rainfall events that cause runoff, this chemical may reach surface water bodies including streams, rivers, and reservoirs.

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

Check values 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.

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

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#### Physical or Chemical Hazards

#### In case of:

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SPILL or LEAK, soak up, remove and keep away from humans and comestic animals.

#### ACTIVE INGREDIENTS:\*

Alachior	31.7%
Trifluralin	3.98
INERT INGREDIENTS:	64.48
	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=ptoluidine).

DIRECTIONS FOR USE

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

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

Storage and Disposal

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

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.

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 Presticide or Einvironmental Control Adgency, or, the Hiszardous Waste representative at the nearest EPA Rregional 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.

(See the individual container label for disposal information.)

#### GENERAL INFORMATION

Freedom This product is recommended for the control of yellow nutsedge and to reduce competition of 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 Apply this product and shallowly incorporate 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.

Do not apply when conditions favor drift. Use of this product in any manner not consistent with this label may result in injury to persons, animals or crcps, 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 loar
MEDIUM	loam, silt loam, silt, sandy clay loam
FINE	<pre>silty clay loam, clay loam, sandy clay, silty clay, clay</pre>

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

#### MIXING, SPRAYING AND HANDLING INSTRUCTIONS

#### NOTE

The use of a mechanical transfer system is required to be used by all mixer/loaders and/or applicators who treat 300 acres or more annually with pesticides containing alachlor as an active ingredient.

Direct contact or exposure to this product or spray mixtures of this product should be minimized. The following instructions for transfer, mixing, cleaning or repairing equipment should be followed in order to minimize this exposure. Review the protective clothing requirements as listed in the ''PRECAUTIONARY STATEMENTS'' section of this label (front panel) and do not use this product intil you are wearing the necessary protective clothing.

#### 2.1 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.

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 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 herbinide or Gramoxone Extra for controls of many emerged weeds priors to scybelar emergence. Refer to the Roundup or Gramoxone Extra label for a list of emerged weeds controlled by tank mixtures of these products.

ORCUMDUP is a registered trademark of Monsanto Company.
T<sup>M</sup>Gramoxone is a trademark of ICI Americas Inc.

#### 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 proctical 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''.

Add	One	Pint	Liquid	Fertilizer
	T	o Two	Quart	Jars

#### WITH

WITHOUT

WITHOUT

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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

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.

#### 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 gal/a)

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

Herbicide	Rate/A	Level TEAspoons			Milliters		
Lmulsifiable	1 pint	=	0.5	or	2.4		
Concentrates or	1 quart	=	1	or	4.7		
Flowables or	2 quarts	=	2	or	9.5		
Liquids or	3 quarts	=	3	or	14.2		
Solutions	1 gallon	3	4	or	19.0		
	5 quarts	=	5	or	23.8		

The compatibility test is designed for 25 gallons  $\cdot$ . 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 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

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; h licopter-Apply the recommended rates of this product or approved tink mixtures in 3 to 10 gallons of water per acre. AVOID DRIFT-DO NOT APPLY DURING INVERSION CONDITIONS, WHEN WINDS ARE GUSTY, OR UNDER ANY OTHER CONDITION WHICH WILL ALLOW DRIFT. Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations which dispense spray or fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure. Ensure uniform application. To avoid streaked, uneven or overlapped application, use mechanical marking systems only. HUMAN FLAGGERS PROHIBITED!

Application with Dry Bulk Fertiliser-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.

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Dry bulk fertilizer may be impregnated with this product or the tank mixtures of this product plus Lexone<sup>TM</sup> or 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 herbicide-fertilizer 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.

RECOMMENDED QUARTS

LIQUID HERBICIDE/ACRE							
Fertilizer Rate (lb/a)	Acres Covered (per ton)	3 3.5 4 (quarts of herbicide/ton dry bulk fertilizer)					
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			

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
<u>(lb or qt/acre x 2000</u>	= per ton of
pounds fertilizer/acre	dry bulk
-	fertilizer

With In-Plant systems, mix and blend the dry fertilizer and herbicide mixture in a closed rotary drum-type mixer, a lowing 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 adsorptive capacity, a highly addsorptive material such as  $Agsorb^{TM}$ ,  $MP-79^{TM}$ , or Microcel<sup>TM</sup> E 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 adsorptive material and dry fertilizer should be thoroughly mixed prior to adding liquid herbicide. Generally the drying material weight is no more

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following dry fertilizers may be impregnated with this product or tank mixtures of this product with Sencor or Lexone: ammonium sulfate, aumonium phosphate-sulfate, diammonium phosphate, potassium chloride, single super-phosphate, treble super-phosphate and urea.

TMAgsorb is a trademark of Oil Dri Corporation.

TMLexone is a trademark of E. I. du Pont de Nemours and Company.

<sup>TM</sup>Microcel is a trademark of Manville Products Corporation.

- <sup>TM</sup>MP-79 is a trademark of Eagle-Picher Industries, Inc.
- TMSenco: is a trademark of the parent company of Farbenfabriken Bayer Gmbh.
- NOTE: DO NOT impregnate this product or tank mixtures of this product with other herbicides on rertilizers containing ammonium nitrate, potassium nitrate as sodium nitrate.

Spread the dry fertilizer-herbicide mixture uniformly with an adequately calibrated c ibble, pneunatic (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<sup>TN</sup>): 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 Preedom plus Command<sup>TM</sup>, 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.

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 av id dilucion or displacement of the herbicide treatment.

THSurface Blend is a trademark of Monsanto Company. THCommand is a trademark of FMC Corporation.

#### WEEDS CONTROLLED

Applicators should evaluate soil and weed conditions carefully to assureensure 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.

<u>C =</u>	= Control		Reduced	Competition
3 4	Freedom <sup>®</sup> Freedom + Canopy <sup>TM</sup> Freedom + Command Freedom + Gemini <sup>TM</sup> Freedom + linuron	47 <u></u> 1 581 691	Freedom Freedom Freedom	<pre>+ Lorox<sup>TK</sup>Plus + Preview<sup>TM</sup> + Pursuit<sup>TM</sup> + .cepter<sup>TM</sup> + Sencor<sup>TM</sup>/Lexone<sup>TM</sup></pre>

								1 3
	1	2	3	4 5 6	47	<del>5</del> 8	69	710
ANNUAL GRASSES								
Barnyardgrass	С	С	С	Q ECE C	С	С	С	с
Crabgrass: hairy, smooth	с	С	С	C.C.C	С	С	с	С
Cupgrass, woolly <sup>1</sup>	R	R	R		R	R	R	R
Foxtail: giant, green, robust purple, robust white, yellow	с	с	С	c c	с	с	с	с
Goosegrass	с	С	С	C C C	С	с	с	С
Johnsongrass, seedling <sup>2</sup>	R	R	R	RRR	R	С	с	R
Panicum: browntop, fall	С	С	с	C C C	С	С	с	с
Panicum, Texas <sup>3</sup>	R	R	R	RRR	R	R	R	R
Rice, red <sup>4</sup>	С	С	С	• • •	С	С	с	С
Sandbur, Grassbur <sup>2</sup>	R	R	R	• • •	R	R	R	R
Shattercane, wild cane <sup>1</sup>	R	R	R	• • •	R	R	R	R
Signalgrass, broadleaf	С	С	С	C C C	С	C	С	с
Sprangletop, red	С	С	С	C C C	С	С	с	с
Witchgrass	с	<u> </u>	С	<u>c c c</u>	С	c	<u>c</u>	с
	1	2	3	4 5 6	47	<del>5</del> 8	<del>69</del>	710
ANNUAL BROADLEAVES								
Beggarweed, Florida <sup>2</sup>	R	С	•	C e e	R	•	٠	с
Carpetweed	С	С	С	C C C	С	С	с	с
Cocklebur	•	с	٠	C • C	С	с	С	R
Coffeeweed: hemp sesbania	•	с	٠		с	•	٠	•
Copperleaf, hophornbeam	•	С	٠		С	•	•	•
Galinsoga	с	С	С	<b>e</b> 2013 (* 1998)	С	с	С	с
Groundcherry, annual	•	С	٠	C C C	С	с	с	С
Groundcherry, cutleaf <sup>5</sup>	С	С	С	C C C	с	с	с	с

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	1	2	3	4 5.6	47	<del>5</del> 8	69	710
Jimsonweed	٠	С	С	C e C	С	С	С	R
Kochia	٠	С	с	• • •	С	С	С	с
Lambsquarters <sup>5</sup>	R	с	с	<u>c c c</u>	с	С	с	с
Morningglory:	• • R	с с с с с	• • •	Course of an P Course of an P C • • • R C • R	R R R	R R R C	R R C C	• • •
Mustard	٠	с	٠	C C C	С	с	С	•
Nightshade: eastern black <sup>4</sup> , hairy <sup>4</sup>	с	с	с	C C C	с	с	с	с
Pigweed, Carelessweed	с	с	с	C C C	с	с	с	с
Purslane	с	с	С	C C C	с	с	С	с
Pusley, Florida	с	С	с	C C C	с	с	с	с
Ragweed, common <sup>5</sup>	R	С	с	C C C	с	R	с	С
Ragweed, giant	٠	R	٠	R. • .R	R	R	R	•
Sicklepod	٠	С	٠	R e e	٠	٠	R	R
Sida, prickly; Teaweed <sup>5</sup>	R	с	с	C C C	с	с	с	•
Smartweed <sup>5</sup>	R	С	R	C C C	С	с	с	С
Starbur, bristly	R	с	٠	• • •	٠	•	с	с
Sunflower, common	•	R	٠	• • •	R	с	с	•
Velvetleaf; Buttonweed	٠	С	с	C R C	с	С	с	R
Waterhemp	с	С	с	C C C	С	с	с	С
BEDGE								
Nutsedge, yellow <sup>4</sup>	с	с	с	e	<u>c</u>	с	С	С

TMCanopy, Gemini, Lorox and Preview are trademarks of E. I. du Pont de Nemours and Company. TMCommand is a trademark of FMC Corporation. TMPursuit and Scepter are trademarks of American Cyanamid Company.

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

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<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 tark 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.

#### 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.

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

**RECOMMENDED 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

	BROADCAST RATE PE	R ACRE (QUARTS) **	
SOTL 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 infestations. Use a minimum of 4.5 quarts per acre for control of yellow nutsedge or red rice.

#### Surface Application Rates

BROADCAST RATE PER ACRE (QUARTS) **	_
SOIL TEXTURAL Less than 34 34 or more GROUP* organic matter organic matter	_
Coarse         3.0 to 3.5         3.0 to 3.5           Medium         3.0 to 4.25         3.0 to 4.25           Pine         3.0 to 4.25         3.75 to 4.5	
* Refer to the "Solis 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 in the second sec	3

for control of yellow nutsedge or red rice.

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 precauticns 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 bcom

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.

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

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

		BRO	ADCAST RATES	PER ACRE**	
	orga	1/2 to nic mat	3t ter	3 <b>%</b> to 5 organic mat	
SOIL TEXTURAL GROUP*	Fr (q	.m● + `S)	Canopy (ounces)	Freedom + (quarts)	Canopy (ounces)
Coarse-loamy s	sand, sa	andy			
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 if 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 infestations, 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.

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

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

	BR	DADCAST RATES	PER ACRE**	
	1/21 E	5 38	3 <b>%</b> to	58
	organic mat	ter	organic ma	tter
OIL	·····			
EXTURAL	Freedon <sup>®</sup> +	Canopy	Freedom +	
ROUPA	(quarts)	(ounces)	(quarts)	(ounces)
	sand, sandy			
	2.5 to 3.5	6	2.5 to 3.5	Â
(15 miller)	2.5 to 3.5	8	3.0 to 3.7	
ine	3.0 to 3.7		3.5 to 4.0	12
· · · · · · · · · · · · · · · · · · ·				
			n if chis labe	
determin	the correspon	nding soil tex	tural group fo	r the soil
to be tru	ated. DO NOT	PPLY TO SOIL	WITH LESS THAN	@1 <b>72</b> \$

#### Surface Application Rates

organic matter.

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- \*\* Use the higher rate of Freedom herbicide in the recommended ranges in areas of heavy grass infestations, 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 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 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.

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

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#### FREEDON® plus LEXONE or FREEDON 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, Lexone 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

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.

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

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

Proplant Incorporated Application Rate

			BRUADCAS	T RATES PE	R ACR.	<u> </u>	
	_		than 3% nic matte			3 <b>t</b> or organi	more c matter
SOIL TEXTURAL GROUP*	Freedo (quart		Lexone 4L** or Sencor 4L** (pint)		or Freedom + Senco		
Coarse-Sand Loam Only Medium Fine	-	to 3.5	0.5 0.5 0.75	to 0.75 to 1		to 3.5 to 4 to 4.5	0.75

#### BROADCAST RATES PER ACRE\*\*

- \* Refer to the ''SC\_T TEXTURE'' section of this label to determine the corresponding soil textural group for the soil to be treated.
- \*\* Use the rates listed in this latel when using Lexone 4L or Sencor 4F. Use the equivalent rates when using the 50WP or DF formulations of these products. One pint of Lexone 4L or Sencor 4F 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 Lexone 4L or Sencor 4F 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 herbicide per acre to this tank mixture.

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

#### BROADCAST RATES FER ACRE\*\*

### Less than 3% 3% or more organic matter

	Levone (L** Jexone (L**
SOIL	C: OT
TENTED TO THE TENTED	Sencor 4L** Freedom + Sencor AL**
ADALUKAN SACEUCAVI	DBHOVE TO THE TRUE TO THE TOTAL OF
GROUP* (quarts)	(pint) (quarts) (pint)

Coarse-Sandy

Loan Only 2.5 to 3.5 0.5 2.5 to 3.5 0.75	
Medium 2.5 to 3.5 0.5 to 0.75 3.0 to 3.75 0.75	
Fine 3.0 to 3.75 0.75 to 1 3.5 to 4.0 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 i. this label when using Lexone 4L or Sencor 4F. Use the equivalent rates when using the 50WP or DF formulations of these products. One pint of Lexone 4L or Sencer 4F 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 Lexone 4L or Sencor 4F 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 herbicide per acre to this tank mixture.

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

#### FREEDOM® plus PREVIEW 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 Preview, including precautions on soil pH, sensitive soybean varieties, minimum recropping interval and rotational guidelines.

#### APPROVED APPLICATION SYSTEMS

#### 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.

#### A CONTRACT (CONTRACTOR OF CONTRACTOR OF CONT

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.

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

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

<b></b>	BRO	ADCAST KATES I	PER ACRE**	
	1/2 <b>%</b> to organic mat		3% to organic ma	
SOIL TEXTURAL GROUP*	Freedom <b>@</b> + (quarts)	Preview (ounces)	Freedom + (quarts)	Preview (ounces)
Coarse-Sandy				
Loam Only	2.75 to 3.5	6	3 to 3.5	7
Medium	2.75 to 3.5	7	3.5 to 4	8
Fine	3.5 to 4	8	3.5 to 4.5	9

#### Preplant Incorporated Application Rate

\* 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 infestations, 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.

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

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

#### Surface Application Este

#### BROADCAST RATES PER ACRE\*\*

	3% to 5% rganic matter
SOIL TEXTURAL Preedome + Preview F	reedom + Preview
GROUP* (quarts) (ounces) (	quarts) (ounces)
Coarse-Sandy Loam Only 2.5 to 1.5 6 2	5 to 3 5 7

Loam Only 2.5 to 3.5 6 2.5 to 3.5 7	
Medium 2.5 to 3.5 7 3.0 to 3.75 8	
Fine 3.0 t. 3.75 8 3.5 to 4.0 9	
Fine 3.0 t. 3.75 8 3.5 to 4.0 9	

 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 infestations, 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.

#### 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.

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APPROVED APPLICATION METHODS

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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 waed emergence and within 5 days of last preplant tillage operation.

**RECOMMENDED RATES:** Refer to the following table for the recommended broadcast treatment rates for this tank mixture. Applications which are not consistent with recommendations in this label may result in unsatisfactory weed control or crop injury. See the 'WEEDS CONTROLLED'' section of this label for recommended rates and application methods for control of certain weeds.

	Less than 3% organic matter	3% or nore organic matter		
SOIL TEXTURAL GROUP*	Freedom® (quarts)	Freedom (quarts)	Pursuit (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	

#### BROADCAST RATES 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 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.

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#### FREEDON® 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

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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

Preplan: Incorporated-Apply this product within 7 days prior to plantir ( and shallowly incorporate or Surface Blend into the upper J to 2 inches of soil. Irrigation within 10 days following planting may improve weed control.

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

**RECOMMENDED RATES:** Refer to the following table for the recommended broadcast treatment rates for this tank mixture. Applications which are not consistent with recommendations in this label may result in unsatisfactory weed control or crop injury. See the ''WEEDS CONTROLLED'' section of this label for recommended rates and application methods for control of certain weeds.

	BROADCA	ST RATES PER AC	RE**
	Less than 3% organic matter		
SOTL TEXTURAL GROUP*	Freedom <sup>¢</sup> (quarts)	Freedom (quarts)	Scepter*** (pints)
Coarse Medium	2.5 to 3 2.5 to 3	2.5 to 3 2.75 to 3.25	1/2 to 2/3 1/2 to 2/3
Fine	2.75 to 3.25	3 to 3.5	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 infestations, 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 infestations, add 1/2 pint of Command 4E herbicide per acre to this tank mixture.

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

#### Conservation or Minimum Tillage Systems TANK MIXTURES

#### COTBEAMS CORLY

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.

- PREEDOMO

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TREEDCH Plus CANOPY

PREEDON DIGE CANOPY

TREDCE plus GENIUI

FREEDOR PIER LEXONE

TREEDOK Plus LINURON

TREDOM DIRE LOROX PLUS

FREEDOM plus PREVIEW

TREEDON plus SENCOR

· · · ·	FREEDON plu	IS PURBUIT			1
an an an an an ang an anna an sao an an an an an a	FREEDOW plu	IS SCEPTER	· ·	 . <u>.</u>	

FREEDON plus SENCOR

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

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**N**et and **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.

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If amonium sulfate is added directly 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, arform a jar test by adding 1/3 cup of amonium sulfate to 1 gallon of water and agitate for one minutes iffundissolved sediment is observed, predissolve the assonium sulfate in water and filter prior to adding to the spray tank.

Following use of amonium 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.

GRANOXONE 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 LADEL FOR GRAMOXONE EXTRA FOR PRECAUTIONARY STATEMENTS.

PREEMERGENCE WEED CONTROL

TREEDON®

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)

SOI	L		
TEX	U LÜ	RA	Ľ
000	TTD		ā

GROUP\* Freedone

<u></u>		200 C
CDATSR		5
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Martin	4.5	
<b>Pina</b>		
4.4.4. <b>4</b>	😽 🔶 🗭 🖉 🖉 🖉 🖉 🖉 🖉 🖉	

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

#### E FREEDON® plus CAROPY

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

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\*\*

DUTH		
THE WITTER A		
	riegome - canopy	
CROTTE +	(cuarts) (ounces)	
	(ydar L3)	

Coarse-sandy

loam only 2.5 to 3.5	~ <del>6</del> -
Medium 3 to 3.75	· ē
Fine 3.75 to 4.5	÷5
	<b>T</b> (

\*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 wead infestation.

PREEDON® plus GENINI

For weed controlled preemergence, see the !'WEEDS CONTROLLED'' section of this label for Freedom plus Gemini.

Note: Observe all precautions and limitations on the Freedom and Gemini labels including precautions on soil pH and rotational crop restrictions.

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

BROADCAST RATE PER ACRE\*\*

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TEXTURAL		Gemini
GROUP*		
	and the second second states of the second se	Contraction of the second states of the
		Services i

Coarse-sandy

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	12 to 16
	16 to 20
	20 to 24

\*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 Gemini in areas of heavy weed infestation.

- FREEDONS plus LEXONE OF
- FREEDOM plus SENCOR

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

See the following table for recommanded rates of Freedom plus Lexone 4L or Freedom plus Sencor 4F in this tank mixture on various soil types.

BROADCAST RATE PER ACRE\*\*

	Le	zone 4L** or
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		SORCOTIAKTE
1 CALURAL	Freedon <sup>g</sup> +	
		and a strain from the state of
GROUP*	CARLES AND A TOMO TO A CARLES AND A	(3)))))))))
GRUUP - Contraction of the second		(pints)
	(quarts)	( To make a construction of the second secon

Coarse-sandy

loam only	.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 this label to determine the corresponding soil textural group for the soil to be treated.
- \*\*Use the rates listed in this label when using Lexone 4L or Sencor 4F. Use the equivalent rates when using the 50WP or DF formulations of these products. One pint of Lexone 4L or Sencor 4F equals one pound of the corresponding 50WP formulation or 2/3 pound of the corresponding DF formulation.

\*\*\*Cn the heavy clay soll of the Mississippi Delta, use 1.5 pints of Lexone 4L or Sencor 4F 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.

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Use the higher rate of Lexone or 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 Lexone or Sencor may occur.

DO NOT use on muck soils.

DO NOT apply on all aline 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.

TREEDON 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 ACRE\*\*

SOIL TEXTURAL GROUP\*

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 Land or loamy sand or on soil with less than 1% organic matter as crop injury from linuron may occur.

FREEDON® plus LOROX PLUS

For weeds controlled preemergence see the ''WEEDS CONTROLLED'' section of this label for Freedom plus Lorox Plus.

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NOTE: Observe all precautions and limitations on the labels for Freedom and Lorox Plus, including precautions on soil pH and rotational crop restrictions.

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

BROADCAST RATE PER ACRESS

		_
	Frandout + Lorox Plus	
and a second		
GRUUP	(quarte) (ounces)	

Coarse-sandy

6077

loam only 2.5 to 3.5 12 to 14
Medium 3 to 3.75 14 to 16
Fine 3.75 to 4.5 16 to 18

\*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 Lorox Plus in areas of heavy weed infestation.

FREEDON® plus PREVIEW

For weed controlled preemergence see the ''WEEDS CONTROLLED'' section of this label for Freedom plus Preview.

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

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

	BROADCAST RATE PER ACRE**
SOTT	
T. XTURAL	Preedome that the preview
	(quarts)

Coarse-sandy

loam only 2.5 to 3.5	
	·
	5 A S S S S S S S S S S S S S S S S S S
Medium 3 to 3.75	
	2
	· · · · · · · · · · · · · · · · · · ·
	· · · · <b>n</b>
	2 . <b>V</b>
Fine 3.75 to 4.5	
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\*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 Preview in areas of heavy weed infestation.

FREEDOM® plus PURSUIT

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

#### 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.

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

#### BROADCAST RATE PER ACRES\*

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	(Sagree)	666-55-96866666655.07°57.0°5.0°		

	2.5 to 3.5 4	
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	1. TYPE ALLOUD MEN ALCOUNT / 2005 177 1434 200207444 2017 100 100 100 100 2007 2017 200000 1 W0 4457 2 4	
→ ▲ A. W =		
	3 to 3.75 4	
	$\sim 2.7$ . There is a construction of the cons	
	3.75 to 4.5	
	and the second secon	

\*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 t. ble for recommended rates of Freedom and Scepter in this tank mixture.

BROADCAST RATE PER ACRE\*\*

SOIL _		
TEXTURAL	Freedom• +	Scepter
GROUP*	(quarts)	(pints)

Coarse2.5 to 3.52/3Medium3 to 3.752/3Fine3.75 to 4.52/3

\*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 BRUADLEAF 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

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#### Witchgrass Panicum capillare

#### ANNUAL BROADLEAVES

Beggarweed, Florida Desmodium tortuosum

#### Carpetweed

Mollugo verticillata

#### Cocklebur

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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 Ipomoea purpurea

#### Pitted

Ipomoea lacunosa

#### Ivyleaf

Ipomoea hederacea

#### Entireleaf

Ipomoea hederacea var. intergriuscula

#### Smallflower

Jacquemontia tamnifolia

#### Mustard

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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

**Bicklepod** 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

STATE REGISTRATIONS

Freedom<sup>•</sup> herbicide has been approved by the U.S. Environmental Protection Agency for the crop, uses and sites listed in this label. This product is registered for use in the following states:

Alabama Arkansas Georgia Illinois Iowa Kansas Kentucky Louisiana Minnesota Mississippi Missouri Nebraska North Carolina North Dakota Oklahoma South Carolina South Dakota Tennessee Texas Virginia West Virginia Wisconsin

EPA Reg. No. 524-422

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

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A-843-31-000-08/53

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9/10/92

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