

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

PA 25 35915-3

1/5

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:

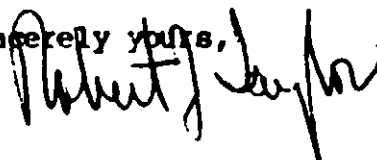
Subject: Atrazine 90 Herbicide
 EPA Reg. No. 35915-3
 Re: Atrazine Voluntary Exposure Reductions Measures
 Your Amendment Resubmission Dated March 20, 1990

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

1. In the middle of the right column of page 3, under AERIAL APPLICATION, change the term "boot stage" to "12 inches in height".
2. On page 4 under Suggestions for Rotational Crops, 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.
3. On page 4 under PRECAUTIONS, delete instruction #5. 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.
4. On page 4, delete the section entitled "Center Pivot Sprinkler Application". (The new measures prohibit application of the subject product by any irrigation system).

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,



Robert J. Taylor
 CONCURRENCES
 Product Manager (25)

SYMBOL	H7505C			Fungicide-Herbicide Branch		
SURNAME	Morfill			Registration Division (117505C)		
DATE	04/03/90					

RESTRICTED USE PESTICIDE
(GROUND 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 WATER CONCERNS. USERS MUST READ AND FOLLOW ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUND WATER.



ACCEPTED
BY EPA

ATRAZINE 90

HERBICIDE

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

Atrazine Is A Dry Flowable

ACTIVE INGREDIENTS:

Atrazine (2-chloro-4-ethylamino-6-isopropylamino-s-triazine)..... 85.5
Related Compounds..... 4.5

INERT INGREDIENTS:..... 10.0

TOTAL..... 100.0

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

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

IF SPLASHED IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes and get medical attention.

IF SPILLED ON SKIN: Immediately remove contaminated clothing, INCLUDING SHOES, and wash skin with soap and plenty of water. If irritation develops, send for a physician.

See Inside Panel For Additional Precautionary Statements

Net Contents:



EPA Reg. No. 35915
EPA Est. No.

MANUFACTURED FOR
OXON ITALIA S.p.A.
via Sempione, 195 - 20016 PERO
MILANO - ITALY

PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes eye and skin irritation. Do not get in eyes, on skin, or on clothing. Wash thoroughly with soap and water after handling and before eating or smoking. Remove and wash contaminated clothing before reuse. Harmful if swallowed. Avoid inhalation of dust and contamination of food and feed.

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 rubber or neoprene gloves and a face shield or goggles.

ENVIRONMENTAL HAZARD

Do not contaminate water when disposing of equipment washwaters. Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) 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 ground water.

This pesticide is toxic to aquatic invertebrates. Do not apply directly to water or wetlands. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

IMPORTANT: Read the entire directions for use and the conditions of sale and warranty before using this product.

DIRECTIONS FOR USE

is a violation of federal law to use this product in a manner inconsistent with its labeling.

GENERAL INFORMATION

ATRAZINE HERBICIDE will control most annual broadleaf and grass weeds in corn, Sorghum, Sugarcane, Macadamia nuts, turf, non-crop lands and certain other crops. It is also effective for control of most annual and many perennial broadleaf and grass weeds in noncrop areas and industrial sites. ATRAZINE may be applied before or after weeds emerge.

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

ATRAZINE is a dry flowable that should be mixed with water and applied as a spray. Make a slurry by adding ATRAZINE to water. Pour the slurry into the spray tank during or after filling. Sufficient hydraulic (jet) or mechanical agitation must be provided during mixing and application to keep the material in suspension.

Wash sprayer thoroughly after use.

ATRAZINE is noncorrosive to equipment and metal surfaces, non-flammable, and has low electrical conductivity.

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

Store ATRAZINE in a dry place.

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, the higher rate should be used on heavy soils and soils high in organic matter.

Application in water plus emulsifiable oil or oil concentrate. Adding emulsifiable oil or oil concentrate to postemergence water based spray on corn and sorghum may improve weed control. However, under certain conditions, the use of either type of oil may seriously injure crop. To minimize this possibility, observe the following directions:

Use a crop oil designated for use with this product containing 1-2% suitable emulsifier, or a suitable crop oil concentrate designed for use with this product and containing not more than 20% emulsifier or surfactant blend. Emulsifiable oil and oil concentrate contaminated with water or other materials can cause compatibility problems and crop injury. Observe all cautions and limitations on labeling of all products used in mixtures.

PROCEDURES:

- 1 Thoroughly clean sprayer prior to use. Do not use sprayer contaminated with 2,4-D or other materials as corn damage or sprayer clogging may result.
- 2 In a separate container, make a thin slurry of ATRAZINE in water, thoroughly wetting the Atrazine.
- 3 Fill the spray tank with water, allowing for the addition of the ATRAZINE.
With the agitation system in operation, add the Atrazine slurry.
Add the emulsifiable oil last.
- 4 Empty the tank as completely as possible before refilling to prevent a buildup of oil in the tank. Keep the agitation system in operation to avoid a separation of the oil from the water in the spray mixture still remaining in the tank.
- 5 If an oil film starts to build up in the tank, drain the tank and clean out with a strong detergent solution or solvent.
- 6 Clean the sprayer THOROUGHLY immediately after use by flushing the system with water containing detergent.

NOTE:

- 1 Do not use oil in Atrazine 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 oil 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 and emulsifiable oil in water because they may 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 make more than one application of ATRAZINE in emulsifiable oil in water per season.

GROUND APPLICATION: For uniform distribution in broadcast applications, TeeJet 8003 or 8004 fan type or similar nozzles with openings of equal or greater size should be used. For bank applications, use TeeJet 8003-E or 8004-E or similar type nozzles. Screens in nozzles as well as those in suction and in-line strainers should be no finer than 50 mesh size. A suitable pump with capacity to deliver 10 - 12 gpm should be used and operating pressure should be 35 - 40 psi. Use 20 - 40 gals. of water per acre to assure even coverage unless otherwise specified.

AERIAL APPLICATION: Use only where broadcast applications are specified. Apply a minimum of 1 gallon of water for each 14 oz. to 1 lb. 5 oz. of ATRAZINE to be applied per acre. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

INSTRUCTIONS FOR SAFE HANDLING — Avoid application directly to human or animals. Although it is unnecessary for flagmen or loaders to wear protective clothing or equipment, care should be taken to avoid inhalation of dust or spray mist, or prolonged contact with skin. Flagmen and loaders should wash thoroughly before eating and at the end of each day's operation.

Do not apply to water drainage areas where runoff or flooding will contaminate ponds, lakes or streams.

Ground water contamination 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.

SUGARCANE

For control of most annual broadleaf weeds, such as crabgrass, junglerice, wiregrass, foxtail, amaranth, Florida palmetto, broadleaf and shrubby plants: Broadcast 2 lbs. 3 oz. - 4 lbs. 8 oz. per acre in 20 - 40 gals. of water for adequate coverage of the soil surface at time of planting or reseed, but before the cane emerges. One additional application may be made over the cane as it emerges, and two additional applications may be made in the fall and spring as a directed spray.

For control of emerged Peltory Weeds (artillery weed) (Florida only): Apply 7 oz. to 10.5 oz. per acre in at least 40 gals. of water per acre as a directed spray. Add 2 qt. of surfactant for each 50 gals. of spray and be sure weed foliage is thoroughly covered.

PRECAUTIONS:
 1 Do not apply ATRAZINE after "close in".
 2 Do not apply more than 10 lbs. 15 oz. of ATRAZINE to any one crop of cane.

For control of alexandergrass, large crabgrass, peltory (artillery) weed and spiny amaranth, use one of the following methods at planting or reseed (Florida only):

- 1 Apply 4.4 lb. in 20-40 gal. of water/A, preemergence broadcast or banded. Follow with one of two broadcast or banded over-the-top applications as needed, postemergence to sugarcane and weeds, at 2.2 lb. in 20-40 gal. of water/A. Treat before weeds exceed 1.5 inches in height.
- 2 Apply 1-3 times as needed, starting in 20-40 gal. of water/A. Broadcast or banded over-the-top, postemergence to sugarcane and weeds, at 2.2 lb. in 20-40 gal. of water/A. Treat before weeds exceed 1.5 inches in height.

TURF GRASS CONTROL ON SOG PRODUCTION (ST. AUGUSTINE, CENTIPEDE, AND ZOYSIA GRASS)

Apply 2.2-4.4 lb. A/A on muck or peat or 1.1 lb. A/A on sandy soil.	Soil texture	Old beds: Within 2 days after sowing sod.
2.2 lb.	Sandy loam	New beds: 3-4 days after sprigging or plugging.
4.4 lb.	Sandy loam	Old beds: Within 2 days after sowing sod.
2.2 lb.	Sandy loam	New beds: 7-10 days after sprigging or plugging.

If weeds regrow, apply an additional 2.2 lb./A on muck or peat or 1.1 lb./A on sandy soil.

PRECAUTIONS:
 1 Do not apply within 30 days before cutting or mowing.
 2 Do not apply in combination with surfactants or other spray additives, as injury may occur.
 3 Do not use north of N.C.

DAMIA NUTS: For preemergence control of many broadleaf and grass weeds, including crabgrass, foxtail, wiregrass, Florida palmetto, spanishneedles, and broadleaf, apply 2.2-4.4 lbs. in 60 gal. of water/A before harvest and just before weeds emerge. Repeat as necessary. Do not spray when nuts are on ground during harvest period. Do not spray by air.

FORREST AND CHRISTMAS TREE PLANTATIONS: Douglas Fir, Grand Fir, Noble Fir, White Fir, Lodgepole Pine, Ponderosa Pine and Scotch Pine. (Pacific Northwest - west of Cascades only).

Annual broadleaf and grass weed control: Broadcast 2 lbs. 3 oz. - 4 lbs. 8 oz. in 20 - 40 gals. of water per acre to assure thorough coverage. For band applications, reduce the rate of ATRAZINE and volume of water in proportion to the area treated. For example, when treating a 4-foot band over trees planted in rows 8 feet apart, apply 1 lb. 1 oz. - 2 lbs. 3 oz. per acre. Apply between fall and early spring while trees are dormant or soon after transplanting and before weeds are 1 1/2 inches high.

Quackgrass control: Broadcast 4 lbs. 8 oz. per acre in 20 - 40 gals. of water for adequate coverage. Apply in fall or early spring while trees are dormant and before weed seedlings are more than 1 1/2 inches high. This application will also control most annual broadleaf and grass weeds.

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

CHEMICAL FALLOW - Wheat-Sorghum-Fallow: To control annual broadleaf and grass weeds following wheat harvest and into following sorghum crop when grown under minimum tillage.

Apply 3.3 lb./A to wheat stubble immediately following wheat harvest. If weeds are present, remove them with a sweep plow or other suitable implement after application. Plant sorghum into wheat stubble the following spring with minimum soil disturbance. 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.

PRECAUTIONS:
 1 Use only on all loam or finer textured soil.
 2 Wheat-sorghum-fallow cropping sequence must be followed.
 3 Do not apply following sorghum harvest.
 4 Do not graze or feed forage from treated area to livestock.
 5 Do not plant any crop other than those on this label within 18 months following treatment.

NONSELECTIVE WEED CONTROL ON NONCROP LAND

For use on fence rows, and around utility poles. Apply ATRAZINE at rates recommended below before or soon after weeds begin growth. Postemergence applications should be made when weeds are young and actively growing. Use the higher rates on heavy clay and muck soils. Do not contaminate domestic or irrigation water supplies, or lakes, streams, or ponds. Use sufficient water to assure thorough coverage. Use at least 1 gal. of water for each 14 oz. of ATRAZINE, more if practical. Mechanical bypass or jet agitation is necessary to keep ATRAZINE suspension during application.

Most annual broadleaf and grass weeds: Broadcast 5 1/2 lbs. - 10 lbs. 15 oz. per acre.
 Hard-to-kill annual and many perennial broadleaf and grass weeds: Broadcast 10 lbs. 15 oz. per acre.

Hard-to-kill biennial and perennial weeds such as bull thistle and sowthistle: Broadcast 10 lbs. 15 oz. per acre.

For longer residual control in regions of high rainfall and a long growing season: Broadcast 10 lbs. 15oz. per acre.

For small areas, 3.94 oz. per 1,000 sq. ft. is equivalent to 10 lbs. 15oz. per 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.

SORGHUM AND SORGHUM-SUDAN HYBRIDS (Grain and Forage types): ATRAZINE may be used to control many annual broadleaf and grass weeds in sorghum.

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

The maximum application rate for sorghum is 3 lbs. a.i. per acre per calendar year. Applications for quackgrass suppression in sorghum is restricted to a spring application only. No fall applications are permitted.

Apply at the rate indicated in the table below. Weeds should not be more than 1 1/2 inches high at time of application. When making band applications, reduce the broadcast rate per acre in proportion to the area treated.

PREPLANT** AND PRE-EMERGENCE APPLICATION (in eastern and central Nebraska and northeast Kansas only).

Soil Texture	Rate Per Acre of Atrazine		
	Broadcast 20-40 gals. of water per acre	20-inch Band* in 10-20 gals. of water per acre	13-inch Band* in 7-14 gals. of water per acre
Sand to sandy loam, erodes slopes & soils low in organic matter	DO NOT USE		
Other soils (shallow incorporation may improve control)	2 lbs. 3 oz. - 2 lbs. 10 oz.	1 lb. 1 oz. - 1 lb. 5 oz.	11.4 oz. - 14 oz.

* Based on 40-inch row spacing.
 ** See pre-plant recommendations for corn. Non-pressure nitrogen solutions of complete water fertilizers may be substituted for all or part of the water as carrier for ATRAZINE. Do not apply nitrogen solution or fertilizers after crop emergence as damage may result.

Weeds to be controlled & soil texture at treatment	Stage or height of Sorghum	Rate Per Acre of Atrazine		
		Broadcast in 20-40 gals. of water/A	20" Band** in 10-20 gals. of water	13" Band** in 7-14 gals. of water/A
BROADLEAF AND GRASS WEEDS				
Sandy or loam Sand: DO NOT USE				
Sandy loam: SEE BROADLEAF WEEDS BELOW				
Silt loam to sandy clay loam	Completely emerged	2 lbs. 3 oz. - 2 lbs. 10 oz.	1 lb. 1 oz. - 1 lb. 5 oz.	11.4 oz. - 14 oz.
Clay & Pullman clay soil	At least 6 inches high	2 lbs. 3 oz. - 2 lbs. 10 oz.	1 lb. 1 oz. - 1 lb. 5 oz.	11.4 oz. - 14 oz.
BROADLEAF WEEDS				
Sandy loams and heavier soils in Okla., N.M., Tex., West Kans., Colo., and desert regions of Ariz. and Cal. only				
At least 6 inches high	1 lb. 5 oz. plus 1/4 pt. surfactant	10.5 oz. plus 3/8 pt. surfactant	7 oz. plus 1/2 pt. surfactant	

**Based on 40-inch row spacing.

POST-EMERGENCE BROADLEAF WEED CONTROL WITH ATRAZINE AND EMULSIFIABLE OIL IN WATER (New Mexico, Oklahoma, and Texas only): The addition of oil to post emergence Atrazine in water sprays may speed the activity of Atrazine and provide quicker kill of annual broadleaf weeds. However, under certain conditions, the use of oil may seriously damage sorghum. To minimize the possibility of damage to sorghum, follow the directions and procedures given below.

GROUND APPLICATION: Broadcast 1 lb. 5 oz. of ATRAZINE and 1 gallon of emulsifiable oil in 20-40 gals. of water per acre when sorghum is 8 to 10 inches in height and before it reaches 12 inches in height. Treat before broadleaf weeds reach 6 inches in height.

AERIAL APPLICATION: Broadcast 1 lb. 5 oz. of ATRAZINE and 1/2 gallon of emulsifiable oil in no less than 5 gals. of water per acre when sorghum is 8 to 10 inches in height and before it reaches boot stage. Treat before broadleaf weeds reach 6 inches in height.

*For combining with ATRAZINE use a crop oil designed for use with ATRAZINE containing at least 1 per cent suitable emulsifier. Several oils of this type are on the market. Oils contaminated with water or other materials can cause compatibility problems and/or crop injury.

- PROCEDURES:**
- 1 Thoroughly clean sprayer prior to use. Do not use sprayer contaminated with 2,4-D or other materials as sorghum damage or spray clogging may result.
 - 2 In a separate container make a thin slurry of oil in water, thoroughly mixing the ATRAZINE.
 - 3 Fill the spray tank with water, allowing for the addition of the ATRAZINE.
 - 4 With the agitation system in operation, add the ATRAZINE slurry.
 - 5 Add the emulsifiable oil.
 - 6 Empty the tank as completely as possible before refilling to prevent a build-up of oil in the tank. Keep the agitation system in operation to avoid a separation of the oil from the water in the spray mixture still remaining in the tank.
 - 7 If an oil film starts to build up in the tank, drain the tank and clean out with a strong detergent solution or solvent.
 - 8 Clean the sprayer thoroughly immediately after use by flushing the system with water containing a detergent.

- NOTE:**
- 1 Do not use oil in ATRAZINE sprays when sorghum is under stress from prolonged cold, wet weather, poor fertility, or other factors or when sorghum is wet and susceptible from recent rains; crop injury may occur.
 - 2 Do not use oil in ATRAZINE 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 because they may 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. Do not make more than one application of ATRAZINE and emulsifiable oil in water per season.

- PRECAUTIONS:**
- 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 (plowed-in). Deep planter marks or seed furrows should be leveled before application.
 - 2 Application made to sorghum growing under stress caused by minor element deficiency or to sorghum growing on highly calcareous soils may result in crop injury.
 - 3 Do not plant any rotational crops other than those specified in the Suggested Rotational Crops section below for 18 months following application.
 - 4 Do not graze or feed forage from treated areas for 21 days following application.
 - 5 Following harvest of a treated area, plow (subsoil or dis-plow) and thoroughly till the soil in fall or spring to minimize possible injury to rotational spring-seeded crops. Resistant to the...

Rotational Crop:

- 1 Do not rotate to any crop except corn or sorghum until the following year, as injury may occur
- 2 If applied after June 10, do not rotate with crops other than corn or sorghum the next year, as crop injury may occur.
- 3 If used at a rate higher than 3.3 lb/A or equivalent band application rate, a crop of untreated corn or sorghum should precede the next rotational crop.
- 4 In the Higher Plains and Intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required, use only when corn or sorghum is to follow corn or sorghum or when a crop of untreated corn or sorghum is to precede other rotational crops.
- 5 In eastern parts of the Dakotas, KS, western MN, and NE, do not rotate to soybeans if the rate applied to corn or sorghum was more than 2.2 lb/A or equivalent band application rate, as soybean injury may occur.
- 6 Injury may occur to soybeans (planted) in north-central and north-west IA, south-central and south-west MN, northeast NE, southeast SD, and other areas of 1st year following application on 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 on grasses the year following application, as injury may occur.

CORN

One application will control most annual broadleaf and grass weeds such as barnyardgrass, witchgrass, (Panicum capillare), yellow foxtail, green foxtail, wild oats, large (heavy) crabgrass, (Parietaria), velvetleaf, morning glory, lambsquarters, pigweed, raygrass, nightshade, purslane, and mustard. ATRAZINE may be applied either before planting, at planting, or after planting, use 2 lbs. 3 oz. - 3 lbs. 4 oz. per acre as indicated below.

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

The maximum application rate for corn is 3 lbs. a.i. per acre per calendar year. Applications for quackgrass suppression in corn is restricted to a spring application only. No fall applications are permitted.

For preplant and pre-emergence applications, nitrogen sources or complete mixed fertilizers may replace all or part of the water as a carrier to ATRAZINE. Do not apply after rain. This method as there is danger of liquid fertilizers causing crop injury.

PREPLANT: Broadcast in the spring after plowing at the rate indicated in the table below. Application may be made before, during, or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation of ATRAZINE. Best results have been obtained when ATRAZINE is applied within two weeks prior to planting.

PRE-EMERGENCE: Apply during or shortly after planting prior to weed emergence at the rate indicated in the table below.

POST-EMERGENCE: Apply before weeds exceed 1 1/2 inches in height, at the rate indicated in the table below.

NOTE: For band applications, reduce the broadcast rate of ATRAZINE in proportion to the area treated.

	RATE PER ACRE OF ATRAZINE		
	Broadcast in 20-40 gals. of water per acre	20-inch Band* in 10-20 gals. of water per acre	13-inch Band* in 7-14 gals. of water per acre
Soil Texture Light Soils: Sands, loamy sands & sandy loams	2 lbs 3 oz	1 lb 1 oz	11 4 oz
Medium Soils: Silt & clay loams that are low in organic matter	2 lbs 10 oz	1 lb 5 oz	14 oz
Heavy Soils: Silt & clay loams with medium to high organic matter & clay silt, muck, & high organic clays (Apply post- emergence only)	3 1/4 lbs	1 lb 10 oz	1 lb 1 oz

*Based on 40-inch row spacing. For other band or row widths, adjust the rate in proportion to the area actually treated.

LAYBY TREATMENT: Broadcast 1 lb 1 oz. - 2 lb 3 oz. per acre in 20 - 40 gals of water or sufficient nitrogen solution before weeds are 1 1/2 inches high. Apply when corn is 12 inches high. When nitrogen solutions are used direct the spray to the lower 3-4 inches of corn stalks to avoid corn lodging injury. Agitation in the spray tank during application is essential.

POST-EMERGENCE WEED CONTROL WITH ATRAZINE AND EMULSIFIABLE OIL IN WATER: The addition of oil to ATRAZINE in water sprays may speed the activity of ATRAZINE and provide quicker kill of weeds. However, under certain conditions the use of oil may seriously damage corn. To minimize the possibility of damage to corn, follow the directions, procedures, and precautions given below.

GROUND APPLICATION: Broadcast 2 lbs. 3 oz. of ATRAZINE and 1 gal. of emulsifiable oil in 20-40 gals. of water per acre after emergence but before weeds reach 1 1/2 inches high.

AERIAL APPLICATION: Broadcasting 2 lbs. 3 oz. of ATRAZINE and 1/2 gal. of emulsifiable oil* in 10 less than 5 gals of water per acre after weed emerges but before weeds reach 1 1/2 inches in height.

*Up to "close-in"

NORTHERN NUTGRASS OR YELLOW NUTSEDE (Cyperus esculentus) CONTROL: Broadcast 3 lbs. 4 oz. per acre preplant, pre-emergence, or post-emergence before nutgrass is more than 1 1/2 inches high. If applied before nutgrass begins growth, cultivate within 2 - 3 weeks. If applied after nutgrass has emerged, cultivate within 10 - 14 days.

QUACKGRASS CONTROL ON LAND GOING INTO CORN PRODUCTION:

Split application: Broadcast 1 lb. 10 oz. per acre in the early spring and plow 1 - 3 weeks later. Broadcast a second application at the rate of 1 lb. 10 oz. per acre in the spring before, during or after planting but before weeds are 1 1/2 inches high. This split application will control both quackgrass and most annual broadleaf and grass weeds.

Single Application: Broadcast 3 1/4 lbs. per acre in the spring. Plow 1 - 3 weeks after application.

PRECAUTIONS:

1. Do not apply more than 3 lbs. 4 oz. of ATRAZINE to corn in any one year.
- 2 Land treated with ATRAZINE should not be planted to any crop except corn until the following year or injury may occur.
- 3 Following harvest of a treated crop, Plow (moldboard or diskplow) and thoroughly till the soil in the fall or spring to minimize possible injury to rotational spring-seeded crops, regardless of the rate used.
- 4 If ATRAZINE is applied after June 10 do not rotate with crops other than corn or sorghum the next year or injury may occur.
- 5 If ATRAZINE is used at a broadcast rate higher than 3 1/4 lbs. per acre (or comparable rates in a band application), a crop of untreated corn or sorghum should precede the next rotational crop.
- 6 In the Higher Plains and Intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required, use ATRAZINE to control weeds in corn only when corn is to follow corn or a crop of untreated corn or sorghum is to precede other rotational crops.
- 7 In Western Minnesota and Eastern parts of the Dakotas, Nebraska, and Kansas, corn treated with ATRAZINE should not be followed with soybeans if the broadcast rate applied was more than 2 lbs 3 oz. per acre (or comparable rate in a band) or injury may occur.
- 8 Do not plant sugar beets, tobacco, vegetables (including dry beans), spring-seeded small grains, or small-seeded legumes and grasses the year following ATRAZINE application or injury may occur.
- 9 Do not graze treated area or treated feed forage to livestock for 21 days following application.

Center Pivot Sprinkler Application:

Preemergence or postemergence (CO, KS, NE, SD, AND WY): Apply with irrigation water either after planting before corn and weeds emerge, or after corn emergence, but before layby (20-30 inches) and before weeds exceed 1.5 inches in height, at rates in Table 1. Prepare mixture with minimum ratio of 1 part product to 1 part water. Injecting a large volume of a more dilute slurry per hour will assure more accurate calibration of metering equipment. Maintain sufficient agitation to keep herbicide suspension. Meter slurry into irrigation water during entire period. Apply in 1-1 inch of water. Use the lower volume on coarser textured soils. The higher volume on finer textured soils. More than 1 inch of water may reduce weed control by moving herbicide below the effective zone in the soil. Inject dilute slurry into system through a positive displacement pump.

PRECAUTIONS:

- 1 Apply only through irrigation systems containing antisiphon and check valves to prevent back-lamination of well during shutdown and overflow of solution tank.
- 2 Inject ahead of any right angle turn in the main line to insure adequate mixing.
- 3 Chemical injection pumps and water pumps must have interlocking control to insure simultaneous shutoff.
- 4 Application when drift may occur from windy conditions, when system joints and connections are leaking, or when nozzles are not provided uniform distribution may cause crop injury.
- 5 Where sprinkler distribution patterns do not overlap sufficiently, unacceptable weed control may result. Where sprinkler distribution patterns overlap excessively, crop injury may result.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage, disposal or cleaning of equipment.
PESTICIDE DISPOSAL: Pesticide, spray mixture, or rinse water that cannot be used according to label instructions must be disposed of according to Federal or approved state procedures under Section C of the Resource Conservation and Recovery Act.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or disposal in a sanitary landfill, or by incineration if allowed by state and local authorities.

WARRANTY — CONDITION OF SALE

DIRECTIONS FOR USE of this product are based on field use and tests believed reliable and should be followed carefully. It is however impossible to eliminate all risks associated with use of this product. Because such factors as weather conditions, foreign material and manner of use for application are all beyond the control of the Seller of this product, such things as crop injury, ineffectiveness or other unintended consequences may result. **ALL SUCH RISKS ARE ASSUMED BY THE BUYER.** Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the directions for use. Seller makes no other warranties, express or implied, including FITNESS OR MERCHANTABILITY. In no case shall the Seller be liable for consequential special or indirect damages resulting from the use or handling of this product. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.