25 19713-291

# RESTRICTED USE PESTICIDE (GROUND AND SURFACE WATER 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.

THIS PRODUCT IS A RESTRICTED USE HERBICIDE DUE TO GROUND AND SURFACE WATER CONCERNS. USERS MUST READ AND FOLLOW ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUND AND SURFACE WATER.

### DREXEL

## ATRAZINE, 5F

#### HERBICIDE

For Season-Long Weed Control in Corn. Conifers. Fallowland, Guava. Macedamie Nuts. Borghum. SugarCane, Lawns. Turf.and Chemical Fallow.

ATRAZINE OF CONTAINS 5 LBS. ACTIVE INGREDIENTS PER GALLON.

## KEEP OUT OF REACH OF CHILDREN CAUTION

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ACTIVE INGREDIENTS:

Atrazine (2-chloro-4-ethylamino-6-

Related Compounds.....2.67% INERT (NGREDIENTS:......

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EPA REG. NO. 19715-291

EFA ES". NO. 19713-

NET CONTENTS: 2.5 Gallons/9.45 Liters

SHAKE WELL BEFORE USING

Manufactured By: DREXEL CHEMICAL COMPANY P.O. BOX 9306. Memphis. Tenn. 38109

ACCEPTED Min 51 1003 Under the Federal Insecticide. Fungicide, and Roden, side Act, as amended, for the posticide registered under EPA Reg. No.

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Avoid application directly to animals or humans. Flagmen or loaders should avoid inhalation of spray mist or contact with skin and should wash thoroughly before eating and at the end of each day's operation. See Precautionary Statements for Further Information.

HARMFUL OR FATAL IF SWALLOWED: Avoid Breathing of Spray. Do Not Take Internally. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating or drinking. Users are required to wear long sleeve shirts and long pants or equivalent, chemical resistant gloves, and boots (waterproofed). In addition, persons involved in mixing/loading operations are required to use heavy-duty chemical resistant rubber or neoprene gloves and a face shield or goggles. Change to clean clothing daily.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

# STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Contact your local Poison Control Center, hospital or physician. If the patient is unconscious, maintain breathing and heartbeat (cardiopulmonary resuscitation). If the patient is conscious and alert, induce vomiting (syrup of ipecac or stimulate the back of the throat with finger). Never Give Anything by Mouth to an Unconscious Person!

IF ON SKIN: Remove contaminated clothing and wash skin with soap and plenty of water. If irritation develops, get medical attention.

IF IN EYES: Flush with plenty of water. Get medical attention if irritation persists.

NOTE TO PHYSICIAN: There is no specific antidote for atrazine. If this product is ingested, induce emesis or lavage stomach. The use of an aqueous slurry of activated charcoal may be considered.



### ENVIRONMENTAL HAZARDS

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

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

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

This product may not be mixed/loaded, or used within 50 feet of all wells including abandoned wells, drainage wells, and sink holes. This product may not be mixed or loaded within 50 feet of intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be applied aerially or by ground within 66 feet of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 ft. around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66 foot buffer or set-back from runoff points must be planted to crop or seeded with grass or other suitable crop.

# FARMWORKER SAFETY STATEMENT

Do not enter treated areas without protective clothing until sprays have dried.

Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product.

Oral warnings must inform workers of areas or fields that may not be entered without specific protective clothing until sprays have dried, and appropriate actions to take in case of accidental exposure, as described under Precautionary Statements on this label.

When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. CAUTION. Area treated with Atrazine on (date of application). Do not enter without appropriate protective clothing until sprays have dried. In case of accidental exposure, flush eyes or skin with plenty of water. Call physician if irritation persists. Remove and wash contaminated clothing before reuse.

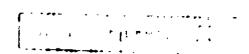
#### GENERAL INFORMATION

ATRAZINE 5F Herbicide will control most annual broadleaf and grass weeds in corn, sorghum, sugar cane, and certain other crops as specified on this label such as barnyardgrass, witchgrass (Panicum capillare), yellow foxtail, green foxtail, wild oats, large (hairy) crabgrass, giant foxtail, velvetleaf, morningglory, lambsquarters, pigweed, ragweed, nightshade, purslane and mustard. ATRAZINE 5F may be applied before or after weeds emerge.

In each case where a range of rates is given, the lower rate should be used on coarse textured soil and soil low in organic matter, and the higher rate should be used on fine textured soil and soil high in organic matter.

Following many years of continuous use of this product and chemically related products, biotypes of some of the weeds listed on this label have been reported which cannot be effectively controlled by this and related herbicides. Where this is known or suspected and weeds controlled by this product are expected to be present along with resistant biotypes, we recommend the use of this product in combinations or in sequence with other registered herbicides which are not triazines. If only resistant biotypes are expected to be present, use a registered non-triazine herbicide. Consult with your state Agricultural Extension Service for specific recommendations.

Since ATRAZINE 5F acts mainly through root absorption, its effectiveness depends on rainfall or irrigation to move it into the root zone. Should weeds develop, a shallow cultivation or rotary hoeing will generally result in better weed control.



ATRAZINE 5F is non-flammable.

Care should be taken to avoid using ATRAZINE 5F near adjacent desirable plants or in greenhouses or injury may occur.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop injury may result.

NOTE: The Seller does not recommend the use of ATRAZINE 5F in combination with other herbicides or oils except as specifically described on the label or in literature published by the Seller.

FAILURE TO FOLION ALL PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, OR TELEGAL RESIDUES.

## APPLICATION PROCEDURES

GROUND APPLICATION: Use conventional ground sprayers equipped with nozzles that provide accurate and uniform application. Be certain that nozzles are uniformly spaced and are the same size. Calibrate sprayer before use and recalibrate at the start of each season and when changing carriers. Unless otherwise specified, use a minimum of 10 gallons of spray mixture per acre for all preplant incorporated, preplant surface, preemergence, and postemergence applications (with or without oil surfactant) with ground equipment.

Use a pump with capacity to: (1) Maintain 35-40 psi at nozzles; (2) Provide sufficient aglitation in tank to keep mixture in suspension; and to (3) Provide a minimum of 20% bypass at all times.

Use centrifugal pumps which provide propeller shear action for dispersing and mixing this product. The pump should provide a minimum of 10 gallons/minute/100 gallon tank size circulated through a correctly positioned spanger tube or jets.

Use screens to protect the pump and to prevent nozzles from clogging. Screens placed on the suction side of the pump should be 16-mesh or coarser. Do not place a screen in the recirculation line. Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles. Check nozzle manufacturer's recommendations.



For band application, calculate the amount to be applied per acre as follows:

band width in inches row width in inches X per acre = per acre in field

## AERIAL APPLICATION:

Use aerial application only where broadcast applications are specified. Apply in a minimum of 1 qt. of water for each quart of ATRAZINE 5F applied per acre. For post-emergence treatments on corn and sorghum, apply recommended rate in a minimum of 2 gal. of water/A. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin, and should wash thoroughly before eating and at the end of each day's operation.

### ATRAZINE 5F IN WATER APPLICATIONS

ATRAZINE 5F, a liquified formulation, should be mixed with water and applied as a spray. Pour ATRAZINE 5F into the tank during or after filling. Hydraulic (jet) or mechanical agitation is recommended during mixing and application to keep the materials in suspension. All return lines to the tank must discharge below liquid level and agitation should not be so violent as to cause air bubbles to form in the liquid. Wash sprayer thoroughly after use.

## ATRAZINE 5F IN LIQUID FERTILIZER APPLICATIONS

Nitrogen solutions or complete liquid fertilizers may replace all or part of the water as a carrier for pre-emergence and preplant applications of ATRAZINE 5F on corn and sorghum. Mixing should be accomplished as described under water applications. Check the compatibility of this product with liquid fertilizer and/or nitrogen solution as shown below before use. Do not apply in nitrogen solution or complete liquid fertilizer after corn or sorghum emerges, except as noted under Lay-by treatment for corn, or crop injury may occur.

Compatibility Test: Since liquid fertilizers can vary, even within the same analysis, always check compatibility with herbicide(s) each time before use.

Be especially careful when using complete suspension or fluid fertilizers as serious compatibility problems are more likely to occur. Commercial application equipment may improve compatibility in some instances. The following test assumes a spray volume of 25 gal. per acre. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure:

- 1. Add 1 pint of fertilizer to each of 2 one-quart jars with tight lids.
- 2. To one of the jars, add 1/4 tsp. or 1.2 milliliters of a compatibility agent approved for this use, such as Compex<sup>R</sup> or Unite<sup>R</sup> (1/4 tsp. is equivalent to 2 pt. per 100 gal. spray). Shake or stir gently to mix.
- 3. To both jars add the appropriate amount of herbicide(s). If more than one herbicide is used, add them separately with dry herbicides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix. The appropriate amount of herbicides for this test follows:

Dry Herbicides: For each pound to be applied per acre, add 1.5 level teaspoons to each jar.

Liquid Herbicides: For each pint to be applied per acre, add 0.5 teaspoon or 2.5 milliliters to each jar.

4. After adding all ingredients, put lids on and tighten, and invert each jar ten times to mix. Let the mixtures stand 15 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (A) slurry the dry herbicides(s) in water before addition, or (B) Add 1/2 of the compatibility agent to the fertilizer and the other 1/2 of the emulsifiable concentrate or flowable herbicide before addition to the mixture. If incompatibility is still observed, do not use the mixture.



# ATRAZINE 5F PLUS EMULSIFIABLE OIL OR OIL CONCENTRATE

Adding emulsifiable oil (petroleum-derived, petroleum-derived oil concentrate, or single or mixed crop-derived oil concentrate) to postemergence water-based sprays in corn and sorghum may improve weed control. However, under certain conditions, the use of either type of oil may seriously injure the crop. To minimize this possibility, observe the following directions:

Use one of the following properly emulsified:

- 1. A suitable oil concentrate containing at least 1% but not more than 20% suitable emulsifier or surfactant blend.
- 2. Petroleum-derived oil containing at least 1% suitable soulsifier.

Note: In the event of a compatibility problem when mixing of with this product and water, a compatibility agent such as Compex or Unite should be used. Any of the above oils contaminated with water or other materials can cause compatibility problems and/or crop injury.

## MIXING PROCEDURES (All Uses):

1) Be sure sprayer is clean and not contaminated with any other materials or crop injury or sprayer clogging may result. 2) Fill tank 1/4 full with clean water, nitrogen solution, or complete liquid fertilizer. 3) Start agitation. 4) Be certain that the agitation system is working properly and creates a rippling or rolling action on the liquid surface. 5) Pour product directly from container into tank. 6) Continue filling tank until 90% full. Increase agitation if necessary to maintain surface action. 7) Add emulsifiable oil, oil concentrate, or tank mix herbicide( ) after this product is thoroughly suspended. 8) Finish filling tank. 9) Empty tank as completely as possible before refilling to prevent buildup of oil or emulsifiable concentrate residue. Maintain agitation to avoid separation of materials. 10) If an oil or emulsifiable concentrate film starts to build up in tank, drain it and clean with strong detergent solution or solvent. ') Clean sprayer thoroughly immediately after use by flusting system with water containing a detergent.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistant with its labeling.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL. CROP INJURY. OR ILLEGAL RESIDUE.

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

### ROTATIONAL CROPS - ALL USES

- 1. Land treated with ATRAZINE 5F should not be planted to any crop except corn or sorghum until the following year or injury may occur.
- 2. If ATRAZINE 5F is applied after June 10, do not rotate with crops other than corn or sorghum the next year or injury may occur.
- 3. In the High Plains and Intermuntain area of the West where rainfall is sparse and erratic or where irrigation is required, use ATRAZINE 5F to control weeds in corn only when corn is the follow corn or a crop of untreated corn, or sorghum is to precede other rotational crops.
- 4. In Western Minnesota and Eastern parts of the Dakotas, Nebraska and Kansas, corn treated with ATRAZINE 5F should rot be followed with soybeans if the broadcast rate applied was more than 3.2 pts. per acre (or comparable rate in a band) or injury may occur.
- 5. Injury may occur to soybeans planted in North Central Iowa and South Central Minnesota the year following an ATRAZINE 5F application on Harps, Canisteo, Stroden or other soils having a calcareous surface layer.

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 Do not plant sugar beets, tobacco, vegetables (including dry beans), spring-seeded small grains or small seeded legumes and grasses the year following ATRAZINE 5F application or injury may occur.

Preplant Surface-Applied, Preplant Incorporated, or Preemergence (or Post-emergence at 3.2 pt./A with Oil)

## Broadleaf or Grass Weeds Controlled

cocklebur\*\*\* nightshade barnyardgrass (watergrass)\*\*\* groundcherry
giant foxtail\*\* jimsonweed
green foxtail\*\*\* kochia proweed purslane ragweed lambsquarters annual morningvelvetleaf\*\*\*
 (buttonweed) large (hairy) crabgrass\*\* sicklepod\*\* wild oats glory mustards witchgmass (Panicum capillare)\*\*\* yellow foxtail

Post-emergence with Emulsifiable Oil or Oil Concentrate in Water (2 pt. Oil plus 1.9 pt. product/A)

## Broadleaf Weeds Controlled

annual morningglory pigweed ragweed jimsonweed smartweed lambsquarters wild buckwheat velvetleaf\*\*\*

Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or set-backs) which are different from the label, the more restrictive/protective requirements must be followed. Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state regulations.

\*\*Partial control only
\*\*\*Partial control only on medium and fine-textured soils

#### CORN

ATRAZINE 5F may be applied either before planting, at planting, or after planting as indicated below.

Preplant Surface-Applied (Broadleaf and Grass Control):



Use on medium and fine textured soils with minimum tillage or no tillage systems only in CO, IL, IN, IA, KS, KY, MN, MO, MT, NE, ND, SD, WI, WY. Apply the recommended rate of ATRAZINE 5F shown in Table I up to 30 days prior to planting. On coarse-textured soils, do not apply more than two weeks prior to planting.

If weeds are present at the time of treatment, apply in tank mix combination with a contact herbicide (for example, paraquat or glyphosate). Observe directions for use, precautions, and restrictions on the label of the contact herbicide.

NOTE: 'To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

Preplant Incorporated (Broadleaf and Grass Weed Control):
Broadcast in the spring after plowing at the rate indicated
in Table 1. Application may be made before, during or after
final seedbed preparation. If soil is tilled or worked
after application, avoid deep incorporation of ATRAZINE 5F.
Best results have been obtained when ATRAZINE 5F is applied
within two weeks prior to planting.

PRE-EMERGENCE OR AT PLANTING (Broadleaf and Grass Weed Control):

Apply during or shortly after planting prior to weed emergence at the rate indicated in Table 1.

POST-EMERGENCE (Broadleaf and Grass Weed Control):
Apply before weeds exceed 1.5 inches in height before corn exceeds 12 inches in height at rate recommended in Table I.

TABLE 1

For Control of Broadleaf and Grass Weeds

## FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE

On Highly Erodible Soils (as defined by the Soil Conservation Service (SCS)

If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply 3.2 pts./A as a broadcast spray.

If the soil coverage with plant residue is less than 30% at planting, a maximum of 2.4 pts./A may be applied.



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# On Soils Not Highly Erodible

Apply 3.2 pts./A as a broadcast spray.

## FOR POSTEMERBENCE APPLICATION

If no atrazine was applied prior to corn emergence, apply 3.2 pts./A broadcast apply. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 lbs. active ingredient (4 pts. of this product) per acre per calendar year.

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\* Broatleaf control (eastern CO, western KS, western NE, NM, OK Fan Handle, west TX, and eastern WY): On sand, loamy sand, sandy loam, mild to strongly alkaline soil and all recently leveled soil, apply no more than 1.7 pt./A, either proplant or preemergence. On other soils in these areas, apply rate in Table 1 for broadleaf and drass control.

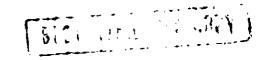
Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or set-backs) which are different from the label, the more restrictive/crotective requirements must be followed. Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

POST-EMERGENCE WITH EMULSIFIABLE DIL OR DIL CONCLNTRATE IN WOTER

Add the following volume of one of the type oils indicated for serial or ground application unless the oil label specifies otherwise:

Type Qil	Ground Application	Nersal Application
Oil Concentrate (Crop or Petroleum-derived)	1 qt./A	.5 1 qt./A
Petrolaum-derived oil	2.4 qts/A	2 qt./A

NOTE: Crop-derived or petroleum-derived oil concentrates should contain at least 1% but not more than 20% suitable emulsifier or surfactant blend. Petroleum-derived oils should contain at least 1% suitable emulsifier.



BROADLEAF AND GRASS CONTROL: For post-emergence control of those weed listed under Preplant Incorporated and Pre-emergence.

Broadcast 3.2 pt./A plus emulsifiable oil or oil concentrate after weed emergence, but before weeds reach 1.5 inches in height and before corn exceeds 12 inches in height.

BROADLEAF CONTROL: For post-emergence control of those weeds listed under Post-emergence with emulsifiable oil or oil concentrate in water. Broadcast 1.9 pt/A. plus emulsifiable oil or oil concentrate before pigweed and lambsquarters reach 6 inches in height and before all other weeds reach 4 inches in height. A cultivation may be necessary if all weeds are not controlled or if weeds regrow.

PRECAUTIONS FOR APPLICATIONS OF ATRAZINE 5F PLUS EMULSIFIABLE OIL IN WATER TO CORN

- 1. Do not use oil in ATRAZINE 5F sprays when corn is under stress from prolonged cold, wet weather, poor fertility, or other factors, or when corn is wet and succulent from recent rainfall as crop injury may occur.
- 2. Do not use oils in sprays when treating inbred lines or any breeding stock as injury may occur.
- 3. Adding other insecticides, herbicides, liquid fertilizers or other materials is not recommended with ATRAZINE 5F and emulsifiable oil in water because they cause compatibility problems or crop injury.
- 4. Store and handle emulsifiable oil carefully. Oil contaminated with even a small amount of water may not emulsify properly when added to the tank.
- 5. Do not exceed 2.5 lbs. active ingredient (4 pts. of this product) per acre per calendar year.
- 6. Postemergence application to corn must be made before corn exceeds 12 inches in height.

TANK MIXTURE WITH ATRAZINE 5F FOR CORN
This product may be tank mixed with these herbicides for control of certain broadleaf and grass weeds in corn:



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metolachlor + paraquat elachlor metolachlor + qlyphosate alachlor metolachlor + simazine paraquat metolachlor + simazine + paraquat qlyphosate metolachlor + simazine + qlyphosate simazine + glyphosate simazine + glyphosate propachlor butylate

alachlor

alachlor + plychosate

alachlor + paraquat

paraquat

qlyphosate

simazine

simazine + paraquat

butylate 6.7E

tise tank mix directions appearing on the labels of the above herbicides when tank mixing with this product. Observe all precautions and limitations on labeling of products used in a particular tank mix.

NOTE: When the labels of the above herbicides refer to Atrazine BOW, use equivalent rates of ATRAZINE SF. One lb. of 80W equals 1.78 pt. of 5L.

#### ATRAZINE SE + PARADUAT

For Aill of Existing Vecetation and Residual Weed Control where John Will Be Planted Directly Into a Cover Crop. Established Sod or in Previous Crop Residues.

Apply 3.2 pts. ATRAZINE 5F plus 1 to 2 pts. paraguat per aure, as a broadcast spray. Refer to both labels for directions, limitations and cautions. Apply 20 to 40 rallons diluted spray per acre. Add Surf-Ac 820 per another non-ionic surfactant at the rate of 8 fl. oz. per 100 gallons diluted spray. Add Atrazine to spray tank first mixing thoroughly in water. Then add paragust and burfactant. Constant agitation recommended at all times.

Atrazina plus paraquat may be applied in limited mitroden and/or complete limited fertilizer solutions when 25 or more pallons of dilute solution are applied per acre in combination with 1 or 2 nts. of Surf-Ac 820 is another non-zonic surfactant per 100 pallons. Equipment must be adjusted and calibrated to obtain thorough coverage of undesirable vecetation. Inadequate coverage and/or absence of a non-zonic surfactant will result in severe reduction of paraguat activity. Phosphate containing limited fertilizer solutions will reduce the activity of paraguat. When liquid fertilizer solutions containing phosphorus are used with paraguat, and a rapid kill is desired, use the high paraguar rate.

## FOR PUSTEMERGENCE AFEL TOATTON

If no atrazing was applied prine to come energence, apply 3.2 pts./A behaddest apply. If a postembrownia treatment jureouters following an earlier herbicide application, the

total atrazine applied may not exceed 2.5 lbs. active ingredient (4 bts. of this product) per acre per calendar year.

Rafer to the paraquat label for further directions, limitations and cautions.

ATRAZINE SF PLUS ALACHLOR 4 EC PLUS PARAQUAT

For Kill of Existing Vegetation and Residual Weed Control Where Corn Will Be Planted Directly Into a Cover Crop. Established Sod or in Previous Crop Residues.

Apply 1.6 to 3.2 pts. ATRAZINE 5F plus 4 to 5 pts. alachlor 4 EC plus 1 to 2 pts. paraguat per acre prior to, during, or after planting, but before crop emergence. Use 20 to 60 dals, of diluted spray per treated area. Add Surf-Ac 820 at 8 pts. per 100 gal. of diluted spray.

Add the Atrazine to the spray tank while agitating, then add the alachlor, paraquat and Surf-Ac 820. Continue agitation during application. Refer to alachlor label for caution and tor specific rates for a given soil type.

FOR POSTEMERGENCE APPLICATION

If no atrazine was applied prior to corn emergence, apply 3.2 pts./A broadcast apply. If a postemergence treatment is required following an earlier herbicide application, the total strazine applied may not exceed 2.5 lbs. active ingredient (4 pts. of this product) per acre per calendar year.

ATRAZINE SF PLUS METULACHLOR and ATRAZINE SF PLUS METULACHLOR PLUS SIMAZINE 4L or 80W

Preplant Incorporated or Pre-emergence: In addition to the weeds controlled by ATRAZINE SF along, metolachior + ATRAZINE SF or metolachior + ATRAZINE SF + simazine 4L applied prelant surface, prelant incorporated, or pre-emergence, also controls the following weeds: browntop panicum, cocklebur, common purslane, hairy nightshade, lambaquarters, morningglory, ragweed, smartweed, and velvetleaf.

Apply metalachlor + ATRAZINE SF or metalachlor + ATRAZINE SA + Simaline 4L preplant surface, preplant incorporated, or pre-emergence.

Preplant Surface Applied: Follow instructions for use of metolachlor alone under Application Procedures and under application instructions for metolachlor alone on corn.

Apply metolachlor + AIRAZINE 5F or metolachlor + AIRAZINE 5F



+ simazine 4L on medium soils (2.5 pts./A metolachlor + 2.6-3.2 pts./A of ATRAZINE 5F or simazine 4L or ATRAZINE 5F + simazine 4L combined) and on fine soils 2.5-3 pts./A metolachlor + 3.2/A of ATRAZINE 5F or ATRAZINE 5F + simazine 4L combined in minimum-tillage and no-tillage systems in CO, IL, IN, IA, KS, KY, MN, MO, MT, NE, ND, SD, WI, WY. Apply the tank mixtures as a split or single treatment in those states and as indicated in the metolachlor alone Preplant Surface Applied section of the metolachlor label for corn. On coarse soils, apply 2 pts./A of metolachlor and 3.2 pts./A of ATRAZINE 5F or ATRAZINE 5F + simazine 4L combined.

When using simazine 80W use equivalent rates.

Preplant Incorporated or Pre-emergence: Follow instructions for use of metolachlor alone under Application Procedures. apply metolachlor + ATRAZINE 5F or metolachlor + ATRAZINE 5F + simazine 4L using the appropriate rates from table 2.

Note: Do not make more than one application per year.

TABLE 2

Broadcast Lates Per Acre

		**********			
	Less then 32 O	rganic Matter	31 organic matter or greater		
	Atresine* 5	Atrazine Spin	Atresine 15 - Atresine 5 Fa		
	+ 0	R +	+	OR +	
	Matolachlor	Met>lacklor + Simezine** 4L or 80V	Retolechior	Hetolachlor + Simasine** 4L or SOV	
SOIL TEXTURE COARSE: Sand, loany sand, sandy loan	1.6 - 3.2 pts + 1.25 - 1.5 pts	0.8 - 1.6 pts + 1.25 - 1.5 pts + 1.1-2 pts 5im 4L -or- .7 - 1.2 lbs 5im 80	1.9 - 3.2 pts + 1.5 pts	1.0 - 1.6 pcs + 1.5 pcs - 1.25 - 2 pcs Sim 4L -or- .8 - 1.2 lbs Sim 804	
MEDIUM: Loam, silt loam silt	1.9 - 3.2 pts + 1.5 - 2 pts	1.0 - 1.6 pts + 1.3 - 2 pts + 1.25 - 2 pts 5(m 4L -er- .8 - 1.2 lbs 5(m 50)	2.6 - 3.2 pts 2 pts	1.3 - 1.6 pes + 2 pes + 1.6 - 2 pe. Siu 6L -oc- 1 - 1.2 lbs Sim 800	
FINE: Silty clay loam, sandy clay loam, elity clay, sandy clay, clay loam, clay	2.6 - 3.2 pts 2 pts	1.3 - 1.6 pcs  2 pcs  1.6 - 2 pcs Stm 4L  1 - 1 - 1bs Stm 30%	2.6 - 3.2 pts************************************	1.3 - 1.6 pre***  2 - 2.5 pts  1.6 - 2 pts \$1m 4L**	

### DO NOT USE

\*On soils having between 6% and 20% organic matter, metolachlor may be used up to 3.5 pts./A in tank mix combination with 3.2 pts/A of ATRAZINE 5F.

FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE

On Highly Erodible Soils (as defined by the Soil Conservation Service (SCS)

If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply 2 pts./A as a broadcast spray.

If the soil coverage with plant residue is less than 30% at planting, a maximum of 2.4 pts./A may be applied.

On Soils Not Highly Erodible

Apply 3.2 pts./A as a broadcast spray.

\*\*When using the tank mixture of ATRAZINE 5F + metolachlor + simazine 4L or 80W, use equal rates of each as shown when heavy broadleaf weed infestations are expected. When heavy infestations of crabgrass or fall panicum are expected, use 1:2 ratio of Atrazine + simazine instead of 1:1 ratio given in Table 2 above.

\*\*\*For cocklebur, yellow nutsedge, and velvetleaf control on fine-textured soils above 3% organic matter: Apply 3.2 pts. ATRAZINE 5F or the same total amount of Atrazine + simazine with 2-2.5 pts. of metolachlor.

ATRAZINE 5F PLUS METOLACHLOR POST-EMERGENCE



## WEEDS CONTROLLED:

yellow nutsedge.

lambsquarters ragweed barnyardgrass green foxtail (watergrass) yellow foxtail mustard Smartweed crabgrass pigweed velvetleaf crowfootgrass jimsonweed prickly sida fall panicum kochia purslane giant foxtail Weeds Partially Controlled: cocklebur, morning-glory,

Apply early post-emergence using the appropriate rates from Table 3. Apply this tank mixture before grass and broadleaf weeds pass the 2-leaf stage and before corn exceeds 5 inches in height. Application to weeds larger than the 2-leaf stage will generally give unsatisfactory control. Occasionally some corn leaf burn may result, but this should not affect later growth or yield. Do not apply this post-emergence tank mixture in fluid fertilizer, as severe crop injury may occur.

Table 3: ATRAZINE 5F plus metolachlor

POST-EMERGENCE CORN

SOIL TEXTURE BROADCAST RATES PER ACRE
ATRAZINE 5F + Metolachlor

COARSE: 1.9 pts. 1.5 pts.

Sand, loamy sand, sandy loam

MEDIUM:

Loam, silt, silt 2.6 pts. 2 pts.

FINE:
Sandy clay loam, 2.6 to 3.2 pts.\* 2-2.5 pts.
silty clay loam,
clay loam, sandy
clay, silty clay,
clay

\*For better control of cocklebur, morning-glory, velvetlear and yellow nutsedge on fine-textured soils above 3% organic matter, apply 3.2 pts. ATRAZINE 5F with 2-2.5 pts. of metolachlor per acre.

## FOR COSTEMERGENCE APPLICATION

pts./A.broadcast apply. It a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 lbs. active ingredient (4 pts. of this product) per acre per calendar year.

## ROTATIONAL CROPS:

Follow the crop rotation instructions on the metolachlor label for metolachlor plus Atrazine Preplant Incorporated or Pre-emergence - Corn.

ATRAZINE 5F + METOLACHLOR + SIMAZINE 4L or 80W WITH PARAQUAT OR GLYPHOSATE FOR MINIMUM - TILLAGE OR NO - TILLAGE SYSTEMS

In minimum-tillage or no-tillage systems where corn is planted directly into a cover crop, stale seed bed, established sod, or previous crop residues, the contact herbicides paraquat or glyphosate may be added to a tank mix of ATRAZINE 5F + metolachlor or ATRAZINE 5F + metolachlor or ATRAZINE 5F + metolachlor + simazine 4L or 80W portion of the tank mixture provides premergence control of the weeds listed on the metolachlor label in the tank mixture section for metolachlor + Atrazine or metolachlor + Atrazine + simazine Preplant Incorporated or Pre-emergence.

Application: Apply before, during or after planting, but before the corn emerges, at the rate in Table 4. Add paraguat or glyphosate at the following broadcast rates:

Paraquat: 1 - 2 pts.\* per acre plus 8 oz. Surf-Ac 820 per 100 gals. of spray mixture. Use the lower rate for control of annual weeds less than 4 inches tall and the higher rate for weeds 4 - 6 inches tall.

This treatment will not consistently control weeds taller than 6 inches.

\*Based on products containing 2 lbs. active ingredient per gal.

NOTE: Do not apply combinations containing paraquat in suspension type liquid fertilizers as the activity of paraquat will be reduced.

Glyphosate: 1.5 qts. per acre for existing annual weeds, or 2-4 qts. per acre for existing perennial weeds. See the glyphosate label for weeds controlled and recommended rates for specific weeds.



Apply in 20 - 60 gals. of water or fluid fertilizer per acre with ground equipment.

ATRAZINE 5F\*\*

TABLE 4

ATRAZINE 5F\*

## Broadcast Rates Per Acre

OR

	Metolachlor	Metolachlor +
•		Simazine 4L or 80W
SOIL TEXTURE		
Coarse: Sand, Loamy sand, Sandy	1.9 pts +	l pts. +
Loam	1.5 pts.	1.5 pts.
		1.25 pts or 8 lbs.
Medium: Loam, slit	2.6 pts.	1.3 pts.
loam, silt	+	+
	2 pts.	2 pts. +
		1.6 pts. simazine 4L
		or 1 lb. simazine 80W
Fine:*** Silty clay loam, sandy clay loam, silty clay,	2.6 to 3.2 pts.	1.3 to 1.6 pts.
sandy clay, clay loam, clay	2 to 2.5 pts.	2 to 2.5 pts.
		1.6 to 2 pts. simazine 4L or
		1.0 to 1.2 lbs. simazine 80W

<sup>\*</sup>Use simazine in preference to Atrazine when heavy infestations of crabgrass or fall panicum are expected.

<sup>\*\*</sup>When using tank mixture of ATRAZINE 5F plus metolachlor plus simazine, use equal rates of Atrazine and simazine as shown when heavy broadleaf weed infestations are expected. When heavy infestations of crabgrass or fall panicum are expected, use a 1:2 ratio of ATRAZINE 5F + simazine (4L or 80W) instead of the 1:1 ratio given above.



\*\*\*For cocklebur, yellow nutsedge, and velvetleaf control on ATRAZINE SF fine-textured soils above 3% organic matter. apply 3.2 pts./A of ATRAZINE SF, or equivalent, or the same total amount of ATRAZINE SF + simazine with 2-2-1/2 pts./A of metolachlor.

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FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE

On Highly Erodible Soils (as defined by the Soil Conservation Service (SCS)

If conservationtillage is practiced, leaving at least 30% of the soil covered with plant residue at planting, apply 2 pts./A as a broadcast spray.

If the soil coverage with plant residue is less than 30% at planting, a maximum of 2.4 pts./A may be applied.

On Smils Not Highly Erodible

Apply 3.2 pts./A as a broadcast spray.

FOR POSTEMERGENCE APPLICATION

If no atrazine was applied prior to corn emergence, apply 3.2 pts./A broadcast apply. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 lbs. active angredient (4 pts. of this product) per acre per calendar year.

## ATRAZINE SF PLUS ALACHLOR 4EC

Use as tank mixture for control of many annual broadleaf and grass weeds in corn (field, hybrid seed, silage, sweet, popcorn), including barnyardgrass, carpetweed, crabgrass, fall panicum, Florida pusley, foxtails (giant, green, yellow), goosegrass, jimsonweed, kochia, lambsquarters, mustard, nightshade, piqweed, purslane, ragweed, signalgrass (Brachiaria), smartweed, and witchgrass. This tank mix will reduce competition from the hard to control annual weeds - annual morning-glory, cocklebur, velvetleaf (buttonweed), and sandbur.

For pre-emergence or early post-emergence broadcast application, use rates in Table 5. Apply tank mixture any time from immediately after planting until weeds reach 2 leaf weed stage and corn is no more than 5 inches tall. On sweet corn, apply before crop and weeds emerge. Application after the 2-leaf weed stage will not give satisfactory

control. With post-emergence application, occasional corn leaf burn should not affect growth or yield. If applied with liquid fertilizers, spray before crop emerges.

## TABLE 5

Tank Mixtures of ATRAZINE 5F Plus Alachlor 4EC on Corn (Surface Application)

# Surface Application Rate/A

•	Less tha organic		3% or more organic matter		
Soil Texture	ATRAZINE 5L	Alachlor 4EC	ATRAZINE 5L	Alachlor 4EC	
COARSE loamy sand, sandy loam	1.2 to 1.6 pts.	4 pts.	1.6 to 2.4 pts.	4 pts.	
MEDIUM Loam, silt loam, silt	1.6 to 2.0 pts.	4 pts.	2 to 2.4 pts.	4 pts.	
FINE Silty clay loam, sandy slay loam, silty clay, sandy clay, clay	2 to 2.4 4 pts.	.5 pts.	2 to 2.8 pts.	4.5 pts.	

NOTE: Use the higher rates in the recommended ranges in areas of heavy weed infestations, or for fields under irrigation. Use a minimum of 5 pts. of alachlor 4EC per acre in this tank mixture on coarse soils and 3 quarts on medium or fine textured soils to reduce competition for hard-to-control weeds.

ATRAZINE 5F PLUS ALACHLOR 4EC ON CORN (Preplant Incorporated Application)

Table 6
Preplant Incorporated Application Rate per Acre

	Less tha organic		3% or more organic matter		
Soil Texture	ATRAZINE 5L	Alachlor 4EC	ATRAZINE 5L	Alachlor 4EC	
MEDIUM Loam, silt loam, silt	2 pts. 5	pts. 2.4	pts. 5 pt	s.	
FINE Silty clay loam, sandy clay loam, silty clay, sandy clay, clay	2.4 pts.	5.5 pts.	2.8 pts.	5.5 pts.	

NOTE: Use 6 to 8 pints of alachlor 4EC per acre for control of yellow nutsedge or to reduce competition from the hard-to-control weeds listed on this label.

NOTE: Two pass shallow incorporation is recommended to reduce competition from shattercane. Use the 4 quart rate for shattercane.

For preplant incorporated application, use rates in Table 6. Broadcast within 7 days before planting and incorporate 2 inches deep.

Apply tank mixture in a minimum of 20 gals. of water/A. Liquid fertilizer may replace all or part of the water. Add ATRAZINE 5F to spray tank, throughly mix with water, then add alachlor 4 EC. Follow mixing procedures in the section, "Application Procedures" of this label.

At least 12 weeks must elapse following treatment with ATRAZINE 5F Plus alachlor 4 EC before immature corn forage can be harvested or fed to cattle.

Refer to alachlor 4EC label for information concerning directions, limitations and cautions

ATRAZINE 5F PLUS ALACHLOR 4EC PLUS PARAQUAT or ATRAZINE 5F PLUS ALACHLOR 4EC PLUS GLYPHOSATE

MINIMUM OR CONVERSATION TILLAGE SYSTEMS TANK MIXTURES. FIELD CORN OR SILAGE CORN ONLY.

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

For mixing instructions, see the "Mixing Instructions" section of this label.

Apply these tank mixtures in 15 to 60 gals. of water 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 insure complete coverage.

Add the Atra ine to the spray tank while agitating then add the alachlor 4EC, paraquat and Surf-Ac 820. If glyphosate herbicide is used in this tank mixture, add it to the tank last instead of the paraquat and Surf-Ac 820.

## CONTROL OR SUPPRESSION OF EMERGED WEED

Add paraguat or glyphosate to the rates of ATRAZINE 5F and alachior 4EC given in Table 5.

## PARAQUAT

When used as directed, paraquat in tank mixture with Atrazine and alachlor 4EC controls many emerged annual weeds and suppresses many emerged perennial weeds. In the absence of emerged vegetation, the paraquat should be deleted, since this product does not provide pre-emergence weed control.

Broadcast Treatment - Apply 1 to 2 pints of paraquat in this tank mixture immediately before, during or after planting but BEFORE CROP EMERGENCE. Use the 2 pint rate if any weeds are 4 to 6 inches tall. This mixture may not control weads taller than 6 inches. As density of stubble, crop residue of weeds increases, spray gallonage should be increased within the recommended range for complete coverage. Add



Surf-Ac 820 surfactant at 8 oz. per 100 gals. of diluted spray. Refer to the paraquat label for precautionary statements.

#### GLYPHOSATE

Annual Weeds - Use 1.5 quarts of glyphosate herbicide per acre in tank mixture with Atrazine plus alachlor 4 EC for control of many emerged annual grass and broadleaf weeds. For emerged annual weeds controlled, see the "Weeds Controlled" section of the label for glyphosate.

Perennial Wee's - 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 glyphosate for the proper stage of growth for perennial weeds. Use of 2 to 4 quarts of glyphosate herbicide per acre in the above tank mixtures under these conditions provides top kill and reduces competition from many emerged perennial grass and broadleaf weeds. For emerged perennial weeds controlled see the "Weeds Controlled" section of the label for glyphosate. To obtain control, follow label recommendations for stage of growth and rate of application for specific perennial weeds.

To obtain the desired stage of growth, it may be necessary to apply glyphosate herbicide alone in the late summer or fall and then follow with a label approved seedling weed control program at planting.

NOTE: When using this tank mixture, do not exceed 4 quarts of glyphosate herbicide per acre.

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

# ATRAZINE 5. PLUS PROPACHLOR 65W

Use a tank mixture of ATRAZINE 5F plus propachlor 65W for control of most annual broadleaf and grass weeds in corn (field, hybrid seed, silage, and sweet corn only), such as annual ryegrass, barnyardgrass, (watergrass), carpetweed, crabgrass, fall panicum, Florida pusley, giant foxtail, goosegrass, groundsel, jimsonweed, lambsquarters, mustard, nightshade, pigweed, purslane, ragweed, smartweed and sunflower. This combination also reduces competition from buttonweed (velvetleaf), cocklebur and annual morning-glory). Broadcast 1.7 to 2.6 pts. of ATRAZINE 5F plus 3.8 to 6.0 lbs. cf propachlor 65W per acre on the surface any time from immediately after planting until proadleaf and

grass weeds reach the two-leaf stage. Use the lower rates of ATRAZINE 5F and propachlor 65W on the light-textured soils low in organic matter. Use the higher rates on heavy-textured soils high in organic matter.

A minimum of 2.3 pts. per acre of ATRAZINE 5F in the tank mixture will give better control of annual morning-glory, buttonweed (velvetleaf), cocklebur and sunflower.

Apply in a minimum of 20 gals. of water per acre. Non-pressure fluid fertilizer may replace all or part of water used as a carrier for applications applied to the soil surface before crop and weeds emerge. Add the ATRAZINE 5F to the spray tank first and thoroughly mix with water. Cut the propachlor 65W bag and fill with water to the fill line. Grasp the neck of the bag firmly and shake vigorously and add to the spray tank.

FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE

On Highly Erodible Soils (as defined by the Soil Conservation Service (SCS)

If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply 2 pts./A as a broadast spray.

If the soil coverage with plant residue is less than 30% at planting, a maximum of 2.4 pts./A may be applied.

On Soils Not Highly Erodible

Apply 3.2 pts./A as a broadcast spray.

Refer to propachlor 65W label for further directions, limitations and cautions.

ATRAZINE 5F PLUS SIMAZINE 4L OR SIMAZINE 80W

In addition to the weeds listed under ATRAZINE 5F Applied Alone - Corn and Grain Sorghum - Preplant Surface - Applied, Preplant Incorporated, or Pre-emergence, this combination also controls crabgrass, full panicum, and carpetweed.

Broadcast tank mix before planting, at planting, or after planting, but before crop and weeds emerge, at rates in Table 7. Use the 1:1 datio for control of most weeds. Use the 1:2 ratio for expected heavy infestations of crabgrass and fall panicum. Cultivate shallowly if weeds develop.

Preplant Surface - pplied: Use on medium and fine textured soils with minimum-tillage or no-tillage systems on in CO, IL, IN, IA, KS, KY, MN, MO, MT, NE, ND, SI, WI, and WY.



Apply the recommended rate of ATRAZINE 5F and Simazine shown in Table 7 up to 30 days prior to planting. Applications made less than 30 days prior to planting may be as either a split or single treatment. On coarse-textured soils, do not apply more than two weeks prior to planting. Refer to the ATRAZINE 5F alone - Preplant Surface - Applied section of the corn label for additional details.

If weeds are present at time of treatment, apply in a tank mix combination with a contact herbicide (for example, paraquat or glophosate). Observe directions for use, precautions and restrictions on the label of the contact herbicide.

NOTE: To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

Preplant Incorporated: Apply to the soil and incorporate in the spring before, during, or after final seedbed preparation. Avoid deep incorporation. For best results, apply within two weeks prior to planting.

Pre-emergence: Apply during or shortly after planting, but before crop and weeds emerge.



TABLE 7
TANK KIXTURES WITH SIMAZINE 4L OR SOW ON CORN

		Broad cast			rate/A	
Soil Texture	Atrazina	Simazine 80V	Simesine 4L	Attestae		_
Sand, loamy sand, sandy loam	1-71	1.25 16	2 950	1.1.250	1.67 15	2.6 pts
Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sandy clay, or silty clay with low organic matter	1.92 pc	1.5 16	2.4 pca	1.3 pts	2 16	3.2 pts
Loan, silt loan, silt, clay loan, sand, clay loan, silty clay loan, sandy clay, or silty clay with medium to high organic matter, and clay (including dark prairie soils of the Corn Belt)	2.4 >10	1.8 16	3 pts	1.5 pes	2.4 15	3.84 pt

\*For cantrol of most weeds.

\*\*Stor control of expected heavy infestations of crangrams and fall panicum.

herer to Corn sections of this label and to simazine 44 or simazine 80W label for further directions, limitations and rantions.

MIRAZINE BOW FLIE BIMOZINE AL DE BOW PLUS PARGONAT

Her Fill of Relating Vegetation and Residual Meed Control Where Corn Will He Flanted Directly Into a lover Crop. Fatablished Sod on in Freytons Crop Residues.

Opply 1.6 to T.D ptm. ATRAZINE SE blow 2-4 btm. simazine Auto 1.25 to 2.5 lbm. simazine 80% plus 1 to 2 btm. paraguat the sonayer acre prior to, during on after blenting — but infine ment energenes. The lbm low rates of Atraxine and simerine on light soils, and the higher rates on beavy alaments. Use 20 to 50 mals, of diluted spray ner screved arms. Add Sunt-Ac 820 or another non-ionic surfactant at the mate of 5 fl. oz. her 100 gals, diluted spray. Add the oten into the surfactant, and the material of the spray that while autoting, then add the minarios, paramont, and during application. The the continue relation of the Dorac to 2 btm. has the first rate of Sunt-Ac 820. This is the continue testion is 4 another tall. This is the will not control weeds taller than 6 inches. Sefer to paraguat and simesize labels for further limitations and oracautions.

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if conservation tillage is practiced, leaving at least 20% of the smil covered with plant residues at planting, apply 1.0 rts./A as a broadcast spray.

if the abil coverage with plant residue is less than 30% at blants in a harrishm of 3.4 pts./A may be applied.

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## ATRAZINE SF PLUS SIMAZINE 4L OR 80W PLUS GLYPHOSATE

when applied as recommended under the conditions described, this tank mixture controls many emerged weeds, and gives pre-emergence control of many annual weeds when corn will be planted directly into a cover crop, established or in previous crop residues.

Apply this tank mixture in 20 to 60 gallons of water per acre immediately before, during or after planting, but BEFORE CROP EMPRGENCE. As density of stubble, cro, residue or weeds increases, spray gallonage and rate should be increased within the recommended ranges to insure complete coverage.

Annual Weeds - apply Atrazine and simazine to actively growing grasses and broadleaf weeds that are 6 inches tall at the rates given in Table 8 plus 1 quart of glyphosate per acre. If the weeds are over 6 inches tall, increase the rate of glyphosate to 1.5 qts.

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 glyphosate label for the proper stage of growth for perennial weeds. Apply the atrazine and simazine at the rates given in Table 8 plus 2-4 qts. of glyphosate per acre. This combination will provide top kill and reduce competition from many emerged perennial grass and breadleaf weeds.

NOTE: Do not use this tank mix on sand or loamy sand soils. Do not exceed 4 qts. of glyphosate per acre in this tank mixture. Not recommended to control bermudagrass or johnsongrass in minimum tillage systems.

WABLE 8: ATRAZINE 5F plus Simazine 4L or 80W for mixture with Glyphosate.

Broadcast Rate Per Acre

Scil Texture ATRAZINE 5F\* Simazine \* 4L or 80W

Coarse: sandy

1.6 pts. 2 pts. or 1.25 lbs.

loam only

Medium: loam silt loam, silt, 1.6 to 2.3 pts.

2-2.75 pts/or 1.25-1.75 lbs.

sandy clay loam

Fine: silty clay

1.9 to 2.6 pts.

2.35-3.15 pts.

or 1.25-2 lbs.

loam, clay loam, sandy clay, silty

clay, clay

FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE

On Highly Erodible Soils (as defined by the Soil Conservation Service (SCS)

If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply 3.2 pts./A as a broadcast spray.

If the soil coverage with plant residue is less than 30% at planting, a maximum of 2.4 pts./A may be applied.

On Soils Not Highly Erodible

Apply 3.2 pts./A as a broadcast spray.

\*Use the higher rate of Atrazine and simazine in the recommended ranges in soil with greater than It organic matter.

## ATRAZINE SE PLUS BUTYLATE 6.7E

A tank mix combination of ATRAZINE SF and butylate 6.7E can be applied and mixed into the soil before planting for weed control in corn. This combination will control a broader spectrum of weeds than will either material used alone. addition, potential hazard of ATRAZINE residues affecting certain succeeding crops is reduced because a lower rate of ATRAZINE can be used when it is combined with butylate 6 7E than when it is used alone.

FOLLOW ALL USE PRECAUTIONS AND WARNINGS THAT APPEAR ON THE BUTYLATE 5.7E LABEL, SUPPLEMENTARY



BUTYLATE 6.7E LITERATURE AND ELSEWHERE ON THIS LABEL.

MAKE ONLY ONE APPLICATION PER CROP AFTER TPEATMENT WITH ATRAZINE SF/BUTYLATE 6.7E COMBINATION. DO NOT PLANT ANY CROP EXCEPT CORN UNTIL THE FOLLOWING YEAR OR INJURY MAY OCCUR.

DO NOT USE ON MILO OR SORGHUM.

DO NOT USE ON CORN SEED STOCK (BREEDERS, FOUNDATION, OR INCREASE).

For weeds controlled by ATRAZINE 5F/butylate 6.7E see the butylate Label.

The ATRAZINE 5F/butylate 6.7E combination can be mixed with water or combined with fluid (solution, slurry or suspension) fertilizers and applied as a spray, or can be impregnated on dry bulk fertilizers.

See Appendix III on butylate 6.7E label for Tank Mix Directions.

ATRAZINE 5F/butylate 6.7E FLUID FERTILIZER TANK MIX.

The ATRAZINE 5F/butylate 6.7E combination can be combined with fluid fertilizers for applications made before planting. However, the physical compatibility with these fluid fertilizers must be determined before combining in the spray tank, and even though found to be compatible, constant agitation is necessary to keep the ATRAZINE 5F/butylate 6.7E evenly mixed with the fluid fertilizer during application.

In some areas disking 2 to 3 times spaced at 4 to 6 week intervals during fall and winter can be done. If this cannot be done, start with fall plowing followed by several diskings in the spring before planting.

The disking cuts rhizomes into small pieces and brings them to the surface, where both the weather and butylate 6.7E will kill or weaken them.

Rhizome Bermudagrass: The rhizomes and stolons of bermudagrass must be cut up thoroughly so that four or less nodes remain on a strand. For control of bermudagrass, whe disc must be set to cut 6 inches deep.

For Suppression of Arbadleaf Signalgrass: For early and mid-season suppression, use 7-1/3 pts. of butylate 6.7E and 1 to 1-1/2\* quarts ATRAZINE 5F per acre. Cultivation or application of a post-emergence herbicide recommended for



broadleaf signalgrass will aid in extending control to late season.

For Suppression of Hemp Dogbane: for early and mid season suppression, use 7-1/3 pints of butylate 6.7E and 1 to 1-1/2\* quarts ATRAZINE 5F per acre. Cultivation or application of a post-emergence herbicide recommended for hemp dogbane may aid in extending control beyond mid-season.

\*Use the higher rate of ATRAZINE 5F on soils with over 5% organic matter.

See Appendix IV on the butylate 6.7E label for directions on use of dry bulk fertilizer applied in the Fall with this combination.

NOTE: Do not use Fall Application for suppression of wild cane.

# CULTURAL PRACTICES FOLICWING APPLICATION

Should weeds develop, a shallow cultivation or rotary howing will generally result in better weed control. When cultivating for any reason, it should be shallow; i.e., no more than 1/2 the depth the herbicide was incorporated.

## RECOMMENDATIONS

NOTE: The ATRAZINE 5F/butylate 6.7E tank mix combination is rot recommended on corn grown in Arizona or in the ten Southernmost California counties.

For all uses, cultivation is recommended in addition to the ATRAZINE 5F/butylate 6.7E treatment in fields with moderate to heavy infestations of wild came, nutgrass, sandbur, johnsongrass, seedlings, rhizome, bermudagrass, Taxus panicum or volunteer sorghum.

BROADCAST RATES PER ACRE CONVENTIONAL SPRAY - ATRAZINE 5L/BUTYLATE 6.7E.

For control of annual grasses and broadleaf weeds: Use -- 3/4 to 4-3/4 pints butylate 6.7E and 1 to 1-2 quarts
ATRAZINE 5F per acre. Use the higher rate of butylate 6.7E on medium (medium fine textured-silt loam, clay loam, etc.) to fine (fine textured-clay) soils and for sandbur and johnsongrass seedling control.



For control of nutsedge and Taxus panicum (in addition to the broadleaf weeds and other annual grasses listed: Use 4-3/4 to 7-1/3 pints of butylate 6.7E and .8 to 1-1.2 quarts per acre. Use the higher rates of butylate 6.7E on medium (medium fine to textured-silt loam, clay loam, etc.) soils, fine textured-clay) soils and for heavy infestations.

For partial control (suppression) of wild cane (and for the control of the broadleaf weeds and other annual grasses listed): When applied and incorporated immediately before planting, butylate 6.7E at the rate of 7-1/3 pints and .8 to 1-1.2 quarts ATRAZINE 5F per acre will reduce competition from wild cane. On continuous corn acreage with high cane speed population, rotation to another crop is recommended.

NOTE: See preceding butylate 6.7E section for wild cane supplemental cultural and tillage practices.

For control of Johnsongrass and Bermudagrass (in addition to the broadleaf weeds and annual grasses listed): Apply and disc-incorporate butylate 6.7E just before planting at the rate of 4-3/4 to 7-1/3 pints plus to .8 to 1-1.2 quarts of ATRAZINE 5F per acre. Use the higher rate of butylate 6.7E on medium (medium fine textured-silt loam, clay loam, etc.) soils, fine (fine textured-clay) soils, for rhizome johnsongrass suppression and for heavy infestations. Disc a second time at right angles to the first. Cultivate at least once, preferably twice.

Johnsongrass: Using a program of plowing and disking followed by butylate 6.7E and ATRAZINE 5F will give good control of seedlings and greatly reduce competition from plants coming from rhizomes.

## PLANTING

Do not plant seed deeper than 2 inches. For a ATRAZINE 5F/butylate 6.7E application made before planting, seeding can be done immediately, or it may be delayed up to 2 weeks. To avoid removing ATRAZINE 5F/butylate 6.7E from the row (with loss of weed control in the row), do not move or shape soil after treatment, such as by planting in deep furrows. If it is necessary to work the soil following application and incorporation but before planting, do not work the soil deeper than depth the herbicides were incorporated.

Refer to Appendix II on butylate 6.7E label regarding the procedure for testing the compatibility of ATRAZINE/butylate 5.7E combination with fluid fertilizers.

IMPPEGNATION ON DRY BULK FERTILIZEPS

## APPLICATION AND SOIL INCORPORATION DIRECTIONS

## SPRAY APPLICATION AND MECHANICAL INCORPORATION

Apply the recommended dosage in 10 to 50 gals. of water per acre (use the higher gallonage in arid areas) using a properly calibrated, low-pressure type nozzle (flood, fan or swirl chamber) on boom-type sprayer having good, but not excessive agitation. Check frequently during application to be sure nozzles are free from clogging and are delivering a uniform spray pattern. Read directions on this label concerning nozzle and screen sizes.

The herbicides must be incorporated into the soil immediately after application to prevent loss of the butylate 6.7E.

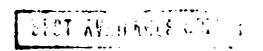
Whenever possible, application and incorporation should be done in the same operation. Apply the herbicides to soil dry enough to permit good soil mixing.

See Appendix I on butylate 6.7E label for Soil Mixing (incorporation) before Planting Directions.

Loss of weed control will result from any delay in incorporation if butylate 6.7E is applied to a moist soil surface.

If there must be a delay (less than one hour) in incorporation of the herbicides when application and incorporation are done in separate operations, butylate 6.7E must be applied to a dry soil surface (at least 1/2 inch deep) and free from dew and incidental moisture.

IMPORTANT: Thorough mixing of butylate 6.7E in the soil is necessary. The soil must be in good tilth. Improper disking or poor tilth (large clods) may result in unsatisfactory control.



# PRECAUTIONS FOR ALL APPLICATIONS TO CORN

- 1. Post-emergence application to corn must be made before corn reaches 12 inches in height.
- 2. The maximum application rate for corn is 2.5 lbs. a.i. per acre per calendar year. Applications for quackgrass suppression in corn are restricted to spring application only. No fall applications are permitted.
- 3. To avoid crop injury and illegal residues do not apply more than 4 pts. per acre of ATRAZINE 5F to corn in any one year.
- 4. Following harvest of a treated crop, plow (moldboard or disk-plow) and thoroughly till the soil in the fall or spring to minimize possible injury to rotational springseeded crops, regardless of the rate used.
- 5. Do not graze treated area or feed treated forage to livestock for 21 days following application or illegal residues may result.
- 6. For best control of velvetleaf and cocklebur, the application rate cannot be less than 2 lbs./A active ingredient, either alone or in tank mix combination.

For post-emergence applications plus emulsifiable oil or oil concentrate, see additional precautions under that section of this label.

SORGHUM AND SORGHUM-SUDAN HYBRIDS (GRAIN AND FORAGE TYPES)

Apply before planting, at planting, or after planting. See Corn section for weeds controlled.

Preplant Surface-Applied (Broadleaf and grass control):
Use on medium-and-fine-textured soil with minimum-tillage or
no-tillage systems only in CO, IL, IN, IA, KS, KY, MN, MC,
MT, NE, ND, SD, WI, WY. Apply 2/3 the recommended rate of
Atrazine shown in Table 9 for the soil texture as a split
treatment 30-45 days prior to planting and the remainder at
planting. Applications made less than 30 days prior to
planting may be as either a split or single treatment.

Under dry conditions, irrigation after application is recommended to move Atrazine into the soil.

If weeds are present at time of treatment, apply in a tank mix combination with a contact herbicide (for example, paraquat or glyphosate). Observe directions for use,



precautions, and restrictions on the label of the contact herbicide.

NOTE: To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

PREPLANT INCORPORATED (BROADLEAF AND GRASS CONTROL)
Broadcast in spring after plowing at rate in Table 9. Apply before, during, or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation. For best results, apply within two weeks prior to planting.

PRE-EMERGENCE (BROADLEAF AND GRASS CONTROL)
Apply at rate shown in Table 9 before weeds exceed 1.5 inches in height and before sorghum exceed 12 inches in height.

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### TABLE 9

Preplant Surface, Preplant Incorporated, and Pre-emergence Applications \*
For Broadleaf and Grass Weed Control in Sorghum

FOR AL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE

On Highly Erodible Soils (as defined by the Soil Conservation Sarvice (SUS)

If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply 3.7 pts./A as a broadcast spray.

If the soil coverage with plant residue is less than 30% at planting, a maximum of 2.4 pts./A may be applied.

On Soils Not Highly Erodible
Apply 3.2 pts./A as a broadcast spray.

# FOR POSTEMERGENCE APPLICATION

If no atrazine was applied prior to sorghum emergence, apply 3.2 pts./A broadcast apply. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 lbs. active ingredient (4 pts. of this product) per acre per calendar year.

\*Do not apply preplant in AL. AR. FL. GA. LA. MS. NC. NM. OK. SC. TN. or TX. Do not apply pre-emergence in NM. CK. or TX. except in northeast OK and the TX Gulf Spast and Blackland areas.

Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or set-backs) which are different from the label, the more restrictive/ protective requirements must be followed. Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

In case of planting failure, sorghum or corn may be replanted. Do not make a second broadcast application, or injury may occur. If originally applied in a band and sorghum or corn is replanted in untreated row middles, this product may be applied in a band to the second planting.

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PRE-EMERGENCE BROADLEAF WEED CONTROL IN FURROW IRRIGATED BEDDED SORGHUM (AZ and CA only):

For pre-emergence control of broadleaf weeds such as ground cherry, lambsquarters, morning-glory, mustard, pigweed and purslane, broadcast 1.3 to 1.9 pts. per acre. Use the lower rate on coarse-textured soils and soils low in organic matter and use the high rate on fine-textured soils and soils high in organic matter. Make application after bed preparation, during or after planting, but before sorghum and weeds have emerged and before the first furrow irrigation. Several irrigations should follow the application, making sure that all soil is thoroughly wet.

PRECAUTIONS FOR PRE-EMERGENCE APPLICATIONS OF ATRAZINE 5F TO FURROW IRRIGATED BEDDED SORGHUM GROWN IN AZ AND CA:

To avoid possible sorghum injury, do not use on sand or loamy sand soils or on sorghum planted in the furrow. Additionally, applications made to sorghum growing on alkali soils or where cuts, fills or erosions have exposed calcareous or alkali subsoils, may result in crop injury. In case of crop failure, do not replant sorghum for eight months following application. Corn may be planted immediately.

POST-EMERGENCE (BROADLEAF AND GRASS WEED CONTROL):

Apply before weeds exceed 1.5 inches in height at the rate indicated in Table 10. Application may be made up to sorghum reaching 12 inches in height.

TABLE 10

Post-emergence Broadleaf and Grass Weed Control in Sorghum

Soil Texture	Minimum Height of Sorghum at Treatment	Broadcast Rate/ATRAZINE 5F
Sand or loamy sand Sandy loam	DO NOT U See directions for br control	oadleaf and weed
Silt loam to sandy clay loams	Completely emerged	3.2 pts.
Olton and Pullman clay soils	At least 6 inches high	3.2 pts.

Silty clay loams and heavier so: 1s

+

Completely emerged 3.2 pts.

FOR POSTEMERGENCE APPLICATION

If no atrazine was applied prior to Sprohum Emergence, apply 3.2 ots./A broadcast apply. If a postemergence treatment is required tollowing an marlier herbicide application, the total atrazine applied may not exceed 2.5 lbs. active ingredient (4 pts. of this product) per acre per calendar

POST-EMERGENCE BRUADLEAF WEED CONTROL WITH ATRAZINE 54 PLUS EMULBIFIABLE GIL OR OIL CONCENTRATE IN WATER:

Broadcast 1.9 pts. per acre for control of tiroadless weeds much as annual morning-plory, cocklebur, lambsquarters. mustard, bigweed, ragweed, smartweed and wild bickwheat. Application should be made before pigweed and lembsduarters reach o inches in height and before all other weeds reach 4 inches in height. In CO. western FS. NM. OF. TX. and desert recions of AZ and CA, apply when sorghum is 6-10 inches in neight, but before it reaches 12 inches. In all etrer areas, apply after somehum reaches the three-lest stade. field emulsifiable oil at the rate of 1 gal. per acre for pround applications and 0.5 gal. per acre for agricl applications, or add 1 ot, per acre of pil concentrate for pround application. A fultivation may be necessary if all weeds are not controlled or if regrowth of weeds occurs.

For the list of weeds controlled, see ATRAZINE SE Coplied Alone - Corn on Grain Borohum - Post-emergence with Emulsifiable Ux. or Qil Concentrate in Water.

PRECAUTIONS FOR APPLICATION OF ATRAZINE OF PLUG EMPLATAPLE DIL OR DIL CONCENTRATE IN WATER TO SORGHUM - Bee "Precautions for applications with emulsifiable oil or oil concentrate in water in Corn section.

POST-EMERGENCE BROADLEAF WEED CONTROL WITH ATRAZINE SE PLUS SURFACIANT (CO. western .8. NM. OK. TX. and desert regions of AZ and CA only): Proadcast 1.9 ots. of ATHOZINE SE plus .75-1.50 pts. of surfectant per acre after toronum reaches \$ inches in height, but before weeds reach 1.5 inthes in height. Apply only on sandy loams and finer-taxtured soils.

TANK MIXTURES FOR GRAIN SORGHUM

ATRAZINE SE + METULACHIOR on Brain Sprakum (Cynnetrinil) Ireated Seed)



The ATRAZINE 5F + metolachlor tank mixture provides control of weeds listed on label under the ATRAZINE 5F + metolachlor on corn tank mix section.

Apply ATRAZINE 5F + metolachlor pre-plant incorporated or pre-emergence using the appropriate rates from Table 12 Preplant Incorporated or Pre-emergence. Follow the use instructions on the metolachor label immediately preceding Table 12.

TABLE 12: ATRAZINE 5F + Metolachlor - Grain 'orghum'

# Broadcast rates per acre

Soil Texture	Less than 1.3% organic matter	1.5% organic matter or greater
	ATRAZINE 5F" + Metolachlor	ATRAZINE 5F + Metolachlor
Coarse: sand, loamy sand, sandy loam	Do Not Use	Do Not Use
Medium: loam milt, milt loam	Do Not Use	1.9 ptm. 5L + 1.5 ptm.
Fine: silty clay loam, sandy clay loam, silty clay, sandy clay, clay loam, clay	1.9 p'm 5L +1.5 p'm.	2.3-2.0 otm. 5L + 1.75-2 ptm.

# FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE

On Highly Erodible Soils (as defined by the Soil Conservation Service (SCS)	• • • • • • • • • • • • • • • • • • • •	····
If conservation tillage is practiced, leaving at least of the soil covered with plant residues at planting, ap 3.2 pts./A as a broadcast spray.	104 ·	••••
If the soil coverage with plant residue is less than 10 planting, a maximum of 2.4 pts./A may be applied.	1 At	****
On Soils Not Highly Erodible		

Apply 3.2 pts./A as a broadcast spray.

. . . .

\*Do not use in NM, OK, or TX except in northwest OK and the Texas Guif Coast areas. Do not apply preplant incorporated in AZ or the Imperial Valley of CA.

# Precautions:

- 1. Applications of Atrazine + metolachler c i highly alkaline soils or on eroded areas where calcareous subsoils are exposed may cause sorghum injury.
- If sorghum seed is not properly treated with dyometrinil, Atrazine + metolachlor vill severely injure the crop.
- 3. Under high soil moisture conc.tions prior to sorghum emergence, injury may occur following the use of Atrazine + metolacher. The crop will formally outgrow this effect.
- 4. Do not use Atraxine + metolaralor on sorghum grown under dry mulch tillage or injury may occur.

Rotational Crops: Refer to the crop rotation instructions on the autolachlor label for metolachlor + Atraxine tank mixtures on corn.

# PRECAUTE ' ' OR ALL APPLICATIONS TO SOFGHUM

- Post-amergance application to sorghum must be made before sorghum reaches 12 inches in height.
- 2. The maximum application rate for morghum is 2.5 lbs. active ingredient for acre per calendar year. Application for quackgrass suppression in sorghum are restricted to a spring application only. No fall applications are permitted.
- 1. Heavy rains immediately following application tend to result in excessive concentrations of herbicide in seed.: furrow, resulting in possible crop injury. Applications to furrow-planted sorghum should not be made until furrows are leveled 'plow-in'. Deep planter marks or seed furrows should also be leveled before application...
- 4. Application made to sorohum growing under stress caused . by minor element deficiency or to sorohum growing on . ... highly calcareous soils may result in crop injury.

- 5. Do not graze or feed forage from treated areas for 21 days following application or illegal residues may result.
- 6. Following harvest of a treated crop, plow (moldboard or disk-plow) and thoroughly till the soil in the fall or spring to minimize possible injury to rotational springseeded crops, regardless of rate used.
- 7. Injury may occur if both this herbicide, preplant surface, preplant incorporated, or preemergence, and an at-planting systemic insecticide applied in-furrow are used.

For applications to furrow-irrigated bedded sorghum in Arizona and California and for post-emergence applications plus emulsifiable oil, see additional precautions under these sections of this label.

Suggestions for Rotational Crops:

See "Suggestions for Rotational Crops" at the end of Corn Section.

#### WINTER WEED CONTROL IN TEXAS

For postemergence control of winter weeds only, such as henbit, sendling dock, and annual thistle on fall badded land in the Gulf Coast and Blacklands of Texas. Apply 0.8 - 1 qt/A postemergence to the weeds in November or December to land that will be planted to corn, grain sorghum or forage, sorghum the following spring. For best results add a suitable surfactant such as Surf-Ac 820 at the rate of 0.7%, of the spray volume, an emulsifiable oil at the rate of 1.0% of the spray volume, or an oil concentrate at the rate of 1 qt per acre.

Note: Do not plant any crops except corn, grain sorghum, or forage sorghum the apring following this treatment, or illegal residues may result.

CHEMICAL FALLOW-ATRAZINE SE ALONE

WHEAT-SOPGHTM-FALLOW

This treatment controls annual broadleaf and grass weeds following wheat harvest and in the following sorghum crop when grown under minimum tillage.

Apply 4.8 pts. to wheat stubble immediately following wheat harvest. If weeds are present, remove them with a sweep plow or other suitable implement after application or use an approved contact herbicide before or after application of ATRAZINE 5F. Plant sorghum into wheat stubble the following spring with minimum disturbance of the soil. Use a surface planter or a planter leaving a shallow furrow. If weeds are present at planting, remove them with a sweep plow or other suitable implement before planting.

For the list of weeds controlled, see ATRAZINE 5F Applied Alone - Corn or Grain Sorghum - Preplant Surface-Applied, Preplant Incorporated, or Preemergence.

### PRECAUTIONS:

- 1. Use only on silt loam or finer textured soil.
- 2. Wheat-sorghum-fallow cropping sequence must be followed.
- 3. Do not apply following sorghum harvest.

NOTE: To avoid illegal residues, do not graze or feed forage from treated area to livestock. To avoid illegal residues and crop injury do not plant any crop other than those on this label within 18 months following treatment.

WHEAT-CORN-FALLOW (KS, NE): This product controls cheatgrass (downy brone, chess), kochia, mustards, pigweed, Russian thistle, wild lettuce, wild sunflower, and volunteer wheat during period after wheat harvest. Weed control may extend into following corn crop grown under minimum tillate:

Follow directions for use, notes, and precautions in the "Wheat-Sorghum-Fallow: section above, substituting corn for references to soughum."

WHEAT-FALLOW-WHEAT (CO, KS, MT, NE, ND, SD, and WY): For ... pre-emergence and control of cheatgrass (downy brome, chess), common lambsquarters, field pennyuress, kochia, ... mustard, Russian thistle, wild lettuce, and suppression of volunteer wheat during fallow period of a wheat-fallow-wheat rotation, broadcast .8 - 1.6 pt/A on all soils except those listed under "Pre-mattions". For control of pigweed and wild

sunflower, use the higher rate. Apply to stubble ground. Treat only once during same fallow period.

TANK MIXTURES FOR CHEMICAL FALLOW

WHEAT-SORGHUM-FALLOW OR WHEAT-CORN-FALLOW (KS, NE)

# ATRAZINE SF PLUS PARAQUAT

If weeds are present at application, a tank mix with paraquat may be used. Broadcast .8 - 1.6 pts. of this product plus 1-2 pts. of paraquat in 20-60 gals. of water/A by ground equipment. Add 0.5-1 pt. of a nonionic surfactant, such as Surf-Ac \$20, per 100 gals. of spray mixture. Add this product to spray tank first and thoroughly mix with water. Then add paraquat followed by surfactant. Use the 2 pt. rate of paraquat if weeds are 4-6 inches tall. This mixture will not control weeds taller than 6 inches. Apply to stubble ground. Treat only once during same fallow period. Refer to paraquat label for further directions, precautions, and limitations.

If weeds are present at application and this product is used alone, use either an approved contact herbicide before or after treatment, or tillage after treatment.

Use tillage to control weeds which escape during fallow period. Till before planting. For this product applied alone or in tank mixture with paraquat, plant at least 2 inches deep and 12 months or more after application.

#### PRECAUTIONS:

- 1. Do not use on sand soil.
- Do not treat eroded hillsides, caliche and rocky outcroppings, or exposed calcarec s subsoil.
- 3. Do not treat soils of the Rosebud and Canyon Series in western NE and adjoining counties in CO and WY.
- 4. Do not treat soils with calcareous surface layers.
- 5. Avoid apray overlay.

NOTE: Do not graze treated areas within 6 months after application or illegal residues may result.

AERIAL APPLICATION: In order to assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft. using low drift nozzles at a maximum pressure of 40 psi. and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply ATRAZINE SF alone by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

# ROADSIDES

To control certain annual weeds in established perennial grasses along roadsides in CO, KS, MT, NE, ND, SD, and WY, including cheatgrass (downy brome, chess), common (annual) broomweed, little barley, medusahead, sagewort, and tumble mustard, broadcast 1.6 pt/A in a minimum of 10 gallons of water by ground equipment in the fall before ground freezes, or after thawing in the spring, but before the established grasses green-up and before weeds emerge. Examples of desirable established grasses include big bluestem, bluegrama, bromegrass, buffalo grass, crested wheatgrass,

Indiangrass, little bluestem, side-oats grama, switchgrass, and Western wheatgrass. Apply only once per year. Temporary discoloration or other form of injury to the desirable perennial grasses may occur following application.

NOTE: To avoid illegal residues:

- 1. Do not cut or feed roadside grass hay.
- 2. Do not allow livestock to graze treated areas.

#### SUGARCANE

For control of many broadleaf & grass weeds, such as crabgrass, jungle rice, wire grass, foxtail, amaranths, Flora's paintbrush, fireweed and similar plants. Broadcant, 1.6 - 3.2 qts. per acre at time of planting or rationing, but before the cane emerges.

Broadcast aemility in a minimum of 5 gal. of spray per acre, or broadcast or band by ground equipment in a minimum of 20 gal. per acre, unless indicated otherwise. One additionation application may be made over the cane as it emerges, and two additional applications may be made interline after emergence, as a directed spray. Repeat treatments, where needed, may be applied broadcast, band, or interline as suggested with the final application being prior to "close-

in. " Do not exceed the rate of herbicide suggested for any one crop of sugarcane.

NOTE: Where high rates of Atrazine are used along, apply in a minimum of 1 qt. of water for each .8 qt. of ATRAZINE SF applied per acre.

ARRIAL APPLICATION: In order to assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft. using low drift nossles at a maximum pressure of 40 psi. and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not advesely affect adjacent sensitive nontarget plants, apply ATRAZINE 5F alone by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

#### FLORIDA

For control of emerged Pellitory Weeds (artillery weed). Apply .6 -1.0 pt/A in 40 gals. of water per acre as a directed spray, by ground equipment prior to "close-in". Add 2 qts. of surfactant for each 50 gals. of spray and be sure weed foliage is thoroughly covered.

For control of alexandergrass, large crabgrass, pellitory (artillery) weed, and spiny asseranth, use one of the following methods at planting or rationing.

- 1. Apply 5.4 pts/A pre-emergence. Follow with one or two applications, as needed, post-emergence to sugarcane and weeds, at 3.2 pts/A. Treat before weeds exceed 1.5 inches in height.
- 2. Apply 1-3 times, as needed, at 3.2 pts/A post-emergence to sugardane and weeds. Treat before weeds exceed 1.5 inches in height.

### LOUISIANA

For Control of annual weeds during the summer fallow period; apply 3.2 pt/A to weedfree beds immediately after bed formation. Follow normal weed control after planting.

Precautions: To avoid crop injury:

- Do not apply more than 10 qt/A to any one crop of sugarcane.
- 2. If making 3.2 pt/A application during summer fallow period do not exceed 6.4 qt/A during remainder of the growing season, or illegal residues may result.

#### TEXAS

Use ATRAZINE SF for control of barnyardgrass, pigweed, purslane and sunflower in plant or ration sugarcane.

Apply 6.4 pts/A of ATRAZINE SF pre-emergence. Follow with one or two applications, as needed, at 4.8 pts/A post-emergence to surgarcane and weeds.

For best results when weeds are emerged, add a nonionic surfactant, such as Surf Ac 820, at a concentration of 2 qts/100 gals. to the spray and apply before weeds exceed 1.5 inches in height.

#### PRECAUTIONS:

- 1. Do not apply ATRAZINE 5F after "close-in."
- 2. Do not apply more than 20 pts. of ATRAZINE SF to any one crop of came.
- 3. Injury to sugarcane may occur when under moisture stress, when soil is of low adsorptive capacity, or when land is first cropped to sugarcane.

# CONIFERS

For control of annual broadleaf and grass weeds prior to transplanting, after transplanting or in established conifers (including Douglas fir, grand fir, noble fir, white fir, Austrian pine, bishop pine, Jeffrey pine, knobcone .... pine, loblolly pine (shore pine), monterey pine, ponderost pine, Scotch pine, slash pine, blue spruce, and Sitka spruce): Broadcast 3.2 - 6.4 pts. in a minimum of 5 gale of water per acre by air or 10 gals by ground before weeds are. 1.5 inches tail. Apply to established traes between fall and early spring while trees are dormant. For applications prior to transplanting allow sufficient precipitation to activate Atrasine before transplanting.

In areas where apring and summer rainfall is inadequate to activate Atraxine, apply during fall prior to apring transplanting.

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#### DORMANT BERMUDA GRASS

ATRAZINE 5F may be applied to Bermuda grass during the dormant season only. Applications to Bermuda grass during the growing season will cause injury. Follow rates below.

### RATE OF APPLICATION

Determine the total area to be sprayed and base rate of application on the chart below. Avoid overlapping spray pattern while treating. Shake contents well before mixing.

Area To Be Treated	Amount of ATRAZINE 5F
500 sq. ft.	1.5 tablespoons
1,000 H H	3 " (1.50 oz.)
3,000 " "	4.5 ounces
5,450 H H	8 ounces
10,900 " "	1 pint
(0.25 acre)	<del>-</del>
1 Acre	2 Quarts

TURFGRASS FOR FAIRWAYS, LAWNS, SOD PRODUCTION\* AND SIMILAR AREAS

\*In states other than Florida. For use on turfgrass for sod in Florida, see "Turfgrasses for Sod (Florida only)" section above.

Bermudagrass, Centipedegrass, St. Augustinegrass, and Zoysia Grass.

Apply ATRAZINE 5F after October 1 before emergence of winter annual weeds for control of annual bluegrass, burclover, carpet burweed, chickweed, corn speedwell, henbit, hop clover, and spurweed. ATRAZINE 5F will control annual bluegrass even if it is emerged at time of treatment. For control of summer annual weeds listed in the preemergence portion of the ATRAZINE 5F. Applied Alone - Corn or Grain... Sorghum section of this label, also apply ATRAZINE 5F in late winter before the weeds emerge. Apply in a minimum.of. 15 gals. of water per acre or 1 gal.per 1,000 sq. ft.

Where annual bluegrass is the major weed, use 1.6 pts. per acre (or .6 oz. per 1,000 sq. ft.) Use 3.2 pts. per acre (or 1.2 oz. per 1,000 sq. ft.) for control of the other weeds ... named above. Do not exceed 1 qt. per acre per treatment on newly sprigged turfgrass or on hybrid bermudagrass such as Tiflawn, Tifway, and Ormond.

For the list of weeds controlled, see ATRAZINE 5F Applied Alone - Corn or Grain Sorghum - Preplant Surface Applied, Preplant Incorporated or Pre-emergence.

QUACKGRASS CONTROL: Broadcast 6.4 pts in a minimum of 5 gals of water per acre by air or 10 gal by ground between fall and early spring while trees are dormant and before quackgrass is more than 1.5 inches tall.

PRECAUTIONS: Temporary injury to trees may occur following the use of Atrazine on coarse-textured soil. To avoid injury:

- 1. Do not apply to seedbeds
- 2. Apply only once per year.

AERIAL APPLICATION: In order to assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft. above vegetation, using low drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph.

To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply ATRAZINE 5F by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

ST. AUGUSTINE GRASS, CENTIPEDE GRASS, AND DORMANT BERMUDA GRASS

ATRAZINE 5F controls spurweed, Florida betony, annual bluegrass and many other problem weeds in home lawn, ornamental and recreational turf and other noncrop areas such as highway right-of-ways and similar areas. ATRAZINE 5F may be applied with any pump-up or compressed air typessprayer or with a hose-on type sprayer. ATRAZINE 5F will control BOTH emerged weeds and weeds from seeds. Rain or watering within 2 to 3 days of application may decrease the effectiveness on emerged weeds. However, for control of weeds from seeds, rainfall or watering is necessary within 7 to 10 days after treatment.

CAUTION: Do not apply within the active root zone of vegetables or desirable ornamental plants such as camellias, azaleas, boxwoods, etc. However, ATRAZINE 5F treatments should not normally cause injury to medium or large shrubs or trees in the landscape. Do not plant any crop (flower or vegetable gardens) to treated areas for 18 months or injury may result.

# WEEDS CONTROLLED OR SUPRESSED

Annual Bluegrass (Poa Annua), Chickweed (Common and Mousear), Crabgrass, Cransbill, Cudweed, Dichondra, Florida Betony, Henbit, Knotweed, Lespedeza, Moneywort, Mustards, Narrowleaf Vetch, Parsley-Piert, Sandspur, Smutgrass, Spurge, Spurweed, Swinecrest, Woodsorrel and various annual clovers.

# TIMING OF APPLICATION

The timing of applications to achieve maximum control may vary quite a bit with different weed species. The following application times are suggested for certain problem weeds.

Spurweed: The best control of spurweed can be obtained by applying ATRAZINE 5F when spurweed has emerged (December and January).

Florida Betony: This weed emerges in the fall so an application of ATRAZINE 5F in mid to late October followed with a second application in mid to late February would give best control.

Dichondra, Moneywort: The best control of these weeds can be obtained by applying ATRAZINE 5F in early April followed with a second application in July. Do not apply to growing Bermuda Grass.

Applications for Spurweed or Florida Betony generally willgive control or suppression of the other weeds listed. • However, as a general rule ATRAZINE 5F will give the best control when applied to young tender weeds or just prior to weed emergence.

# ST. AUGUSTINE AND CENTIPEDE GRASSES

ATRAZINE 5F may be applied to established St. Augustine and centipede grasses during both the dormant and the growing season. Best results are usually obtained in the early spring or dormant periods when weeds are small or have not emerged. Follow rates below.

For continued summer annual weed control, apply another 1.6 pts. per acre at least 30 days after the previous application, but not after April 15. However, do not make more than two applications of this product per year.

Precautions: On newly sprigged turfgrass and hybrid bermudagrass, temporary slowing of growth and yellowing may occur following application. To avoid turf injury, 1) Use only on turfgrass reasonably free of infestations of insects, nematodes, and diseases. 2) Do not use on golf greens. 3) Do not use north of NC (except may be used in Virginia Coastal Plains) or west of the high rainfall areas of eastern OK and eastern TX. 4) Do not use on muck or alkaline soils. 5) Do not apply over the rooting area of trees or ornamentals not listed on this label. 6) Do not overseed with desirable turfgrass within 4 months before or 6 months after treatment.

Note: Do not graze or feed turf clippings to animals, or illegal residues may result.

# TURF GRASES FOR SOD (FLORIDA ONLY)

St. Augustinegrass, Centipedegrass, and Zoysia Grass Broadcast 3.2 - 6.4 pts/A according to soil texture to control those weeds listed under ATRAZINE 5F applied Alone -Corn on Grain Sorghum - Preplant Surface-Applied, or Preplant Incorporated, or Preemergence.

Muck Old Beds: within 2 days after lifting sod.

or 6.4 pts.

Peat New Beds: 3-4 days after sprigging or

plugging.

Sandy Old Beds: within 2 days after lifting

sod.

Soil 3.2 pts.

New Beds: 7-10 days after sprigging or

plugging.

If weeds regrow, apply an additional 4 pt/A on muck or peat, or 2 pt/A on sandy soil.

PRECAUTIONS: To avoid crop injury

- 1. Do not apply within 30 days prior to cutting or lifting.
- 2. Do not apply in combination with surfactants or other spray additives.

- 3. Use only on turfgrass reasonably free of infestations of insects, nematodes, and diseases.
- 4. On newly sprigged turfgrass, temporary slowing of growth may follow application.

# MACADAMIA NUTS

For pre-emergence control of many broadleaf and grass weeds, including crabgrass, foxtail, wiregrass, Flora's paintbrush, spanishneedles, and fireweed, broadcast 3.2 to 6.4 pt/A before harvest and before weeds emerge. Repeat as necessary. Do not spray when nuts are on ground during harvest period. Do not apply by air.

#### **GUAVA**

Use only on established plantings which are at least 18 months old. Apply as a directed spray at 3.2 - 6.4 pt/A of ATRAZINE 5F in 20-50 gals. of spray mix pre-emergence or early post-emergence to weeds. When applying post-emergence, the use of a surfactant and greater spray volume (80-100 gals. of spray mix per acre) may enhance weed control

This product controls many annual broadleaf and grass weeds, including fireweed, purslane, scarlet pimpernel, spanishneedles, and sowthistle.

Notes: To avoid illegal residues:

- 1. Do not allow spray to contact foliage or fruit.
- 2. Do not apply more frequently than at 4 month intervals.
- 3. Do not apply more than 12.8 pts. of ATRAZINE 5F per year,

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STORAGE AND DISPOSAL

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

# STORAGE INSTRUCTIONS:

Store in a cool dry location. Avoid storage at high temperatures. Keep container tightly sealed. Avoid contamination with acids or alkalies. Do not stack more than 2 pallets high to prevent crushing. Keep containers away from any source of puncture. Store in original container only.

Pesticides should be separated during storage to prevent cross contamination of other pesticides, fertilizer, food and feed. Storage area should preferably be locked to prevent admittance by unauthorized or unknowledgeable persons. If the container is damaged and leaking or material has been spilled follow these procedures:

- 1. Cover spill with absorbent material
- 2. Sweep into disposal container.
- 3. Wash area with detergent and water and follow with clean water rinse.
- 4. Do not allow to contaminate water supplies.
- 5. Dispose of according to instructions below.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning or 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.

# WARRANTY - CONDITION OF SALE:

OUR RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. '...' Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically.' recommended, and other influencing factors in the use of this product are howard the control of the seller. Buyer assumes all risks of use, storage and handling of this

material not in strict accordance with directions given herewith.

In no case shall Drexel or the Selier be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by Drexel Chemical Company and is accepted as such by the Buyer.

