APR - 5 1990

Linda C. Watson
Consultant / Regulatory Affairs
Oxon Italia S.p.A.
Rt. One, Box 143-A
Highway 122 / Banks Lake
Lakeland, Georgia 31635

Dear Ms. Watson:

Subject: Atrazine 4L Herbicide

EPA Reg. No. 35915-4

Re: Atrazine Voluntary Exposure Reductions Measures Your Amendment Resubmission Dated March 20, 1990

The labeling referred to above, submitted in connection with the Federal Insecticide, Fungicide, and Rodenticide Act, as amended is acceptable with the following comments:

- On page 4 under section entitled FOR QUACKGRASS CONTROL ON LAND GOING INTO CORN PRODUCTION, revise specified application rates to conform with the 3 lb. ai per acre per year limit.
- 2. On page 4 under PROBLEM WEEDS #3, change the first sentence to read 3 pints of Atrazine per acre ... The current rate of 4 pints would exceed the 3 lbs. ai per acre limit if applied with a second application of 3 pints.
- 3. On page 4 under section entitled LAYBY TREATMENT (Broadleaf and Crass Weed Control), change the phrase "20 30 inches high" to "no higher than 1?".
- 4. On page 5 under Suggestions for Rotational Crops (appears in two places), delete instruction #3. There is no case where the 3 lb. ai per acre application rate should be exceeded in either corn or sorghum. This sentence may appear under instructions for crops (i.e. sugarcane) that do not carry the 3 lbs. ai per acre per year limit.

Please submit five (5) copies of your final printed labeling incorporating this amendment and above mentioned comments before you release the product for shipment. A stamped copy is enclosed for your records.

Sincerely yours,

CONCERRENCES

SYMBOL H7805C

SURNAME MODER J. Taylor

Product Manager (25)

Fungicide-Herbicide Branch

Régistration Division (H7505C)

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

46.5, **GPO** 1486 159 6 4

RESTRICTED USE PESTICIDE (GROUND WATER CONCEPNS)

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 water concerns. Users mist read and follow NLL precautionary statements and instructions for use in order to minimize potential for atrazine to reach ground water.



ATRAZINE 4L

HERBICIDE

Under the P. bert Inspecticide, Fungacia, consequence to the description of Act as amended, for the restricte registered under EPA Reg. No. 359/5-4

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For season-long weed control in corn and sorghum, for weed control in certain other crops, in non-crop and industrial sites.

ACTIVE INGREDIENTS:

Atrazine (2-chloro-4-ethylamino-6-ìsopropylamino-s-triazine)	40.89c
Related compounds	2.2%c
INFRT INGREDIENTS:	57.0%
TOTAL	160.0%

Atrazine 4L contains 4 lbs. active ingredients per gallon.

CAUTION'

See Side Panel For Additional Precautionary Statements SHAKE WELL BEFORE USING

NET CONTENT: 21/2 Gallons 9.45 Liters



EPA REG. NO. 35915-4 EPA EST.NO.

MANUFACTURED FOR OXON ITALIA S.D.A.

Via Sempione, 195 - 20016 PERO MILANO - ITALY

WORKER PROTECTION STATEMENT

Do not enter treated areas without protective clothing until sprays have dried. Because certain states may require more restrictive re-entry intervals for various crops treat 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, (Indicate specific oral warnings which inform workers of areas or fields that may not be entered without specific protective dothing, period of time field must be vacaked and the appropriate actions to in case of accidental exposure). When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given in a language customarily understood by workers. Oral warnings must be given to accidental exposure that writings cannot be understood by workers. Written warnings must include the following information: CAUTION — Area treated and accidental exposure that writing to account the understood by workers. ATRAZINE on (date of application). Do not enter without appropriate protective clothing until sprays have dried. In case of accidental exposure treat as follows

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful or latal if swcNowed. Causes moderate eye kritation. Do not get in eyes, on skin, or on clothing. Wear goggles. Harmful if swellowed, inhaled, or ausorate through the skin. Avoid breathing spray mist. Wash thoroughly with seep and water alter handling and before eating. Remove contaminated clothing and wash before related by no not apply this product in such a manner as to directly or through drift expluse workers or other persons. The area buing treated must be vargated by unprotected persons.

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 chemical resistant subber or neoprene gloves and a face shield or goggles.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Call a Physician or Poison Control Center, Drink 1 or 2 glasses of water and induce vorniting by touching back of throat with finger. Do not induce vorniting or give anything by mouth to an unconscious person.

(F IN EYES; Immediately flush eyes with planty of water. Get medical attention if irritation develops.

IF ON SAIN: Immediately flush skin with plenty of exap and water white removing contaminated clothing and shoes. If irritation develops, seek medical attention

ENVIRONMENTAL HAZARDS

This pesticide is toxic to aquatic invertebrates. Do not apply directly to water or wetlands. Runoff and drift from treated areas may be hazardous to aquatic organisms neighboring areas. Do not contaminate water when disposing of equipment wash vaters.

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, to well-drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

GENERAL INFORMATION

ATRAZINE 4L herbicide will control most annual broadleaf and grass weeds in corn and sorghum such as barnyardgrass, witchgrass (Panicum capillare), yellow foxtail, gractioxitail, wild oats, targe (hairy) crabgrass, giant toxtail, velvetleaf, morning glory, tambsquarters, pigweed, rightshade, purstane and mustard. ATRAZINE 4L may the applied before or after weeds emerge.

In each case where a range of rates is given, the lower rate should be used on light soils and soils low in organic matter, and the higher rate should be used on heav, 环 high in organic matter.

Since ATRAZINE 4L 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 hosing will generally result in better weed control.

ATRAZINE 4L is non-flammable

Care should be taken to avoid using ATRAZINE 4L where adjacent desirable trees, shrubs or plants might be injured.

NOTE: The Seller does not recommend the rise of ATRAZINE 4L in combination with other herbicides or oils except as specifically described on the label or in literature published. by the Setter

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

This product may not be mixed/loaded, or used within 50 feet of all wells including abandoned wells, drainage wells, and sink holes

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

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling

BEST AVAILABLE COP

APPLICATION PROCEDURES

pezies. Screens related in suspen (screen compactant) GROUND APPLICATION: For the most uniform distribution of broadcast applications use 60° flat fan type nozzles. For band applications, u and strainers should be no liner than 50 mesh. Use a nump with capacity to (1) provide sufficient hydraulic agristion during mixing and application and (2) maintain 36-40 psi operating pressure. Use a minimum of 5 gallons of water per acre for preplant incorporated pressure applications. Use a minimum of 10 gallons of water per acre for all posternergence applications combined with oil or surface. FOR BAND APPLICATIONS, CALCULATE THE AMOUNT TO BE APPLIED PER ACRE AS FOLLOWS:

Band width in inches

Rate / A for broadcast treatment

needed for ba

AERIAL APPLICATION: For preulant and preemergence broadcast treatments, apply at a 1:1 ratio of A product and is mixed with 1 quart of water) to be applied per acre. For posternergence treatments, apply in a minimum of 2 gallons of water per acre. Avoid applications under conditions where uniform annually minutestion cans for a security of the AL plus of basive drift may occur L to

cur ATRAZINE 4L into the tank during ATRAZINE 4L IN WATER APPLICATIONS: ATRAZINE 4L, a liquified formulation, should be spannics, All naturn lines to the trok must discoarge lighty after use. or after filling. Hydrautic (jet) or mechanical agitation is recommended during mixing and a below siguid level and agitation should not be so violent as to cause air bubbles to for liqu

ATRAZINE 4L IN LIQUID FERTILIZER APPLICATIONS: Nitrogen solutions part of the water as a carrier for preemergence and preplant applications of ATRAZINE 4L. Mixing should be accomplish is danger of liquid fertilizers causing crop injury. not apply after corn or sorghum has emerged as there

Q 10) ATRAZINE 4L PLUB EM "L'BIFIABLE OIL IN WATER APPLICATI rgence ATRAZINE 4L in water sprays may speed the activity of ATRAZINE damage corn or sorghum. To minimize the possibility of damage follow 4L and provide quicker till of weeds. However, under or the directions, procedures and precautions given below.

For combining with ATRAZINE 4L, use a crop oil designed taminated with water or other material can cause compati TRAZINE 4L 296 suitable emulsifier. Severals oils of this type are on the market. Oils conna) ms and/or co orofi

MIXING PROCEDURES: 1) Thoroughly clean sprayer prior todes. Do not use contaminated with 2,4-D or other materials as crop damage or sprayer dogging may result. 2) Fill spray tank half to two thirds full of clean water. 3) With the apitation, add the ATRAZINE 4L. 4) Add the emulsifiable of last. 5) Empty the tark as completely as possible before refilling to prevent a buildup of oil in the tank. Keep the apitation system in operation to avoid a separation of oil from the water mixture still remaining in the tank. 6) If an oil firm starts to build up in the tank, drain the tank and clean out with a strong detergent solution or solvent. 7) Clean the sprayer thoroughly improved the tank. Immediately after use by flushing the system with water containing a detergent.

INSTRUCTIONS FOR MAFE HANDLING: 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

many in the series of the seri

DIRECTIONS FOR USE

CORN: ATRAZINE 4L may be applied either before planting, at planting or after planting as indicated below.

The maximum application rate of corn is 3 lbs. a.i. (6 pts. Atrazine 4L) per acre per calendar year. Applications for quackgrass suppression in corn are restricted to a spring application only. No fall applications are permitted.

PREPLANT (Broadlest and Grass Weed Control): Broadcast in the spring after plowing at the rate indicated in Table 3. Application may be made before, during or after lines seatled preparation. If soil is liked or worked after application, avoid deep incorporation of ATRAZINE 4L. Best results have been obtained when ATRAZINE 4L is expense within two weeks prior to planting.

PREEMERGENCE (Broadcast and Grass Weed Control): Apply during or shortly after planting prior to weed emergence at the rate indicated in Table 1.



POSTEMERGENCE (Broadlesf and Grass Weed Control): Apply before weeds exceed 1½ Inches in height, at the rate indicated in Table 1.

For control of Broadlest and Grass Weeds'		
Soli Texture	ATRAZINE 4L Broadcast Rate/A	
Light Soile: sands, loamy sands and sandy loams.	4 pints	
Medium Soils: sit and clay loams that are low in organic master	4¼ pints	
Heavy Solic: slit and clay loams with medium to high organic matter and clays (including the dark prairie sections, of the Corn Belt)	6 pints	
Peets, music and high organic clays (apply posternergence only)	6 pints	

Postemergence application to corn must be made before corn reaches 12 inches in height.

*For Preplant or Preemergence Application in Western Kensas, Western Nebraeka, Eastern Colorado, Eastern Wyoming, New Mexico, West Texas and the Panhandle of Oktahoma. On sands, loamy sands, sandy loams, mild to strongly affusine soils and all recently leveled soils, apply 2 2/5 pirits per acre for broadlest control. Broadlest weeds such as pigweed, lambaquarters, rightshade, pursians and lochia will be controlled. On other soil types in the areas above, make application at the rate shown in Table 1 for broadlest and Grass weed control.

LAYBY TREATMENT (Broadlesf and Grass Weed Control): Broadcast 2-4 pints per acre in a minimum of 5 gals, of water or nitrogen solution before weeds are 11/2 inch high and corn is 20-30 inches high. When nitrogen solutions are used, direct the to the lower 14 inches of cornstalk to avoid corn foliage injury. Agitation in the tank during application is essential.

POSTEMERGENCE BROADLEAF AND GRASS WEED CONTROLLING ALL PLUS EMULSIFIABLE OIL IN WATER: Broadcast 4 page emergence, but before weeds reach 1½ inches in height. The page of 1 gallon per acre for ground applications and ½ the page of the applica

applications.

POSTEMERGENCE BROADLEAF WEED CEMULSIFIABLE OIL IN WATER: Broadcast weeds such as annual morning glory, cool ragweed, smartweed and wild buckwheat. At and tambsquarters reach six inches in height ches in height. Add emulsifiable oil at the ration and 1/2 gallon per actifier serial applicatives are not control. It regrowth of versions and the rest of OL WITH per acre traquerter thyld be miles ches in height. Add entate tion and ½ gallon per as weeds are not control PRECAUTIONS FOR A IN WATER TO CORN: CATIONS OF NE 4L PLUS EMULSIFIABLE OIL

not use oil in ATI com is under stress from prolonged or when corn is wet and succulent from City 1 ether, poor : utali as crop injur

The string inbred lines or any breeding stock as injury use oils in sprays

her insecticides, herbicides, liquic tertilizers or other materials is not recom-TRAZINE 4L and emulsifiable oil in water because they cause compatibility

andle emulsifiable oil cartully. Oil contaminated with even a small amount of emulsify properly when added to the tank.

Do not make more than one application of ATRAZINE 4L and emulsifiable oil in ster per season (except as recommended for control of yellow nutsedge and Canada

PROBLEM WEEDS

FOR CONTROL OF YELLOW NUTSEDGE AND CANADA THISTLE: ATRAZINE 4L FOR CONTROL OF YELLOW NUTSEDGE AND CANADA THISTLE: ATRAZINE 4L will control yellow nutsedge (Cypenus esculentus) and Canada thistle (Cirsium arvense) when applied as indicated below. For best results, ATRAZINE 4L should be used each year until yellow nutsedge or Canada thistle is eliminated or reaches a level of intestation where neither weed species is a problem if regrowth of yellow nutsedge or Canada thistle occurs following the last application of ATRAZINE 4L during the sea "n, cultivate once. When ATRAZINE 4L is applied postemergence to the weeds, 1 gallon of emutationable crop oil should be applied per acre.

For control of yellow nutsedge and Canada thistle with ATRAZINE 4L, several alternative methods of use are available. These methods are listed in order of preference below if other weed species, such as annual grasses, are also expected, use an alternative method that includes a preplant or preemergence treatment plus a postemergence combination with emulsifiable oil or apply all the ATRAZINE 4L preplant or preemergence.

- 1. Broadcast 3 pints of ATRAZINE 4L plus 1 gallon of emulsifiable oil per acre after the crop has emerged and after yellow nutsedge or Canada thistle plants emerge, but before yellow nutsedge plants reach a height of 3 inches or Canada thistle plants reach a height of 6 inches. Follow with a second application of 3 pints of ATRAZINE 4L plus 3/4 gallon of oil per acre 10 to 20 days but prior to lay-by (before corn reaches 12 inches in height) after the initial application has been made
- 2. Broadcast 3 pints of ATRAZINE 4L per acre proplant. Follow with an application of 3 pints of ATRAZINE 4L plus 3/4 gallon of oil per acre after the corn and weeds energe, but before nutsedge plants reach a height of 3 inches (for nutsedge control only).
- 3. Broadcast 4 pints of ATRAZINE 4L per acre during or shortly after planting, but prior to crop or weed emeryence. Follow with an application of 3 pints of ATRAZINE 4L plus 3/4 gallon of oil per acre after the corn and weeds emerge, but before yellow nutsedge plants reach a height of 3 inches or Canada thistles plants reach a height of 6 inches.

- Broadcast 6 pints of ATRAZINE 4L plus 1 gallon of oil per acre after the crop has emerged put prior to lay-by (before corn reaches 12 inches in height) and after yellow nutsedge and Canada thistle plants emerge, but before nutsedge reaches a height of 3 inches or Canada thistle is more than 6 inches tall.
- 5. Broadcast 6 pints of ATRAZINE 4L per acre preplant (for yellow nutsedge control only).
- 6. Broadcast 6 pints of ATRAZINE 4L per acre during or shortly after planting, but prior to crop or weed emergence. (For yellow nutsedge control only).

NOTE: Oil should not be used in ATRAZINE sprays when corn is wet or under stress, especially when using 6 pints of ATRAZINE 4L per acre. See precaution section under Postemergence Application of ATRAZINE 4L plus Emulsifiable Oil in Water on Corn for additional

FOR QUACKGRASS CONTROL ON LAND GOING INTO CORN PRO-DUCTION: Broadcast 4 pints per acre in the spring and plow 1-3 weeks later. Broadcast a second application at the rate of 4 pints per acre in the spring before, during or after planting, but before weeds are 15 inches high. This split application will control both quackgrass and most annual broadleaf and grass weeds. SINGLE APPLICATION: Broadcast 6 pints per acre in the spring. Plow 1-3 weeks after application.

TANK MIXTURES WITH ATRAZINE 4L

ATRAZINE 4L PLUS PARAQUAT CL: For control of existing vegetation and residual control where corn will be planted directly into a cover crop, established sod or in previous crop resides — Broadcast 4-6 pints ATRAZINE 4L and 1-2 pints Paraquat CL per acre in 20-60 gallons of water per acre. Add 8 oz. of trontonic surfactant per 100 gallons of diuted spray. Add ATRAZINE 4L to spray tank first and thoroughly mix with mater Add the Paraquat and excitant last.

Refer to the Paraquat and excitant last.

Refer to the Paraquat Chartel for further direction, limitations and cautions

ATRAZINE 4L RETS ALTEGION dec. Use a tank mixture of ATRAZINE 4L plus Alachlor 4EC for the portragion most annual broadleaf and grass weeds in corn (field and sigge corn only), bith as barryardgrass, black nightshade, bractuana, carpe. Aeed, cratigiass, fall particum, Florida pusley, giant foxtail, green foxtail, yellow foxtail, googlegoss, tambsquarters, pigweed, pursane, mustard, common ragiveed, smans.eed and with thorass. This combination also reduces competition from buttonweed (velvelleaf), cock-bit hand annual microing glory.

Make populations at the ratio indicated in Table II. For preplant applications, apply within

ake or nations at the ratio indicated in Table II. For proplant applications, apply within days of nations of incorporate to a depth of 2 to 3 inches. For preemergence apparations, including the incorporate to a depth of 2 to 3 inches. For preemergence apparations, inches inches inches the crop or weeds emerge in posturiary as it treatments, make applications until weeds reach the two-leaf stage and the copies no more than three inches tall

- TABLE I Tank Mixtures of ATRAZINE 4L Plus Alachior 4EC On Corn (Field on Silege Only) Broadcast Rate Per Acre

More than 3% Less than 3 organic matter organic matter Alachier 4EC Atrazina 4L Alachior 4EC Atrazine 4L Soll Texture (Pinte/A) (Pints/A) (Qte./A) (Q18.(A) Light sandy 2 15 Salt loam 2 . 2 2/5 1.75 2 . 2 2/5 20 soils Heavy clay 2 2/5 - 3 1/5 2.5 2 2/5 . 3 1/5

NOTE: Apply in a minimum of 20 gallons of water per acre. Non-pressure fluid ferritzer may replace all or part of the water used as a carrier for applications applied to the sor surface before crop emerges. Add the ATRAZINE 4L to the suraly lark, first and thoroughly mix with water. Add the Alachtor last.

At least 12 weeks must elapse following treatment with ATRAZINE 4L plus Atachtor #EC before immature corn forage can be harvested or fed to ratife.

Refer to the Alachlor 4EC label for further crucions, limitations and cautions ATRAZINE 4L PLUS PROPACHLOR 65W: Use of tank mixture of ATRAZINE 4L plus ATRAZINE 4L PLUS PROPACHLOR 65W; "Use it tank mixture of ATRAZINE 4L plus Propachlor 65W for control of most annual busides and grass weeds in corn (field hybrid sped, slage and sweet corn only), such as annual hyegrass, harryarderass (watergrass), carpetweed, crabgrass, fall paricum, Florida pusiev, giant fo but, green foxtal, yellow foxtal, goosegrass, groundset, jimsonweed, lambaquerters, mustard, nightshape, pigweed, pursiane, ragweed, smartweed and sunflower. This compinion also reduces competition from butlionweed (velvetiest), coctabur and annual micron glory. Broadcast 2 1/10 - 3 1/5 pints of ATRAZINE 4L plus 3.8 to 6.0 lbs of Propachlor 65W per acre on the surface any time from immediately after planting until broadleaf and grass weeds reach the two-leaf stage. Use the lower rates of ATRAZINE 4L and Propachlor 65W on the light-textured soils low in organic matter. Use the higher rates on heavy-lextured soils high in organic matter.

A minimum of 2 4/5 pints per acre of ATRAZINE 4L in the tank mixture will give better control of annual morning glory, buttonweed (velvetlear), cocklebur and sunflower Apply in a minimum of 20 galloris of water per acre. Non-pressure liquid fertilizer may replace all or part of the water used as a carrier for applications applied to the soil surface before crop and weeds emerge. Add the ATRAZINE AL to the spray tank first and thoroughly mix with water. Cut the Propachlor 65W beg and fill with water to the fill line. Grasp the neck of the beg firmly and shake vigorously and add to the spray tank. Refer to Propechlor 65W lebel for further directions, limitations and cautions

5- Do not apply more than 6 pints per acre of ATRAZINE 4L to corn in any one year.

2 - Following hervest of a treated crop, plow (molidboard or disk-plow) and thoroughly till the soil in the fast or spring to minimize possible injury to rotational spring-seeded crops, regardless of the rate used.

3 - Do not graze treated area or lead treated lorage to fivestock for 21 days following

For posternargance applications plus emulsifiable oil, see additional precautions under that eaction of this label.

SUGGESTIONS FOR ROTATIONAL CROPS

1 — Land treated with ATRAZINE 4L should not be planted to any crop except corn or sorghum until the following year or injury may occur.
2 — If ATRAZINE 4L is applied after June 10, do not rotate with crops other than corn or sorghum the next year or injury may occur.
3 — If ATRAZINE 4L is used at a broadcast rate higher than 6 pints per acre (or com-

parable rates in a band application), crop of untreated corn or sorghum should precede the next rotational crop.

4 - In the High Plains and Intermountain area of the West where rainfall is sparse and erratic or where irrigation is required, use ATRAZINE 4L to control weeds on corn only then com is to follow corn or a crop of untreated corn, or sorghum is to precede other

rotational crops.

5 — In Western Minnesota and Eastern parts of the Dakotas, Nebraska and Kansas, com treated with ATRAZINE 4L should not be followed with soybeans if the broadcast rate applied was more than 4 pints per acre (or comparable rate in a band) or injury

- Injury may occur to soybeans planted in North Central lows and South Central Min-acts the year following an ATRAZINE 4L application on Harps, Canistoo, Stroden or other soils having a calcareous surface layer

7 -- Do not plant augar beets, lobacco, vegetables (including dry beans), spring-seeded small grains or small-seeded legumes and grasses the , ear following ATRAZINE 4L application or injury may occur.

BORGHUM AND SORGHUM-SUDAN HYBRIDS (Grain and Forage Types): ATRAZINE 4L maybe applied either before planting, at planting or after planting as indicated below.

The maximum application rate for sorghum is 3 lbs. a.i. per acre per calendar year. Applications for quackgrass suppressions in sorghum are restricted pring application only. No fall applications tα _emitted.

PREPLANT (Broadcast and Grass Weed Control): Broadcast in the spring after plowing at the rate indicated in Table III. Application may be made before, during or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation of ATRAZINE 4L. Best results have been obtained when ATRAZINE 4L is applied within two weeks prior to

PREEMERGENCE (Broadcast and Grass Weed Control): Apply during or shortly after plan-ling, but prior to weed or crop emergence at the rate indicated in Table III

For Be	replant and Pres	ABLE III —————————————————————————————————
Soll Texture Organic Matter		Broadcast Rate of ATRAZINE 4L Per Acre
Light Soils: sands, loamy sands, sandy loams and sandy clay loam	any level	DO NOT USE (except for preemergence use on bedded sorphum in Arizona and California as in- dicated below)
Medium and Heavy Soils	Less than 196	
Sit loams, clay loams	196 to 1 1/296	3 1/5 - 4 pints
and clays	More than 1 1/2%	3 1/5 - 4 <u>2</u> /4 pints

ATRAZINE 4L should not be applied preplant to sorghum grown in New Mexico, Oklahoma, sxas, Arkanss, Louisana, Tennessee, Mississippi, Alabama, Georgia, Florida, South Carolina of Crolina or preemergence to sorghum grown in New Mexico, Texas and Oklahoma size. N.E. Oklahoma and the Texas Gutl Coast.

planting feitures, sorghum can be replanted into soil previously treated with ATRAZINE ... Do not make a second broadcast application or injury may occur. If ATRAZINE 80% is splied in a bend and sorghum is replanted in the unfreated row incides, ATRAZINE 4L can special as bend to the second planting (Do not apply more than 3 lbs. per acre per calendar year)

REEMERGENCE BROADLEAF WEED CONTROL IN FURROW IRRIGATED BEDDED DROWN (Arizona and California enly): For preomergence control of broadleaf weeds this ground cherry, terribs juariers, morning glory, mustard, pigweed and purstane, broadle it 3/5 to 2.25 pints per arize. Use the lower rate on coarse-leakured sols an sols high organic matter. Make application after bed preparation, during or after planning, but before rightum and weeds have emerged an ibefore the first lurrow irrigation. Several irrigations should low the application, making sure that all sol is thoroughly wet

BECAUTIONS FOR PREEMERGENCE APPLICATIONS OF ATRAZINE 4L TO FURROW RIGATED BEDDED SORGHUM GROWN IN ARIZONA AND CALIFORNIA: To avoid posei sorghum injury, do not use on send and loamy send soils or on sorghum planted in the row. Auditionally, applications made to sorghum prowing on alkali soils or where cuts, fils erosions have exposed calcareous or alkali subsoils, may result in crop injury. In case of ip faiture, do not réplant torghum for eight months following. Implication. Com may be planted

ostemergence application to sorghum must be made efore sorghum reaches 12 inches in height.

OSTEMERGENCE BROADLEAF AND GRASS WEED CONTROL: pply before weeds exceed 15 inches in height and t the rate indicated in Table IV. Application. ust be made to plants before plants reach two to nches in height.

Postemorgance Broadlest and Grees Wood Control in Serghum		
Soll Texture	Minimum Height of Sorghum at Treatment	Breedrast Rase/ATRAZINE 4L
Sand or loamy wand	DO NOT USE See directions for broadlest and weed control below	
Sandy loam		
Sit loams to sandy clay loams	Completely emerged	4 - 4% pints
Otton and Pulmon day soils	At least 6 inches high	4 - 4% pints
Sity clay foams and heavier soils	Completely emerged	6 pints

POSTEMERGENCE BROADLEAF WEED CONTROL WITH ATRAZINE 4L PLUS EMULSIFIABLE OIL IN WATER: Broadcast 2-2/5 pints per acre for control of broadleaf weeds such as annual morning glory, cocklebur, lambaquarters, mustard, pigweed, ragweed, smartweed and wild buckwheat. Application should be made before pigweed and lambsquarters reach six inches in height and before all other weeds reach four inches in height. In Toxas, New Mexico, Oklahoma, Western Kansas. Colorado and the desert regions of California and Arizona, apply when sorghum is 6-10 inches in height. but before it reaches 12 inches in height. In all other areas, apply after enghum reaches the threeleaf stage. Add emulsifiable oil at the rate of 1 gallon per acre for ground applications and \(\frac{1}{2} \) gallon per acre for aerial application. A cultivation may be necessary if all weeds are not controlled or if regrowth of weeds occurs.

PRECAUTIONS FOR APPLICATION OF ATRAZINE 4L PLUS EMULSIFIABLE OIL 1 WATER TO SORGHUM

WATER TO SORGHUM

1 — Do not use oil in ATRAZINE 4L aprays when sorghum is under stress from protongcold, wet weather, poor fertility or other factors or when sorghum is wet and succulent facrecent rainfall as crop injury may occur.

2 — Do not use in ATRAZINE 4L aprays when treating inbred lines or any breeding stock;

INUITY MAY OCCUR.

ingury may occur.

3 — Adding other insecticides, herbicides, liquid fertilizers or other materials is not recommende because they may cause compatibility problems or crop injury.

4 — Store and handle emutsikable of carefully. Of contaminated with even a small amou, of water may not emutsify properly when added to the tank.

5 — Do not make more than one appliction of ATRAZINE 4L amutatiliable of in water per seaso.

Postemergence Broadleaf Weed control with ATRAZINE 4L plus Surfactant i Oklahoma, New Mexico, Texas, Western Kansas, Colorado, and Desert regions c Arizona and California only: Broadcast 2 2/5 pints of ATRAZINE 4L plus 14-11/2 pints i surfactant per acre after sorghum reaches 6 inches in height, but before weeds reach 11/2 x ches in height. Apply only on sandy loams and liner-textured soils.

PRECAUTIONS FOR ALL APPLICATIONS TO SORGHUM

1 — Hezvy rains immediately following application lend to result in excessive concentration of herbicide in seed furrow, resulting in potential crop injury. Applications to lurrow-plants sorghum should not be made until furrows are leveled (plow-in). Deep planter marks or see, furrows should not be leveled before application.

teriows should not be leveled before application.

2 — Application to sorghum growing under stress caused by minor element deficiency or the sorghum growing on highly calcareous soils may result in crop injury.

3 — Do not graze of feed forage from treated areas for 21 days following application.

4 — Following harvest of a treated crop, plow (moldboard or disk-plow) and thoroughly the soil in the fall or spring to minimize possible injury to rotational spring-seeded crops regardless of rate used

For applications to lurrow-irrigated bedded sorghum in Arizona and California and 'postemergence applications plus emulsifiable oil, see additional precautions under those y tions of this label.'

SUGGESTIONS FOR ROTATIONAL CROPS:

- Land treated with ATRAZINE 4L should not be planted to any crop except corn or sorgh.

in the following year or injury may occur

If ATRAZINE 4L is applied after June 10, do not rotate with crops other than corn or sorgitude.

the next year or injury may occur

3 — If ATRAZINE 4L is used at a broadcast rate higher than 6 pints pe acre (or comparat rates in a band application), a crop of untreated corn or sorghum should precede the next re-

- In the High Plains and Intermountain areas of the West where rainfall is sparse and errat 4 — In the right mains and intermountaint arous or the view where remems species and one or where wrighten its required, use ATRAZINE 4L to control weeds in sorghum only who sorghum is to follow sorghum or a crop of untreated sorghum in corn is to precede order rule.

tional crops
5 — In Western Minnesota, and Eastern pairs of thir Dakotas, Nieuraticu, and Kansar sorghuliteatich with ATRAZINE 4L should not be followed with solybeans if the broadcast rate applic was more than 4 pints per acre (or comparably rule in a band) for injury may occur 6.— Injury may occur to solybeans planted in North Central lywa and South Central Minneso, the year following an ATRAZINE 4L application on Harps, Cantred Strotlen, prioriner sols native a calcareous surface layer.
7.— Do not plant sugar beets, tobacco, vegethbles, including dry beans) spring-secred singulations or small, seeded legumes and grasses the year following an ATRAZINE 4L applicant or injury may occur.

or injury may occur. SUGAR CANE: For control of nonrhizomotius weeds: such as crabgrass, jungle rice. che great fortail, amarenths, Florais paint brush, litewand and similar plants. Broadcast 2, 4 publis; acre in 20-30 gallons of water for adequirity occurage of the soil surface at time of plants or ratioorang, but before the cane emerges. One additional application may be made over triciane as it emerges, and two additional applications may be made in either emergences a structural surface.

For control of emerged Pellitary Weeds (artiflery wood) (Florida brilly). Apply V2-R5 pints because in 40 gallons of water per acre as a directed spray. Add 2 curins of surfactant for eac. 50 gallons of spray and be sure weed foliage is thoroughly covered. PRECAUTIONS:

1 — Do not apply ATRAZINE 4L after "close in" 2 — Do not apply more than 9½ querts of ATRAZINE 4L to any one crop of cane

POREST AND CHRISTMAS TREE PLANTATIONS: Dougles Fir, Grand Fir, Noble Fir, White Fir, Lodgepole Pine Ponderose Pine and Soutch Pine (Pacific Northwest - West of Cascade only). Annual broadlest and grass weed control. Broadless 2-4 quarts in 20 to 40 gallors of water per acre to assure thorough coverage. For band applications reduce rate of ATRAZINE AL and volume of water in proportion to the acre treated. For example, when treating a 4-foot band over trees planted in row s 8 text apart apply 1-2 quarts per acre. Apply bothere falls and early spring while treat are dormant or soon after transplanting and before weeds are 11, inches high.

QUACKQRASS CONTROL: Broadcast 4 quarts per acre in 20-40 gallons of water for ade-quate coverage. Apply in fall or early spring while trees are dormant and before weed -seedlings are more than 197 inches high. This application will also control most annual broadleaf and

PRECAUTIONS:

1 — Do not graze treated areas. 2 — Do not apply to seedbeds 3 — Do not make more than one application per year.

NONSEL TIVE WEED CONTROL ON NONCROP LAND: For use on lence rows, around NOMBEL * ITVE WEED CONTROL ON NONCROP LAND: For use on lence rows, around tably pc. ..., and inclusinel siles, highway medians and shoulders, rainosed right-of-way tumberyards, patroleum tank larms, and in noncrop areas on farms, such as around buildings, equipment, and lust storage areas, along fances and lanse. Apply ATRAZINE 4L at rates recommended below before or soon a..., weeds begin growth. Postemargance application, should be made when weeds are young and actively growing. Use higher rates on heavy clay and muck soils. Do not contaminate domes to or irrigation water supplies, or lakes, streams, or ponds. Use sufficient water to assure thorough coverage. Use at test 1 gallon of water for each quart of ATRAZINE 4L, more if practical. Mechanical by-pass or jet agitation is necessary to keep ATRAZINE 4L in suspansion during application.

Most annual broadleaf and grass weeds, broadcast 8 2/3 pints to 10 quarts per acre. Hard to kill annual and many perennial broadleaf and grass weeds, broadcast 10 quarts per acre. Hard to kill biennial and perennial weeds such as bull thistle and sow thistle, broadcast 10 quarts per acre. For longer residual control in regions of high rainfall and long growing season broadcast 10 quarts per acre. For small areas, 1 pint per 1,0000 sq. ft. is equivalent to 9% quarts r acre.

NOTE:

Application rates to non crop land for industrial weed control cannot exceed a maximum of 10 lbs. active ingredient per acre per calendar year.

STORAGE AND DISPOSAL

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

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

STORAGE INSTRUCTIONS: Storage should be under took and key and secure from access by unauthorized persons and children. Storage should be in a cool dry area away from any heat or ignition source. Avoid storage at high temperatures. Do not stack over 2 pates high. Move containers by handles or cases. Do not move containers from one area to another unless they are securely sealed. Keep container lightly sealed when not in use. Keep away from any puncture source. Avoid storage near water supplies, lood, feed and fertilizer to avoid contamination. Avoid contamination with soids or alkales. Store in original contamination with a code of the storage in a spilled follow these steps.

a comprise containers only, if the conteins are leading of making its speed loady these steps
1 — Contain spill, absorb with a material such as saw dust, day or granules, or did
2 — Collect and place in suitable containers for disposal.
3 — Wath area with water and scap to remove remaining pesticide.
4 — Follow washing with clean water rings.
5 — Place a feeling container in a plastic tub and transfer contents as soon as possible to an empty original container.
6 — Do not allow run off to enter sewer or contaminate water supplies.
7 — Dispose of waste as indicated below:

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

"INTAINER DISPOSAL: Triple nose (or equivalent). Then offer for recycling or reconding, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by use and local authorities, by burning. If burned, stay out of smoke.

WARRANTY — CONDITION OF SALE

OUP RECOMMENDATIONS FOR USE of this product are based upon lest believed reliable Follow directions carefully. Timing and method of application, weather and crop conditions, motures with other chamicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller. Buyer assumes all asks of use, storage and handling of this material not in strict accordance with directions given herewith. In no case shall the Seller 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 skict accordance with directions given herewith. The foregoing is a condition of sale by the seller and is dance with directions given here accepted as such by the Buyer.

PDS 060189



In Accordance with PR Notice & Based on Draft Laboling Dated

2/22/88

ATRAZINE 4L HERBICIDE

For season-long weed control in corn and sorghum, for weed control in certain other crops, in non-crop and industrial sites.

_	ACTIVE INGREDIENTS:
(Atrazine (2-chloro-4-ethylamino-6-isopropylamino-s-friazine)
	Related compounds
	INERT INGREDIENTS:
	TOTAL

Atrazine 4L contains 4 lbs. active ingredients per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

See Side Panel For Additional Precautionary Statements SHAKE WELL BEFORE USING

NET CONTENT: 21/2 Gallons

(

9.45 Liters



EPA REG.

MANUFACTURED FOR OXON ITALIA S.p.A.

Via Sempione, 195 - 20016 PERO MILANO - ITALY

WORKER PROTECTION STATEMENT

Do not enter treated areas without protective clothing until sprays have dried. Because certain states may require more restrictive relentity intervals for various crops freated 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. (Indicate specific oral warnings which inform workers of areas or fields that may not be entered without specific protective clothing, period of time field must be vacated and the appropriate actions to take in case of accidental exposure). 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. Written warnings must include the following information. 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 treat as follows:

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful or fatal if swallowed. Causes moderate eye irritation. Do not get in eyes, on skin, or on clothing. Wear goggles. Harmful if swallowed, inhaled, or absorbed through the skin. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating. Remove contaminated clothing and wash before reuse. 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: Call a Physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vorniting by touching back of throat with finger. Do not induce vorniting or give anything by mouth to an unconscious person

IF IN EYES: Immediately flush eyes with plenty of water. Get medical attention if irritation develops

IF ON SKIN: Immediately flush skin with plenty of soap and water while removing contaminated clothing and shoes. If irritation develops seek medical attention

ENVIRONMENTAL HAZARDS

This pesticide is toxic to aquatic invertebrates. Do not apply directly to water or wetlands. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

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. It is well drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater

GENERAL INFORMATION

ATRAZINE 4L herbicide will control most annual broadleaf and grass weeds in corn and sorghum such as barnyardgrass, witchgrass (Panicum capillare), yellow foxtail, green foxtail, wild oats, large (hairy) crabgrass, grant foxtail, velvetleaf, morning glory, lambsquarters, pigweed, nightshade, purslane and mustard. ATRAZINE 4L may be

In each case where a range of rates is given, the lower rate should be used on light soils and soils low in organic matter, and the higher rate should be used on heavy soils high in organic matter

Since ATRAZINE 4L 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 41 is non flammable

Care should be taken to avoid using ATRAZINE 4L where adjacent desirable trees, shrubs or plants might be injured

NOTE: The Seller does not recommend the use of ATRAZINE 4L in combination with other herbicides or oils except as specifically described on the label or in literature published by the Seller

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling

APPLICATION PROCEDURES

GROUND APPLICATION: For the most uniform distribution of broadcast applications use 80° flat fan type nozzles. For band applications, use flat fan evilja para and strainers should be no finer than 50 mesh. Use a pump with capacity to (1) provide sufficient hydraulic agitation during mixing and application to keep it is son and (2) maintain 36. 40 psi operating pressure. Use a minimum of 5 gallons of water per acre for preplant incorporated pregnantance, and post (1) the control of applications. Use a minimum of 10 gallons of water per acre for all postemergence applications combined with oil or surfact

FOR BAND APPLICATIONS, CALCULATE THE AMOUNT TO BE APPLIED PER ACRE AS FOLLOWS:

Band width in inches

Row width in inches

Rate/A for broadcast treatment

Another needed for band treat

BEST AVAILABLE COPY

Row width in inches

AERIAL APPLICATION: For preplant and preemergence broadcast treatments apply at a 1.1 ratio of Agr. NE IL to width example accommendation calls for 1 quart of product and is mixed with 1 quart of water) to be applied per acre. For postemergence treatments, apply at a 1.1 ratio of Agr. NE IL to width example accommendation calls for 1 quart of product and is mixed with 1 quart of water) to be applied per acre. For postemergence treatments, apply at a 1.1 ratio of Agr. NE IL to width example accommendation in a minimum of 2 gallons of water per acre. Avoid applications under conditions where uniform coverages. The obtain a product acreating the product and a product acreating the product and a product acreating the prod

AVHAZINE 4L IN LIQUID FERTILIZER APPLICATIONS: Nitrogen solutions of complete their larger for part of the water as a carrier for preemerger and greplant applications of ATRAZINE 4L. Mixing should be accomplished at the property of liquid settle corn or sorghum has emerged as the standard or sorghum has emerged a

ATRAZINE 4L PI-US EMULSIFIABLE OIL IN WATER APPLICATIONS The sudding of pil to continuergence ATRAZINE 4L in water sprays may speed the activity of ATRAZINE 4L and provide quicker kill of weeds. However under certain conditions are the prospective of damage corn or sorghum. To minimize the possibility of damage follow the directions, pracedures and precautions given below.

For combining with ATRAZINE 4L, use a crop oil designed base at TRAZINE 4L and ing. 2% suitable emulsilier. Severals oils of this type are on the market. Oils con

For combining with ATRAZINE 4L, use a crop oil designed as use with TRAZINE 4L and ling 296 suitable emulsifier. Severals oils of this type are on the market. Oils confaminated with grateryor other material can cause compatible problems and/or crommitted with 2.4. Discreption of the materials as crop damage or sprayer clogging may result, 2) Fill spray tank half to two thirds full of clean water. 3) With the agration, and the ATRAZINE 4L. 4) Add the emulsihable oil last. 5) Empty the tank as completely as possible before refilling to prevent a buildup of oil in the tank. Keep the agritation system in operation to avoid a separation of oil from the water mixture still. • remaining in the tank (f) If an oil film starts to build up in the tank, drain the tank and clean out with a strong detergent solution or solvent (7) Clean the sprayer thoroughly Immediately after use by flushing the system with water containing a detergent

INSTRUCTIONS FOR SAFE HANDLING: 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.

DIRECTIONS FOR USE

CORN: ATRAZINE 4L may be applied either before planting, at planting or after planting as indicated below

PRE. LANT (Broadlesf 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 filled or worked after application, avoid deep incorporation of ATRAZINE 4L. Best results have been obtained when ATRAZINE 4L is applied within two weeks prior to planting

PREEMERGENCE (Broadcast and Grass Weed Control): Apply during or shortly after planting prior to weed emergence at the rate indicated in Table 1

POSTEMERGENCE (Broadlesf and Grass Wood Control): Apply before weeds exceed 1½ inches in height, at the rate indicated in Table 1.

For control of Broadlesf and Grass Weeds'		
Soil Texture	ATRAZINE 4L Broadcast Rate/A	
Light Soils, sands, loamy sands and sandy loams	4 pints	
Medium Soils, sift and day loams that are low in organic mafter	4¾ pints	
Heavy Soils, silt and day loams with medium to high organic matter and days (including the dark prairie sections, of the Corn Bett).	6 pints	
Peats musk and high organic days (apply postemergence only)	6 pints	

'For Preplant or Preemergence Application in Western Kansas, Western Nebraska, Eastern Colorado, Eastern Wyoming, New Mexico, West Texas and the Panhandle of Oklahoma. On sands, loamy sands, sandy loams, mild to strongly alkaline soils and all recently leveled soils, apply 2-2/5 pints per acre for broadleaf control. Broadleaf weeds such as pigweed, lambsquarters, nightshade, purstane and kochia will be controlled. On other soil types in the areas above, make application at the rate shown in Table 1 for broadleaf and grass weed control

LAYBY TREATMENT (Broadleaf and Grass Weed Control): Broadcast 2-4 pints per acre in a minimum of 5 gals, of water or nitrogen solution before weeds are 1½ inc high and corn is 20-30 inches high. When nitrogen solutions are used, direct to the lower ¼ inches of cornstalk to avoid corn foliage injury. Agitation in the tank during application is essential

POSTEMERGENCE BROADLEAF AND GRASS WEED CONTRO 4L PLUS EMULSIFIABLE OIL IN WATER: Broadcast 4 TR of act in emergence, but before weeds reach 11/2 inches in height.

rate of 1 gallon per acre for ground applications and applications

trol of calculations of the color of the col POSTEMERGENCE BROADLEAF WEED CONTROL WITH EMULSIFIABLE OIL IN WATER: Broadcast 2.55 it is per acre weeds such as annual morning glory, cocked in improquanters ragweed smartweed and wild buckwheat Adda in the cocked been and lambsquarters reach six inches in height and been ches in height Add emulsifiable oil at the rate of gallion per acre for aerial applications. Add a weeds are not controlled to it regrowth of viscottinosis. ach four in found applica ay be necessary if all

PRECAUTIONS FOR APPLICATIONS OF ATTRAZINE 4L PLUS EMULSIFIABLE OIL IN WATER TO CORN:

1 — Do not use oil in ATRAZINE 4L sprays when corn is under stress from prolonged condition weather, poor fertility, or other according to when corn is wet and succulert from recommendation and the properties of the properties o

Adam other insecticides, herbioides, liquid fertilizers or other materials is not recom-tiled with ATRAZINE 4L and emulsifiable oil in water because they cause compatibility TANGETT OF CHOP INJUIN

ater and handle emulsifiable oil carfully. Oil contaminated with even a small amount ater and emulsify properly when added to the tank.

 Do not make more than one application of ATRAZINE 4L and emulsifiable oil in ter per season (except as recommended for control of yellow nutsedge and Canada stle on this label)

PROBLEM WEEDS

FOR CONTROL OF YELLOW NUTSEDGE AND CANADA THISTLE: ATRAZINE 4L will control yellow nutsedge (Cyperus esculentus) and Canada thistle (Cirsium arverise) when applied as indicated *below*. For best results, ATRAZINE 4L should be used each year until yellow nutsedge or Canada thistle is eliminated or reaches a level of infesta. tion where neither weed species is a problem if regrowth of yellow nutsedge or Canada thistle occurs following the last application of ATRAZINE 4L during the season, cultivate When ATRAZINE 4L is applied postemergence to the weeds 1 gallon of emulsifiable crop oil should be applied per acre-

For control of yellow nutsedge and Canada thistle with ATRi-ZINE 4L several alternative methods of use are available. These methods are listed in order of preference below if other weed species, such as annual grasses, are also expected, use an alternative method that includes a preplant or preemergence treatment plus a posternergence combination with emulsifiable oil or apply all the ATRAZINE 4L preplant or preemergence

- 1 Broad, ast 4 pints of ATRAZINE 4L plus 1 gallon of emulsifiable c1 per acre after the crop has emerged and after yellow nutsedge or Canada thistle plants emerge, but before yellow nutsedge plants reach a height of 3 inches or Canada thistle plants reach a height of 6 inches. Follow with a second application of 4 plans of ATRAZINE 4U plus 1 gallon of oil per acre 10 to 20 days but prior to lay by (20, 30 inches) after the initial application has been made
- 2 Broadcast 4 pints of ATRAZINE 4L per acre preplant. Follow with an at plication of 4 pints of ATRAZINE 41 plus 1 gallion of 0 per acre after the corp and weeds, imerge but before nutriedge plants reach a height of 3 inches (for nutsedge control only).
- 3 Broadcast 4 pints of ATRAZINE 4L per acre during or shortly after planting, but prior to crop or weed emergence. Follow with an application of 4 pints of ATRAZINE. 4L plus 1 gallon of oil per acre after the corn and weeds emerge, but before yellow nulsedge plants reach a height of 3 inches or Canada thistle plants reach a height of
- 4 Broadcast 8 pints of ATRAZINE 4L plus 1 gallon of oil per acre after the crop has emerged but prior to lay by (20, 30 inches) and after yellow nutsedge and Canada this teleplants emerge, but before nutsedge reaches a height of 3 inches of Canada thistle. is more than 6 inches tall
- Broadcast B pints of ATRAZINE 4L per acre preplant (for yellow nutsedge control
- 6 Broadcast 8 pints of ATRAZINE 4L per acre during or shortly after planting but prior to crop or weed: mergence (For yellow nutsedge control only)

NOTE: Oil should be used in ATRAZINE sprays when corn is wet or under stress, especially when using 8 pints of ATRAZINE 4L per acre. See precaution section under Postemergence Applications of ATRAZINE 4L plus Emulsifiable Oil in Water on Corn for additional directions

FOR QUACKGRASS CONTROL ON LAND GOING INTO CORN PRODUCTION: SPLIT APPLICATION: Broadcast 4 pints per acre in the fall or spring and plow 1

1

souls

Broadcast a second application at the rate of 4 pints per acre in the spring before gar ing or after planting, but before weeds are 112 inches high. This split applicat :control both quackgrass and most annual broadleaf and grass weeds

SINGLE APPLICATION: Broadcast 6-8 pirits per acre in the fall or spring. Plow 1-3 weeks after application

TANK MIXTURES WITH ATRAZINE 4L

ATRAZINE 4L PLUS PARAQUATION: For control of existing vegetation and residual control where corn will be planted directly into a cover crop, established sod or in previous crop resides — Broadcast 4, 6 pints ATRAZINE 4L and 1, 2 pints Paraquat CI, per acre

crop resides — Broadcast 4: 6 pints ATRAZINE 4L and 1: 2 pints Paraquat CI per acre in 20: 60 gallons of water per acre. Add 8 oz of nomonic surfactant per 100 gallons of diluted spray. Add ATRAZINE 4L to spray tank first and thoroughly mix with water Add the Paraquat and substant last. Refer to the Paraquat CCEINE of further direction, limitations and cautions. ATRAZINE 4L DUS ALLOTHOR 4EC: Use a tank mixture of ATRAZINE 4L DUS Alaction AEC for it is pintrated most annual broadleaf and grass weeds in corn field and slage corn only sich as barnyardgrass black nightshade, bractuana carpetweed crop lass, fall paradim. Florida pusley, giant foxtail, green foxtail yellow formation also reduces competition from buttonweed (velvereaf) coclumns. This combination also reduces competition from buttonweed (velvereaf) coclumns. and annual morning glory

Make the ations at the ratio indicated in Table II. For proplant applications, apply with a classic matter planting the incorporate to a depth of 2 to 3 inches. For preemergence aboation and a soll surface after planting, but before the crop or weeds emerge posters and a freatments, make applications until weeds reach the two leaf stage. Make and the com is no more than three inches tall

TABLE II Tank Mixtures of A FRAZINE 4L Plus Alachlor 4EC On Corn (Field on Silage Only) **Broadcast Rate Per Acre**

Less than 3% More than 3% organic matter organic natter Atrazine 4L Atrazine 4L Alachlor 4EC **Alachior 4EC** Soil Texture (Pints/A) (Qts./A) (Pints/A) (Qts. (A) Light sandy 1 75 Sit loam 2 2 2/5 $2 \cdot 2 2/5$ 20 soils Heavy clay 2 2/5 3 1/5 2.5 2 2/5 3 1/5 25

NOTE: Apply in a minimum of 20 gallons of water per acre. Non-pressure fluid fem 200 may replace all or part of the water used as a carrier for applications applied to the sosurface before crop emerges. Add the ATRAZINE 4L to the spray tank first and thorough mix with water. Add the Alachlor last

At least 12 weeks must elapse following treatment with ATRAZINE 4L plus Alachlor 40 before immature corn forage can be harvested or fed to cattle

Refer to the Alachlor 4EC label for further directions. Iimitations and cautions

ATRAZINE 4L PLUS PROPACHLOR 65W: Use a tank mixture of ATRAZINE 4L 5 Propachior 65W for control of most annual broadleaf and grass weeds in corn (field hipping seed, silage and sweet corn only), such as annual ryegrass, barnyardgrass (watergrass carpetweed crabgrass fall panicum Florida pusley grant toxtail green toxtail yeich toxtail, goosegrass, groundset, jimsonweed, lambsquarters, mustard, nightshabe pigweed purstane ragweed smartweed and sunflower. This combination also reduce competition from buttonweed (velvetleaf), cockiebur and annual morning glory. Brass cast 2 1/10 - 3 1/5 pints of ATRAZINE 4L plus 3 8 to 6 0 lbs of Propachlor 65W cer alte on the surface any time from immediatel, after planting until broadleaf and grasses at 5 reach the two leaf stage. Use the lower rates of ATRAZINE 45 and Propagation 65W on the light textured soils low in organic matter. Use the higher rates on hea. textured soils high in organic marter

A minimum of 2.4.5 pints per acre of ATRAZINE 4L in the tank mixture will give beta control of annual morning glory, buttonweed (velvetleaf), cocklebur and sunflower

Apply in a minimum of 20 gallons of water per acre. Non, pressure liquid fertilizer — areplace ail or part of the water used as a carrier for applications applied to the soil so. face before crop and weeds emerge. Add the ATRAZINE 4L to the spray tank first and thoroughly mix with water. Cut the Propachlor 65W bag and fill with water to the firming Grasp the neck of the bag firmly and shake vigorously and add to the spray tank.

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

PRECAUTIONS FOR ALL APPLICATIONS TO CORN

- 1 Do not apply more than 8 pints per acre of ATRAZINE 4L to cornin any one **** . . 2 — Following harvest of a freated crop, plow (morpholard or disk "MoN and thorbug".

 till the soil in the fall or spring to minimize possible injury to initial analysising See 2022 crops regardless of the rate used.
- 3 Do not graze treated area or feed treated totage to livestock for 21 days following: application

For postemergence applications plus emulsifiable oil, see additional brecautions 6.1.5.1 that section of this label

SUGGESTIONS FOR ROTATIONAL CROPS

- The Land treated with ATRAZINE 4L should not be planted to the choice except of sorghum until the following year or injury may occur.

 The ATRAZINE 4L is applied after June 10 do not rotate with this other than the control of the
- or sorghum the next year or injury may occur.

 3 If ATRAZINE 4L is used at a broadcast rate higher than 3 pt its pilit acre (c) 2 at will
- parable rates in a band application) crop of untreated corn or stript din should pred app the next rotational crop.
- 4 In the High Plains and Intermountain area of the West where rainfall is sparse and erratic or where irrigation is required, use ATRAZINE 4L to cort. the weeds or corn or when corn is to follow corn or a crop of untreated corn, or sorghum is to precede other
- 5 In Western Minnesota and Eastern parts of the Dakotas. Nebraska and Kansar corn treated with ATRAZINE 4U should not be followed with soybeans if the broadcast. rate applied was more than 4 pints per acre for comparable rate in a band) or in _____. may occur
- Injury may occur to soybeans planted in North Central Iowa and South Central Min nesota the year following an ATRAZINE 41 application on Harps. Caniston, Stroopen

or other soils having a calcareous surface layer

7 — Do not plant sugar beets, tobacco, vegetables (including dry beans), spring, seeded small grains or small, seeded legumes and grasses the year following ATRAZINE_AL application or injury may occur

SORCHIME AND SORGHUM-SUDAN HYBRIDS (Grain and Forage Types): ATRAZINE 4t maybe applied either before planting, at planting or after planting as indicated below

PREPLANT (Broadcast and Grass Weed Control): Broadcast in the spring after plowing at the rate indicated in Table III. Application may be made before during or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation of ATRAZINE 41. Best results have been obtained when ATRAZINE 41 is applied within two weeks prior to olanting

PREEMERGENCE (Broadcast and Grass Wood Control): Apply during or shortly after planting but prior to weed or crop emergence at the rate indicated in Table III.

Preplant and Preemergence Applications' For Broadlest and Grass Weed Control In Sorghum			
Soil Texture	Organic Matter	Broadcast Rate of ATRAZINE 4L Per Acre	
Light Soils sands loamy sands sandy loams and sandy clay loam	any level	DO NOT USE (except for preemergence use on bedded sorghum in Arizona and California as in dicated below)	
Medium and Heavy Soils	Less than 1%		
Sitt loams clay loams	196 to 1 1/2%	3 1/5 - 4 pints	
and clays	More than 1 1/2%	3 1 5 4 3/4 pints	

* ATRAZINE 4: should not be applied preplant to sorghum grown in New Mexico. Okiahoma. Texas. Arkanss. Louisiana. Tennessee. Mississippi. Alabama. Georgia. Florida. South Carolina and North Crolina or preemergence to sorghum grown in New Mexico. Texas and Oklahoma. except in N.E. Oklahoma and the Texas. Guff Coast.

In case of planting failures, sorghum can be replanted into soil previously freated with ATRAZINE 4L. Do not make a second broadcast application or injury may occur. If ATRAZINE 80W is applied in a band and sorghum is replanted in the untreated row middles. ATRAZINE 4L can be applied in a band to the second planting.

PREEMERGENCE BROADLEAF WEED CONTROL IN FURROW IRRIGATED BEDDED SORGHUM (Arizona and California only): For preemergence control of broadleaf weeds such as ground cherry lambsquarters, morning glory mustard pigweed and pursiane broad cast 1 3/5 to 2 2/5 pints per acre. Use the lower rate on coarse textured soils an 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 PREEMERGENCE APPLICATIONS OF ATRAZINE 4L TO FURROW PRECAUTIONS FOR PREEMERGENCE APPLICATIONS OF ATRAZINE 4L TO FUHHOW IRRIGATED BEDDED SORGHUMI GROWN IN ARIZONA AND CALIFORNIA: To avoid possible sorghum injury, do not use on sand and 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 improved to the control of the

POSTEMERGENCE BROADLEAF AND GRASS WEED CONTROL: Apply before weeds ex ceed 1½ inches in height and at the rate indicated in Table IV. Applications may be made up to close in

Postemergence Broadlest and Grass Weed Control In Sorghum			
Soil Texture	Minimum Height of Sorghum at Treatment	Broadcast Rate/ATRAZINE 4L	
Sand or loamy sand	-DO NOT USE		
Sandy loam	See directions for broadleaf and weed control below		
Sift loams to sandy clay loams	Completely emerged	4 434 pints	
Otton and Pullman day soils	At least 6 inches high	4 434 pints	
Sity clay loams and heavier soils	Completely emerged	6 pints	

POSTEMERGENCE BROADLEAF WEED CONTROL WITH ATRAZINE 4L PLUS EMULSIFIABLE OIL IN WATER: Broadcast 2.2/5 prins per acre for control of broadleaf weeds such as annual morning glory cocklebur lambsquarters mustard pigweed rageweed smart weed and wild buckwheat. Application should be made before pigweed and lambsquarters reach six inches in height and before all other weeds reach four inches in height. In Texas New Mexico. Oklahoma. Western Kansas. Colorado and the desert regions of California and Arizona apply when sorghum is 6 - 10 inches in height, but before it reaches the boot stage. In all other areas, apply after sorghum reaches the three leaf stage. Add emulsifiable oil at the rate of 1 gallon per acre for ground applications and 1.2 gallon per acre for aerial application. A cultivation may be necessary if all weeds are not controlled or it regrowth of weeds occurs.

PRECIUTIONS TOR APPLICATION OF ATRAZINF 41 PLUS EMILL SEIABLE ONLINE.

RRECTUTIONS FOR APPLICATION OF ATRAZINE 4L PLUS EMULSIFIABLE OIL IN

WATER 10 SORGHAM

1 — Do not use oil in ATHAZINE 4L sprays when sorghum is under stress from prokinged could were weather, goor fertility or other factors or when sorghum is well and succulent from recent rainfall as crop injury may occur.

2 — Do not use in ATRAZINE 4L sprays when treating inbred lines or any breeding stock as triusy may occur.

This y way occur

3 all Adding other insecticides herbicides liquid fertilizers or other materials is not recommended.
Toledatise they may gause compatibility problems or crop injury.

4 all Store and transfer emulsifiable oil carefully. Oil contaminated with even a small amount of water may not emulsify properly when added to the tank.

Gall Bit not make more than one appliction of ATRAZINE 41, emulsifiable oil in water per season.

Pastemergence Broadleef Weed control with ATRAZINE 4L plus Surfactant in Oklahome, New Likzico, Texas, Western Kansas, Colorado, and Desert regions of swiscius and California daily: Broadcast 2 2/5 pints of ATRAZINE 4L plus ¼ 1½ pints of surfactant per acre after sorghum reaches 6 inches in height, but before weeds reach 1½ in these in height, apply entry on sandy loams and finer textured soils.

PRECAUTIONS FOR ALL APPLICATIONS TO SORGHUM

— Heavy rans infriedately 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 unit furrows are leveled (plow in). Deep planter marks or seed.

sorghum should not be made until furlows are leveled (plow in). Deep planter marks or seed furlows should not be leveled before application.

2 — Application to sorghum growing under stress caused by minor element deficiency or to sorghum growing on highly calct, eous soils may result in crip injury.

3 — Do not graze of feed forage from treated areas for 21 days following application.

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 spring, seeded crops.

regardless of rate used

For applications to furrow irrigated bedded sorghum in Anzona and Cattornia and the posternergence applications plus emulsifiable oit see additional precisulty is 200 those in

SUGGESTIONS FOR ROTATIONAL CROPS:

1 — Land freated with A1RAZINE 4L should not be planted to any croplescept to an soriginum.

until the following year or injury may occur

2 — If ATRAZINE 4L is applied after June 10, do not rotate with crops other than composing management.

the next year or injury may occur

3 — If ATRAZINE 4L is used at a broadcast rate higher than 6 pints be acre or comparace rates in a band application), a crop of untreated corner sorghum should precede the next reliable.

tional crop.
4.— In the High Plains and Intermountain areas of the West where rainfall is sparse and erration where irrigation is required luse ATRAZINE 4th to control wheels in sorghum only when sorghum is to follow sorghum or a crop of untreated sorghum or corn is to precede other rotal.

— In Western Minnesota, and Eastern parts of the Dakotas, Nebraska, and Kansas, Sorgr

 In Western Minnesota, and Eastern parts of the Dakeds, Netriasia, and Eastern parts of the Dakeds. Netriasia and Eastern parts of the Dakeds in Netriasia.
 Including the ATRAZINE 4L should not be followed with soybeans if the broadcast state applied was more than 4 pints per acre (or comparable rate in a band) or injury may occur.
 Injury may occur to soybeans planted in North Central Iowa and South Central Minnesota the year following an ATRAZINE 4L application on Harps. Canisteo. Stroden, or other soils having. a calcareous surface laver

7 — Do not plant sugar beets, tobacco, vegetables (including dry beans) spring, seeded smis-grains or small, seeded legumes and grasses the year following an ATRAZINE 4L application. may occur

or injury may occur. SUGAR CANE: For control of nonrhizomotous iveeds, such as crabgrass, jungle noe, wire grass foxfall amarenths. Flora's paint brush, fireweed and similar plants. Broadcast 2, 4 quarts per acre in 20, 50 gallons of water for adequate coverage of the soil surface at time of planting or ratiooning but before the cane emerges. One additional application may be made over me cane as it emerges and two additional applications may be made interline after emergence. as a directed spray

For control of emerged Pellitary Weeds (artiflery would) (Flurida only). At this acre in 40 gallons of water per acre as a directed spray. Add 2 quarts of sumation 50 gallons of spray and be sure weed foliage is thoroughly covered.

PRECAUTIONS:

1 — Do not apply ATRAZINE 4L after I close in:
2 — Do not apply more than 9% quarts of ATRAZINE 4E to any one cross of care.

FOREST AND CHRISTMAS TREE PLANTATIONS: Douglas Fir Grand Fir Nobie Fir White For Lodgepole Pine Ponderosa Pine and Scotton Pine (Pacific Northwest: West of Cascade only). Annual broadleaf and grass weed control. Broadcast 2: 4 quarts in 20 to 40 gallors: 10 water per acre to assure thorough coverage. For band applications reduce rise of ATBAZIVE 41 and volume of water in proportion to the acre treated. For example, when treating a 4-tion band over trees planted in rows 8 feet apart apply 1: 2 quarts per acre. According to be seen to band over trees prantied in rows 8 feet apart apply 1-2 quarts per acre. Acon befixeen is and early spring white trees are dormant or soon after transplanting and before weeds are 11, inches high inches high

QUACKGRASS CONTROL: Broadcast 4 quarts per acre in 20, 40 gallons of water for acre quate coverage. Apply in fall or early spring while trees are domant and before weed seedlings are more than 1½ inches high. This application will also control most annual broadleaf and orass weeds

PRECAUTIONS:

Do not graze treated areas
 Do not apply to seedbeds
 Do not make more than one application per year

3 — Do not make more than one application per year.
NONSELECTIVE WEED CONTROL ON NONCROP LAND: For use on fence rows around utility poles and industrial sites highway medians and shoulders railroad right of wav tumberyards petroleum tank farms, and in noncrop areas on farms, such as around buildings equipment, and fuel storage areas, along fences and lanes. Apply ATRAZINE 4L at rates recommended below before or soon after weeds begin growth. Postemergence applications should be made when weeds are young and actively growing. Use higher rates on reavy clay and muck soils. Do not contaminate domestic or irrigation water supplies or lakes sheams or ponds. Use sufficient water to assure thorough coverage. Use at least 1 gallon of water for each quart ATRAZINE 4L, more if practical Mechanical by pass or jet agration is necessary to keep ATRAZINE 4L in suspension during application.
Most annual broadleaf and grass weeds, broadcast 8% pints to 10 quarts per acre. Hard 15

Most annual broadleaf and grass weeds, broadcast 8% pints to 10 quarts per acre. Hard to Most annual produced and grass weeds broadcast 649 philis to 10 doards and grass weeds broadcast 10, 20 class per acre. Hard to kill become and perennial weeds such as bull thistle and sow thistle, broadcast 20, 40 quarts per acre. For longer residual control in regions of high rainfall and long growing season broadcast 20, 40 quarts per acre. For small areas, 14 pint per 1,000 sq. ft. is eduivalent to 9. quarts per acre

STORAGE AND DISPOSAL

Do not contaminate water food or feed by storage or disposal

STORAGE INSTRUCTIONS: Storage should be under lock and key and secure from access by unauthorized persons and children. Storage should be in a coordinate to the cess by unauthorized persons and children. Storage should be in a coordinate a walfrom any heat or ignition source. Avoid storage at high temperatures. Do not stack over 2 pallets high. Move containers by handles or cases. Do not move containers from one area to another unless they are securely sealed. Keep container tightly sealed when not in use. Keep away from any puncture source. Avoid storage near water supplies, food. in use. Keep away from any puncture source. Avoid storage near water subclies floor feed and fertilizer to avoid contamination. Avoid contamination with acids or alkales. Store in original contamers only if the contents are leaking or material is spilled tolow mess steps.

- 1 Contain spill absorb with a material such as saw dust clay or granues or diff
- Collect and place in suitable containers for disposal
 Wash area with water and soap to remove remaining pesticide
 Follow washing with clean water rinse.

5 — Place a leaking container in a plastic tub and transfer contents as soon as possible to an empty original container.
6 — Do not allow run off to enter sewer or contaminate water supplies.

- Dispose of waste as indicated 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 landful or incineration or in allowed to troning or puncture and dispose of in a sanitary landful or incineration state and local authorities by burning. If burned, stay out of smoke

WARRANTY — CONDITION OF SALE

QUR RECOMMENDATIONS FOR USE of this product are based upon test beneved reliable follow directions carefully. Timing and method of application, weather and once conditions mixtures with other chemicals not specifically recommended and other influencing fact, is in the use of this product are beyond 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 the Seller 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 the seller and is accepted as such by the Buyer.