RESTRICTED USE PESTICIDE (GROUND AND SURFACE WATER CONCERNS)

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

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

ATRAZINE 4L HERBICIDE

For Season-Long Weed Control In Corn, Sorghum, And Certain Other Crops.

KEEP OUT OF REACH OF CHILDREN CAUTION

See Additional Precautionary Statements And Directions For Use On Back Panel

ACTIVE INGREDIENTS:

Atrazine: 2-chloro-4-ethylamino- 6-isopropylamino-s-triazine	40.8%
Related Compounds	
INERT INGREDIENTS	57.0%
Total	100.0%
Atrazine 4L Contains 4 Lbs. Active Ingredients Per Gallon. Shake Well	

Before Using.

Net Contents: 2 1/2 Gallons

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EPA Reg. No. 1386-11.

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1386-647



Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Harmful If awallowed, inhaled, or absorbed through skin. Do not breathe vapors or spray mist. Avoid contact with eyes, skin or clothing.

Users are required to wear long-sleeved 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.

Statement of Practical Treatment

If swellowed: Call a physician or Poison Control Center immediately. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with linger, or, if available, by administering syrup of ipecac. Do not induce vomiting or give anything by mouth to an unconscious person.

If Inhaled; Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

If on skin: Wash with plenty of soap and water, Get medical attention.

If in eyes: Flush eyes with plenty of water. Call a physician if irritation persists.

Note to Physician: There is no specific antidote for atrazine, if this product is injested, induce emesis or lavage stomach. The use of an aqueous slurry of activated charcoal may be considered.

For Medical Emergency only, call 11-800-228-5635, extension 138.

Environmental Hazards

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 strazine to sand and loarny 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 product may not be immed/loaded or used within 50 feet of all wells, including abandoned wells, dramage wells, and sink holes. This product may not be triuxed or loaded within 50 feet of intermittent streams and invers, natural or impounded lakes and reservoirs. This product may not be applied serially or by ground within 66 feet of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66-foot buffer or setback from runoff entry points must be planted to crop, seeded with grass or other suitable crop.

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

DIRECTIONS FOR USE

RESIDUES.

It is a violation of lederal law to use this product in a manner in FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND LABEL MAY RESULT IN POOR WEED CONTROL, CRO

Do not apply this product in such a manner as to directly or the or other persona, except those knowingly involved in the zi treated must be vacated by unprotected persons.

Do not enter treated areas without protective cicthing until si

Because certain states may require more restrictive reentry treated with this product, consult your State Department of Ametion.

Written or oral warnings must be o who are expected to be in a t in an area about to be treated wit Oral warnings must be given which of areas or fields that may not be specific protective clothing unt dried and appropriate actions to accidental exposure as d precautionary statements on this oral warnings are given, warnings in a language customarily underst Oral warnings must be given if believe that written warni Written understood by workers. include the following informati Area treated with Atrazine 4L application). Do not enter with protective clothing until spray In case of accidental exposure, skin with plenty of water. Ca Rem irritation persists. contaminated clothing before reuse

CHEMIGATION PROHIBITION

Do not apply this product through gation system.

General Information

This herbicide controls many annual broadlest and grass weeds in corn, sorghum, sugarcane, and certain other crops specified on this label. This product may be applied before or after weeds emerge.

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

Since this product acts mainly through root apeorption, its effectiveness depends on moisture to move it into the root zone. If weeds develop, a shallow cultivation or rotary hosing will generally result in better weed control.

This product is noncorrosive to equipment and metal surfaces, nonflammable, and has low electrical conductivity.

Avoid using near adjacent desirable plants or in greenhouses, or injury may occur.

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

Where the use directions give a range of rates, use the lower rate on coarse-textured soil and soil low in organic matter; use the higher rate on fine-textured soil and soil high in organic matter.

NOTE: Universal Cooperatives, Inc., does not recommend applications in combination with other herbicides or oils, except as specifically described on the label.

Application Procedures

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

Use a pump with capacity to (1) maintain 35-40 pel at nozzies, (2) provide sufficient agitation in tank to keep marture in suspension, and (3) to provide a minimum of 20% bypass at all times. Use centrifugal pumps which provide propeller shear action for dispersing and mixing this product. The pump should provide a minimum of 10 gals./minute/100 gal. tank size circulated through a correctly positioned sparger tube or jets.

Use screens to protect the pump and to prevent noticles from clogging. Screens placed on the suction side of the pump should be 76-meah or coarsec Do not place a screen in the recirculation line. Use 50-meah or coarser screens between the pump and boom, and where required, at the notices. Check notice manufacturer's recommendations.

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

band width in inches

k broadcast rate per acre amount needed per acre of field

Aerial application: Use sensi application only where proadcast application specified, Apply in a minimum of 1 of, of water for each quart of this product application. For postemergence preatments on corn and sorthum, apply recommended reminimum of 2 gais, of water/A. Avoid applications under conditions where un coverage cannot be obtained or where excessive apray drift may occur.

Avoid application to humans or animals. Flagmen and logitiers should avoid inhalst spray mist and prolonged contact with skin, and should wash ti croughly to here a and at the end of each day's operation.

Application in water or liquid fertilizer; Nitrogen solution or complete liquid fert may replace all or part of the water as a carrier for preemergence, preplant incorpor or preplant surface ground application on com and sorghum. Check the compatibilities product with liquid fertilizer and/or nitrogen solution as shown below before us not apply in nitrogen solution or complete liquid fertilizer after corn or sorghum emit or crop vigury may occur.

Competibility Test: Since liquid tertilizers can vary, even within the same and always check compatibility with herbicide(s) each time before use. Be especiateful when using complete suspension or fluid fertilizers as senous compatibilities are more likely to occur. Commercial application equipment may improve patibility in some instances. The following test assumes a spray volume of 25 gains acre. For other spray volumes, make appropriate changes in the ingredients. C compatibility using this procedure:

- 1. Add 1 pint of fertilizer to each of 2 one-quart tars with tight lids.
- To one of the jars add 1/4 tsp. or milliliters of a compatibility agent appro for this use, such as Kem Link (1/4 t is equivalent to 2 pts. per 100 gals. spra Shake or stir gently to mix.
- 3. To both jars add the appropriate amount of herbicide(s). If more than one herbic used, add them separately with dry herbicides first, flowables next, and emulail concentrates last. After each addition, shake or stir gently to thoroughly mix, appropriate amount of herbicides for this test follows:

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

Liquid introlcides: For each purt to be applied per acre, add 0.5 teaspoon of multipliers to each jar.

4. After adding all ingredients, put lide on and tighten, and invert each jur ten times to Let the mixtures stand 15 minutes and then look for separation, large fix precipitates, gels, heavy oily film on the just or other signs of incompatibility. Determine the compatibility agent is needed in the spray mixture by comparing the two just either mixture separates, but can be remixed readily, the mixture can be sprayed long as good agitation is used. If the mixtures are incompatible, test the following as good agitation is used. If the mixtures are incompatible, test the following as good agitation is used. If the mixtures are incompatible, test the following as good agitation is used. If the mixtures are incompatible, test the following as good agitation in the compatibility: (A) sturry the dry herbicide(s) in water before a tion, or (B) add \$\frac{1}{2}\$ of the compatibility agent to the fertilizer and the other \$\frac{1}{2}\$ to emulsifiable concentrate or flowable herbicide before addition to the mixture. If no patibility is still observed, do not use the mixture.

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

Use one of the following property emulsified:

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

NOTE: In the event of a compatibility problem wher mixing oil with this product and water, a compatibility agent such as Kem Link should be used. Any of the above oils contaminated with water or other materials can cause compatibility problems and/or crop injury.

Mixing procedures — all uses: (1) Be sure sprayer is clean and not contaminated with any other materials, or crop injury or sprayer clogging may result. (2) Fill tank Vs full with clean water, nitrogen solution, or complete liquid fertilizer. (3) Start agration. (4) Be certain that the agitation system is working properly and creates a rippling or rolling action on the liquid surface. (5) Pour product directly from container into tank. (6) Continue filling tank until 90% full, increase agitation if necessary to maintain surface action. (7) Add emulalfiable oil, oil concentrate, or tank mix herbicide(s) after this product is thoroughly suspended, (8) Finish filling tank. (9) Empty tank as completely as possible before refilling to prevent buildup of oil or emulalfiable concentrate residue. Maintain agristion to avoid separation of materials. (10) If an oil or emulalfiable concentrate film starts to build up in tank, drain it and clean with strong detergent solution or solvent. (11) Clean sprayer thoroughly immediately after use by flushing system with water containing a detergent.

Rotational Crops — All Uses: (1) Do not rotate to any crop except corn or sorghum until the following year, or injury may occur. (2) if applied after June 10, do not rotate with crops other than corn or sorghum the next year, or crop injury may occur. (3) in the High Plains and Intermountain areas of the West where rainfall is sparse and erratic or where impation is required, use only when corn or sorghum is to billow corn or sorghum or when a crop of untressed corn or sorghum is to precede other rotational crops. (4) in eastern parts of the Dalotas, KS, western MN, and NE, do not rotate to soybeans if the rate applied to corn or sorghum was more than 2.2 lbs./A or equivalent band application, rate, or soybean injury may occur. (5) Injury may occur to soybeans planted the year following application on soils having a calcareous surface layer. (6) Do not plant sugar beets, tobacco, vegetables (including dry beans), spring-eeeded small graits, or small-eeeded legumes and grasses the year following application, or snjury may occur.

Atrazine 4L Applied Alone - Corn or Grain Sorghum*

Preplant Surface-Applied, Preplant Incorporated, or Preemergence (or Postemergence at 4 sts./A With Oil)

Broadlest and Grass Weeds Controlled

barnyardgrass (watergrass) ***
glant foctall **
green foctall ***
green foctall ***
large (harry) crabgrass **
wild oats
witchgrass (Penicum capillare) ***
yellow foctall ***
yellow foctall ***

nightshade pigweed pursiane regweed sicklebod ***

(buttonweed)

Postemorgance with Emulaitlable Oil or Oil Concentrate in Water (at 2,4 pts./A)

Broadlest Weeds Controlled

annual morninggiory lambequarters regwied wild outstwine cocklebur musterds smattyres volverlaaf**

- Where there are statis/local requirements regarding atrazine use (including low maximum rates and/or greater setbacks) which are different from the label, the more restrictive/protective requirements must be followed. Certain states may have established rate limitations within specific gongraphical areas. Consult your statilised pesticide control agency for additional information. It is a violation of this lab to deviate from state use regulations.
- ** Partial control only.
- *** Partial control only on medium- and fine-textured soils.

Com

Preplant Surface-Applied (Broadlest and grass control): Use on medium- and fintextured soil with minimum-bilisge or no-cillage systems only in CO, IA, IL, IN, KS, KY, MI MO, MT, ND, NE, SD, WI, and WY. Apply the recommended rate of AAtrex 4L shown Table 1 up to 45 days prior to planting. On coarse-textured soils, do not apply more thit two weeks prior to planting. If an unsatisfactory length of weed control results fro adverse environmental conditions following early treatment, a follow-up application of appropriately labeled herbicide may be used. If the follow-up treatment include atrazzne, do not exceed the labeled rate for corn indicated in Table 1

If weeds are present at the time of treatment, apply in tank mix combination with a continerbicide (for example, Gramoillone® Extra or Roundup®). Observe directions for u precautions, and restrictions on the label of the contact herbicide.

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

Preplant incorporated (Broadlest and grass control): Broadcast in spring after pk ing at rase in Table 1. Apply to the soil and incorporate before, during, or after final seibed preparation. Avoid deep incorporation. For best results, apply within two weeks pr to planting.

Preemergence or At-Plenting (Broadlest and grass control); Apply during or shor after planting before weed emergence, at rate in Table 1.

Postemergence (Broadlest and grass control): Apply before weeds exceed 1.5 inch in height and before com exceeds 12 inches in height at rate in Table 1.

Table 1: Broadleaf and Grass Weed Control in Com*

FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE

- On Highly Erodible Soils (as defined by SCS)
 - If conservation tiliage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply a maximum of 4 pts./A as a broadcast spray.
 - If the soil coverage with plant residue is less than 30% at planting, a maximum of 3.2 pts./A may be applied.
- On Soils Not Highly Erodible
 Apply 4 pts./A as a proadcast apray.

FOR POSTEMERGENCE APPLICATION

If no strazine was applied prior to com emergence, apply a maximum of 4 pts./A broadcast, if a posternergence treatment is required following an earlier herbicide application, the total strazine applied may not exceed 2.5 lbs. active ingredient (5 pts. of this product) per acre per calendar year.

Broadleaf control (sessem CQ, western KS, western NE, NM, OK Panhandie, west TX, and sestern WY): On sand, loamy sand, sandy loam, mild to strongly alkaline soil, and all recently leveled soil, apply no more than 2.4 pts./A, either preplant surface, preplant incorporated, or preemergence. On other soils in these areas, apply rate in Table 1 for broadleaf and grass control.

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

Postamergence with emulaifiable oil or oil concentrate in water: Add the following volume of one of the type oils indicated for aerial or ground application unless the oil label specifies otherwise:

Type Oil	Ground Application	Aerial Application
Oil Concentrate (Crop or Petroleum-derived)	1 qL/A	V2 - 1 qt/A
Petroleum-derived oil	1 gal/A	2 qtsJA

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

Broadlest and gress control: For posternergence control of those weeds listed under Preplant Incorporated and Preemergence, broadcast 4 pts./A plus emulsifiable oil or oil concentre:s after weed emergence, but before weeds reach 1.5 inches in height and before corn exceeds 12 inches in height.

Broadlest control: For postemergence control of those weeds listed under Postemergence with emulaifiable oil or all concentrate in water, broadcast 2.4 pts./A plus emulaifiable oil or oil concentrate before pigweed and lambaquariers reach 6 inches in height and before all other weeds reach 4 inches in height. A cultivation may be necessary if all weeds are not controlled or if weeds regrow. Precautions: For applications with emutalfieble oil or oil concentrate in water; (1) Inbred inter or any breeding stock may be severely injured by applications with emutalfieble oil or oil concentrate. (2) Adding other insecticides, harbicides, liquid fertilizers, or other manifels is not recommended, because they may pause compatibility problems or grop mury; (3) Store and handle emutalfieble oil and oil concentrate carefully. Cil contaminated with even a small amount of water may not emutalfie probledy when addyd to the trail. It avoid crop mury; (4) Do not apply when crop is under stress from prolonged cold, we weather, poor fertility, or other fectors, or when crop is wet and succulent from recent run-lall. (5) Do not exceed 2.5 bs. active ingredient (or 6 pts. of this product) per acts per calender year, (6) Postemergence applications to corn must be used before corn exceeds 12 inches in height.

Tank Mixtures for Com

This product may be tank mixed with these herbicides for control of certain broadleaf and grass weeds in com:

Qual®(metolachior)

Qual + Gramosone Extra

Dual + Roundup (glyphosale)

Dual + Princep®

Dual + Princep + Gramowone Extra

Dual + Princep + Roundup
Beston® or Remrod® (propachior

Beston® or Ramrod® (propachior)
Lasso® or Lasso EC (alachior)

Lasso or Lasso EC + Roundup - Lasso or Lasso EC + Gramoxone Extra

Gramosone Extra

Princeo + Gramosone Extra

Princep + Roundup

Roundup Sutan + 9

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

NOTE: When the labels of the above herbicides refer to atrazine 80W, use equivalent rates of Atrazine 4L. One 1b. of 80W equals 1.6 pts of 4L.

Princep 80W, Princep 4L, or Princep Caliber 90*

In addition to the weeds listed under Atrazine 4L Applied Alone - Corn or Grain Sorghum - Preplant Surface-Applied, Preplant Incorporated, or Preemergence, this combination also controls crabgrass, fall panicum, and carpetweed.

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

Preplant Surface-Applied: Use on medium- and fine-textured solls with minic.umtiliage or no-tiliage systems only in CQ, IA, IL, IN, KS, KY, MN, MQ, MT, ND, NE, SQ, WI,

and WY. Apply the recommended rate of Atrazine 4L and Princep shown in Table 2 up to 45 days prior to planting. Refer to the Atrazine 4L alone section for information if weeds should develop following the early treatment. On coarse-textured soils, do not apply more than two weeks prior to planting. Refer to the Atrazine 4L Alone-Preplant Surface-Applied section of the corn label for additional details.

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

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

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

Preemergence: Apply during or shorth; after planting, but before crop and weeds emerge.

Refer to Corn sections of this label and to Princep BOW, Princep Caliber 90, or Princep 4L labels for further directions, limitations, and precautions.

Table 2: Tank Mixtures with Princep on Corn

	Broodcast Rate/A			
Soli Texture	1:1 Ratio*		1:2 Ratio**	
	This Product	Princep 80W1	This Product	Princep 80W1
Sand, loarny sand, sandy loarn	2 pts.	1.25-bs.	1.32 pts.	1.67 lbs.
Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sandy clay, or silty clay with low organic matter	2.4 pts.	1.5 lbs.	1.5 pts.	2 ips.
Loam, silt loam, silt, clay loam, sandy clay loam, silty clay loam, sandy clay, or silty clay with medium to high organic matter, and clay (including dark prairie soils of the Com Belt)	3 pts.	1.8 fbs.	1.92 pts.	2.4 lbs.

^{*} For control of most well is.

Princep 80W, Princep 4L., or Princep Caliber 90 plus Roundup: Use as tank mixture for preemergence and postemergence control of certain broadlest and grass weeds where corn will be planted directly into a cover grop, established sod, fir in previous crop residues. Refer to Roundup label for all directions, weeds controlled, precautions, and limitations.

Princep 80W, Princep 4L, or Princep Cali 90 plus Gramoxone Extra: Use as tank mixt with Princep and Gramoxone Extra to kill exist vegetation and for residual weed control who corn will be planted directly into a cover or established sod, or in previous crop residu Add this product and Princep to water in sp tank, agitating until thoroughry mixed. T add Gramoxone Extra and a nonionic surfacta such as Aquagene 90. Continue agitation dur application. Broadcast 2-4 pts. of this prod plus 1.25 - 2.5 lbs. of Princep 80W (or 2 4 pts. of Princep 4L, or 1.1 - 2.2 lbs. Princep Caliber 90) plus a suitable amount Gramoxone Extra in 20 - 60 gals. of water Refer to the Gramoxone Ex sprayed acre. label for the appropriate rates to utilize this tank mixture. Apply before, during, after planting, but before corn emerges. 0.5 pt. of a nonionic surfactant, such as Aquage 90, per 100 gals. of spray mixture. Use higher rate of Gramoxone Extra specified the label if existing vegetation is 4 - 6 incl tall. This mixture will not control weeds tal than 6 inclus.

Refer to further limitations and precautions on tabe's for this product, Princep, Gramosone Extra.

Precautions: For all applications to com: (1) To evoid crop injury and illegal residue not apply more than 2.5 lbs./A ective ingredient (6 pts./A of this product) per calendar (2) For best control of velvetical and cocklebut, the application rate cannot be less ti lbs./A ective ingredient, either alone or in tank mix combinations. (3) Following har plow (moldboard or dish-plow) and thoroughly till soil in fall or spring to minimize posingury to spring-seeded rotational crops, regardless of rate used,

Note for all applications to corn; Do not graze or feed forage from treated areas it days following application, or illegal residues may result.

Sorghum and Sorghum-audan Hybride (Grain and Forage Types)

Proplent Surface Applied (Broadles) and grass control; Use on medium- and lexitured soil with minimum-tillage or no-tillage systems only in CQ IA, IL, IN, KS MN, MO, MT, ND, NE, SD, WI, and WY. Apply recommended rate of Atrazine 4L shown in Tal 3 up to 45 days prior to planting. If unsatisfactory length of weed control result

^{*} For control of expected neavy infestations of crabgrass and fall panicum.

¹ When using Princep Caliber 90 or Princep 4L, use equivalent rates. One to, of Princep 80W equals 0.9 to, of Princep Caliber 90 or 1.8 pts. of Princep 4L.

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from adverse environmental conditions following early treatment, a follow-up application of an appropriately labeled herbicide may be used. If the follow-up treatment includes atrazine, do not exceed the labeled rate for corn indicated in Table 1. Under dry conditions, irrigation after application is recommended to move Atrazine 4L into the soil.

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

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

Preplant incorporated (Broadlesf and grass control): Broadcast in spring after plowing at rate shown in Table 3. Apply before, during, or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation. For best results, apply within two weeks prior to planting.

Preemergence (Broadlest and grass control); Apply during or shortly after planting, but prior to weed or crop emergence at rate shown in Table 3.

Posternergence (Broadlest and grass control): Apply at rate shown in Table 3 before weeds exceed 1.5 inches in height and before sorghum exceeds 12 inches in height,

Table 3: Broadleaf and Grass Weed Control in Sorghum 1, 2

FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE

On Highly Erodible Soils (as defined by SCS)

If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply a maximum of 4 pts./A as a broadcast spray.

If the soil coverage with plant residue is less than 30% at planting, a maximum of 3.2 pts./A may be applied.

On Soils Not Highly Eradible
 Apply 4 pts./A as a broadcast spray.

FOR POSTEMERGENCE APPLICATION

If no strazine was applied prior to corn emergence, apply a maximum of 4 pts./A broadcast. If a posternergence treatment is required following an earlier herbicide application, the total strazine applied may not exceed 2.5 lbs. active ingredient (5 pts. of this product) per acre per calendar year.

¹ Do not apply preplant surface or preplant incorporated in AL, AR, FL, GA, LA, MS, NC, NM, OK, SC, TN, or TX. Do not apply preemergence in NM, OK, or TX, except in northeast OK and the TX Gulf Coast and Blacklands areas.

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

In case of planting failure, sorghum or corn may be replanted. Do not make a sectoroadcast application, or injury may occur. It originally applied in a band and sorghum corn is replanted in untreated row middles, this product may be applied in a band to second planting provided the maximum application rate of 2.5 lbs." eVA strazment calendar year is not exceeded.

Preemergence broadleaf weed control in hygger liftigated bedded porghuot (AZ; CA only): For preemergence control of many broadleaf weeds, broadcast 1.5-2.4 pt after bed preparation, during or after planting, but before sorghum and weeds eme and before the first furrow impation. Follow with several-regular longestions, making a to thoroughly wet all soil.

Precautions for preemergence application to turrow irrigated be Jösid acignum in AZ (
CA: To avoid possible sorghum injury, do not use on sand of loany sand soil or on sorghum planted in furrows. Applications to sorghum growing on alkall soils or where cuts, fills erosion have exposed calcareous or alkall subsoils may cause crop injury, in case of a fallura, do not replant sorghum for 8 months following application. Com may be plan immediately.

Postemergence broadlest weed control with emulsifiable ell or ell concentrati water: Broadcast 2,4 pts./A for cuntrol of many broadlest weeds. Apply before pigwi and lambaquariers reach 6 inches in height and before all other weeds reach 4 inche height, in CO, western KS, NM, OK, TX, and desert regions of AZ and CA, apply will sorghum is 6-12 inches in height. In all other areas, apply after sorghum reaches 3-lest stage but before it exceeds 12 inches in height, Add 1 gat, of emulsifiable oil/A ground application and 0.5 gat./A for senal application, or add 1 qt./A of oil concentration ground application. A cultivation may be necessary if all weeds are not controlled if weeds regrow.

For the list of weeds controlled, see Atrazia 4L Applied Alone-Corn or Grain Sorghum-Postemer ence with Emulsifiable Oil or Oil Concentrate in Water.

Preceutions for applications with emulsifiable oil or oil concentrate in water: See "Pretions for applications with emulsifiable oil or oil concentrate in water" in Corn secto

Postemergence broadlest weed control with surfactant (CO, western KS, NM, TX, and desert regions of AZ and GA only); Broadcast 2.4 pts./A plus 0.75-1.5 pt surfactant airor striphum reaches 6 inches in height, but before weeds exceed 1.5 inc in height. Apply only on sandy loam and liner textured soil.

Precautions: For all applications to sorghum: (1) Heavy rain immediately following a cation tends to cause excessive concentrations of herbicide in seed furrow, resultir possible crop injury. Do not apply to furrow-planted sorghum until furrows are lev (plowed in). Level deep planter marks or seed furrows before application, (2) Application of highly ealcareous soil may result in crop injury, (3) Following nervest, plow (moldbuor disk-plow) and thoroughly till soil in full or spring to minimize possible injury to spreaded rotational crops, regardless of rete used, (4) Injury may occur if both tile herbit, preplant surface, preplant incorporated, or preemergence, and an explanting systim resocticide applied in-furrow are used, (5) Do not apply more than 2.5 bs. active ingrec (5 pts. of this product) per scre per calendar year, (6) For all soil applications prior to (emergence (except for preemergence use on bedded sorghum in AZ and CA), do apply to coarse-taxtured soils, i.e., sand, loarny sand, sandy loarn, or to medium- and lexitured soils having less than 1% organic matter, or injury may occur. (7) For peremergence applications, do not apply to sand or loarny sand, or injury may occur.

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Note: Do not graze or feed lorage from treated areas for 21 days following application, or illegal residues may result.

Tank Mixtures for Grain Sorghum

Dua 1 8E: Use as tank mixture with Qual 8E for control of those weeds listed on the Dual 8E label, as well as on this label, Use this tank mixture only on sorghum seed treated with Concep®. Refer to the Qual 8E label for all directions, precautions, and limitations.

Winter Weed Control In Texas

For postemergence control of winter weeds only, such as henbit, seedling dock, and annual thistle on fall bedded land in the Gulf Coast and Blacklands of TX. Apply 0.8 - 1 qt./A postemergence to the weeds in November or December to land that will be planted to corn, grain sorghum, or forage sorghum the following spring. For best results, add a suitable surfactant, such as Aquagene 90, at the rate of 0.5% of the spray volume, an emulsifiable oil at the rate of 1.0% of the spray volume, or an oil concentrate at the rate of 1 qt. per acre.

Normal weed control programs may be used in the following corn, grain sorghum or lorage sorghum crop.

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

Atrazine 4L Alone - Chemical Fallow

Wheet-Sorphum-Fallow: To corror annual broadleaf and grass weeds following wheat harvest and in the following sorphum crop when grown under minimum tiltage, broadcast pts./A to wheat stubble immediately following wheat harvest. It weeds are present at application, remove them with a sweep plow or other suitable implement after application, or use an approved contact herbicide before or after the application of Atrazine 4L. 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.

For the list of weeds controlled, see Atrazin 41 Applied Alone-Corn or Grain Sorghum-Preplan Surface-Applied, Preplant Incorporated, or Preplant Emergence.

Precautions: (1) Use only on sit loam or finer textured soil or grop injury may result. (1) Wheel-sorghum-fallow cropping sequence must be followed: (3) Do not libby followin sorghum harvest.

Note: To avoid litegal residues, do not graze or feed forage from the sted are to investod. To avoid litegal residues and crop injury, do not plant any crop other than those on the label within 18 months following treatment.

Wheet-Corn-Fallow (KS, NE): This product controls chestgrass (downy brome, chest tochia, mustards, pig. reed, Russian thistie, wild lettuce, wild sunflower, and volunte, wheat during period after wheat harvest. Weed control may extend into following corcop grown under minimum titlage.

Follow directions for use, notes, and precautions in the Wheet-Sorghum-Fellow setion above, substituting com for references to sorghum.

Wheat-Fellow-Wheet (CO, KS, MT, ND, NE, SO, and WY): For preemergence control cheatgrass (downy brome, chess), common lambequarters, field pennycress, tochic mustard, Russian thistie, wild lettuce, and suppression of volunteer wheat during fallo penod of a wheat-fallow-wheat rotation, broadcast 1-2 pts./A on all soils except thos listed under Precautions. For control of pigweed and wild sunflower, use the high-rate. Apply to stubble ground. Treat only once during same fallow period.

Tank Mixtures for Chemical Fallow

Wheat-Sorghum-Fallow or Wheat-Corn-Fallow (KS,NE)

If weeds Gramoxone Extra: are present a application, a tank mix with Gramoxone Extr may be used. Broadcast 6 pts. of Atrazine 4 plus a suitable amount of Gramoxone Extra i 20-60 gals. of water/A by ground equipment Add 0.5 - 1 pt. of a nonionic surfactant, suc as Aquagene 90, per 100 gals. of spray mixture Add Atrazine 4L to spray tank first a thoroughly mix with water. Then add Gramoxon Extra, followed by surfactant. Use the higher rate of Gramoxone Extra specified on the laborate if weeds are 4 - 6 inches tall. This mixture will not control weeds taller than 6 inches Apply to stubble ground. Treat only once during same fallow period. Refer to Gramoxone Exti label for further directions, precautions, as

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limitations.

Wheat-Fallow-Wheat (CO, KS, ND, NE, SD, and WY)

If weeds Extra: are present at application, a tank mix with Gramoxone Extra Broadcast 1 - 2 pts. of Atrazine may be used. 4L plus a suitable amount of Gramoxone Extra in 20 - 60 gals. of water/A by ground equipment. Add 0.5-1 pt. of a nonionic surfactant, such as Aquagene 90, per 100 gals. of spray mixture. Add Atrazine 4L to spray tank first and thoroughly Then add Gramoxone Extra, mix with water. followed by surfactant. Use the higher rate of Gramoxone Extra specified on the label if weeds are 4 - 6 inches tall. This mixture will not control weeds taller than 6 inches. Apply to stubble ground. Treat only once during same fallow period. Refer to Gramoxone Extra label further directions, precautions. for limitations.

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

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

Precautions: To evoid crop injury, (1) Do not use on sand soil. (2) Do not treat eroded hitsides, caliche and rocky outcroppings, or exposed calcareous subsoil. (3) Do not treat soils of the Rosebud and Carryon Series in western NE and edjoining counties in CO and WY, (4) Do not treat soils with calcareous surface layers. (5) Avoid spray overlap.

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

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

adversely affect adjacent sensitive nontarget plants, apply Atrazine 4L alone by aircraft at a minimum upwind distance of 400 ft. from sensitive plants.

Roadsides

To control certain annual weeds in established perennial grasses along roadsides in CO. KS, MT, ND, NE, SD, and WY, including cheatgrass (downy brome, chess), common

(annual) broomweed, little barley, medusahead, sugewort, and tumble mustard, broadcast 2 pts./A in a minimum of 10 gals, of water by ground equipment in the fall before ground freezes, or after thawing in the spring, but before the established grasses green up and before weeds emerge. Examples of desirable established grasses include big bluestem, bluegrams, bromegrass, buffalograss, crested, wheatgrass, Indiangrass, little bluestem, side-oxis grams, switchgrass, and Wegtern wifestgrass. Apply once per year. Temporary discoloration or other form of injuly to therefore personnal grasses may occur following application.

Notes: To avoid stlegal residues, (1) Do not out or feed roadside grass hay. (2) Do not allow investock to graze treated areas.

Sugarcane

For control of many broadleaf and grass weeds, including amaranths, crabgrass fireweed, Flora's paintbrush, foxtails, junglerice and wiregrass, broadcast 4-8 pts./A o Atrazine 4L at time of planting or ratooning but before sugarcane emerges. Broadcast aerially in a minimum of 5 gals. of spray per acre, or broadcast or band by ground equipment in a minimum of 20 gals, per acre, unless indicated otherwise One additional application may be made over the sugarcane as it emerges, and two additional applications may be made interline after emergence as directed sprays. Repeat treatments, where needed, may be applied broadcast, band, o interline as suggested with the final application Do not exceed the being prior to close-in. rate of herbicide suggested for any one cro of sugarcane.

NOTE: Where high rates of Atrazine 4L are use alone, apply in a minimum of 1 qt. of wate for each 1 qt. of Atrazine 4L applied per acre

Aeriel application: In order to assure that spray will be controllable within the targarea when used according to label directions, make applications at a maximum heigilof 10 ft., using low drift nozzles at a maximum pressure of 40 pel, and restrict application penods when wind speed does not exceed 10 mph. To assure that spray will not exceed 10 mph.

adversely affect adjacent sensitive nontarge plants, apply Atrazine 4L alone by aircraf at a minimum upwind distance of 400 ft. fro sensitive plants.

Florida

For control of emerged pellifory weed: Apply 0.8-1.2 pts./A in at least 40 gals, of water at a directed spray by ground equipment prior to close-in. Add 4 cts. of surfactant for each 100 gals, of spray. Thoroughly cover weed follage.

For control of alexandergrass, large crabgrass, pelitiony (artiflery) weed, and spiny amaranth, use one of the following methods at planting or responing:

- Apply 8 pts./A preemergence. Follow with one or two applications, as needed, postemergence to sugarcane and weeds, at 4 pts./A. Treat before weeds exceed 1.5 inches in height.
- Apply 1-3 times, as needed, at 4 pts./A posternergence to sugarcane and weeds. Treat before weeds exceed 1.5 inches in height.

Louisiana

For control of annual weeds during the summer fallow period, apply 4 pts./A to weed-free beds immediately after bed formation. Follow normal weed control program after planting.

Precautions: To avoid crop injury, (1) Do not apply more than 10 qts./A to any one crop of sugarcane. (2) If making 4 pts./A application during summer fallow period, do not exceed 8 qts./A during the remainder of the growing season, or illegal residues may result.

Texas

Use Atrazine 4L for control of barnyardgrass, pigweed, purclane and sunflower, in plant or ration sugarcane

Apply 8 pts./A of Atrazine 4L preemergence. Follow with one or two applications, as needed, at 6 pts./A postemergence to sugarcane and weeds.

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

Preceutions: (1) Injury to sugarçane may occur when under moisture stress, when soil is of low adsorptive capacity, or when land is first cropped to sugarcane. (2) Do not apply after close-in. (3) Do not apply more than 20 pts./A to any one crop of sugarcane, or crop injury may result.

Turigrasses for Sod (Florida only)

St. Augustinegrass, Centipedegrass, and Zoysiagrass

Broadcast 4 - 8 pts./A according to soi! texture to control those weeds listed under Atrazine 4L Applied Alone-Corn or Grain Sorghum-Preplant Surface-Applied, Preplant Incorporated, or Preemergence.

Muck or peat 8 pts.	Old beds: Within 2 days after lifting sod.
	a pes.
Sandy soil 4 pts.	. Old beds: Within 2 days after lifting sod.
	Sandy soil

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

Preceutions: To evoid crop injury, (1) Do not apply within 30 days prior to cutting or III (2) Do not apply in combinepon with surfactants or other spray additives. (3) Use on furigrass reasonably free of intestations of insects, nematodes, and diseases. (4 newly applied turigrass, temporary allowing of growth may follow application.

Turigrass for Feirways, Lawns. Sod Production Cancibimilar Areas

*In states other than FL. For use on turigrass for sod in FL, see Turigrasses for (Floride only) section above.

Bermudagrass, Centipedegrass, St. Augustinegrass, and Zoyalagrass

Apply Atrazine 4L after October 1 before emerge of winter annual weeds for control of an bluegrass, burclover, carpet burweed, chickwe corn speedwell, henbit, hop clover, and spurwed Atrazine 4L will control annual bluegrass of it is emerged at time of treatment. For consof summer annual weeds listed in the preemerge section of the Atrazine 4L Applied Alone-or Grain Sorghum section of this label, apply Atrazine 4L in late winter before the weemerge. Apply in a minimum of 15 gals. of wiper acre or 1 gal. per 1,000 sq. ft.

Where annual bluegrass is the major weed, use 1 qt./A (22 ml or 0.75 fl, oz. per 1.00 ft.), Use 2 qts./A (44 ml or 1.5 fl, oz. per 1.000 sq. ft.) for control of the other weeds na above, Do not exceed 1 qt./A per treatment on newly sprigged turfgrass or on hybrid mudagrass such as Tiflawn, Tiflwey, and Ormond.

For continued summer annual weed control, apply another 1 qt./A at least 30 days the previous application, but not after April 15. However, do not make more than applications of this product per year.

Precautions: On newly sprigged turigrass and hybrid bermudegrass, temporary sto of growth and yellowing may occur following application. To avoid turi injury, (1) Use on turigrass reasonably free of infestations of insects, memetodes, and diseases, (; not use on golf greens, (3) Do not use north of NC (except may be used in NA Coestal Pl or west of the high rainfall areas of eastern OK and eastern TX. (4) Do not use on mu alkaline solls. (5) Do not apply over the rooting area of trees or ornamentals not lists this label, (6) Do not overseed with desirable surfgrass within 4 months before or 6 mc after treatment. (7) Do not apply this product to newly seeded bermudegrass until 1 overwintered and has a well-developed rhizome system. Do not exceed 2 gts. proc. within 12 months of seeding bermudegrass.

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

Mecademia Nuts

For preemergence control of many broadlest and grass weeds, including crapgrass, tall, wiregrass, Flora's paintbrush, spanishneedles, and fireweed, broadcast 4-6 pi before harvest and before weeds emerge, Repeat as necessary. Do not spray when are on ground during harvest period. Do not apply by sir.

Gueve

spray at 4 - 8 pts./A of Atrazine 4L in 20 - 50 gals. of spray mix preemergence or early postemergence to weeds. When applying postemergence, the use of a surfactant and greater spray volume (80 - 100 gals. of spray mix per acre) may enhance weed control. This product controls many annual broadleaf and grass weeds, including fireweed, purslane, scarlet pimpernel, spanishneedles, and sowthistle.

NOTES: To avoid illegal residues, (1) Do not allow spray to contact foliage or fruit. (2) Do not apply more frequently than at 4 month intervals. (3) Do not apply more than 16 pts. of Atrazine 4L per year.

Conlifers

For control of annual broadlesf and grass weeds prior to transplanting, after transplanting or in established conflers (including Douglas fit, grand fit, noble fit, white fit, Austrian pine, bishop pine, Jeffrey pine, knobcone pine, lobfolly pine, lodgepole pine (shore pine), monterey pine, ponderosa pine, Scotch pine, slash pine, blue spruce, and Sitks spruce); Broadcast 4-8 pts. in a minimum of 5 gale, of water per acre by air or 10 gale, by ground before weeds are 1.5 inches tall. Apply to established trees between fall and early spring white trees are dormant. For new transplants, apply during or soon after transplanting.

For applications prior to iransplanting, allow sufficient precipitation to activate Atrazine 4L before transplanting. In areas where spring and summer rainfall is inadequate to activate Atrazine 4L, apply during fall prior to spring transplanting.

For the list of weeds controlled, see Atrazine 4L Applied Alone-Corn or Grain Sorghum-Preplant Surface-Applied, Preplant Incorporated, or Preemergence.

Quackgress control: Broadcast 8 pts. in a minimum of 5 gals, of water per acre by air or 10 gals, by ground between fall and early spring while trees are dormant and before quackgress is more than 1.5 Inches tall,

Preceptions: (1) In areas west of the Rocky Mountains (except the Great Basin), grazing may begin 7 months after a fall application or 3 months after a winter or apring application (2) To prevent Begal residues, do not graze treated areas of the Great Basin, or areas east

of the Rocky Mountains. (3) Temporary inj to trees may occur following use of Atraz 4L on coarse-te tured soil. (4) To avoid c injury, do not apply to seedbeds. (5) f apply only once per year.

Aerial application: In order to assure that spray will be controllable within the target; when used according to label directions, make applications at a maximum height of above vegetation, using low drift nozzles at a maximum pressure of 40 pr., and resapplication to penods when wind speed does not acceed 10 mps. To assure that at will not adversely affect adjacent sensition nontarget plants, apply Atrazine 4L by aircrat a minimum upwind distance of 400 ft. is sensitive plants.

Storage and Disposal

Storage

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

Pesticide Dispossi

Do not contaminate water, food, or feed by storage or disposal, or cleaning of equipmic Open dumping is prohibited. Wastes resulting from the use of this product are acutoxic, Improper disposal of unused pesticide, spray mixture, or instate is a violatic federal law. Pesticide, apray mixture, or rinsate that cannot be used according to la instructions must be disposed of according to federal, state or local procedures, guidance in proper disposal methods, contact your State Pesticide or Environment Control Agency, or the Hazardous Waste representative at the nearest EPA Regio Office.

Container Disposal

Triple rinse (or equivalent) and offer for recycling or reconditioning, or puncture a dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by st and local authorities, if burned, keep out of smoke,

For minor spills, leaks, etc., follow all precautions indicated on this label and clean immediately. Take special care to avoid contamination of equipment and facilities during the clean procedures and disposal of wastes, the event of a major spill, fire or of emergency, call 1-800-424-9300 day or night.

WARRANTY AND LIMITATION OF DAMAGES

Seller warrants that this material conforms its chemical description and discreasonably few the purposes stated on the label when u in accordance with addrections sunder mor conditions of use and Buyer assumes the risk

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any use contrary to such directions. Seller makes no other expression implied marranty, including any other expression implied warranty of Fitness or of Merchantability, and no agent of Seller is authorized to do so except in writing with a specific reference to this warranty. In no event shall Seller's liability for any breach of warranty exceeds the purchase price of the material as to which a claim is made.

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