

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION

Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes or clothing. In case of contact, immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists. Wash thoroughly after handling. Wash contaminated clothing before re-use. Keep away from food and feedstuffs.

ENVIRONMENTAL HAZARDS Do not contaminate any body of water by direct application, cleaning of equipment, or disposal of wastes. Keep out of lakes, streams and ponds.

DIRECTIONS FOR USE

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

STORAGE AND DISPOSAL

PROHIBITIONS

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

ACCEPTED

OCT - 8 1982

It is recommended for the pesticide registered under EPA Reg. No. 180-101-1-1

PESTICIDE DISPOSAL

Pesticide, spray mixture, or rinsate that cannot be used or chemically reprocessed should be disposed of according to procedures approved by federal, state or local disposal authorities.

CONTAINER DISPOSAL

Triple rinse (or equivalent) and dispose of in an approved landfill or bury in a safe place.

GENERAL

Consult federal, state, or local disposal authorities for approved alternative procedures.

The Directions For Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of factors as weather conditions, presence of other materials, or the manner of use or application all of which are beyond the control of Platte Chemical Company or the Seller. All such risks shall be assumed by the Buyer.

WARRANTY AND LIMITATION OF DAMAGES

Platte Chemical Company warrants that this material conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions For Use, and Conditions of Sale, subject to the inherent risks referred to therein.

Platte Chemical Company makes no other express or implied warranty of FITNESS or of MERCHANTABILITY, and no agent of Platte Chemical Company is authorized to do so except in writing with a specific reference to this warranty. Any damages, arising from a breach of this warranty shall be limited to direct damages and shall not include consequential commercial damages such as loss of profits or of value, etc.

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, giant foxtail, velvetleaf, morning glory, lambsquarters, pigweed, ragweed, nightshade, purslane and mustard. Atrazine 4L may be applied before or after weeds emerge.

In any 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.

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

Note: Platte Chemical Company does not recommend the use of Atrazine 4L in combination with other herbicides or oils except as specifically described on the label.

APPLICATION PROCEDURES

Ground Application

For the most uniform distribution of broadcast applications use 80° flat fan type nozzles. For band applications use flat fan even spray nozzles. Screens 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 the material in suspension and (2) maintain 35-40 psi operating pressure. Use a minimum of 5 gallons of water per acre for preplant incorporated, pre-emergence and post (without oil or surfactant) applications. Use a minimum of 10 gallons of water per acre for all postemergence applications combined with oil or surfactant.

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

Band width in inches	Rate A lbs	Amount needed
Row width in inches	broadcast treatment	for band treatment

Aerial Application

For preplant and pre-emergence broadcast treatments, apply at a 1:1 ratio of Atrazine 4L to water (example recommendation calls for 1 quart of product and is mixed with 1 quart of water) to be applied per acre. For postemergence treatments, apply the recommended rate of Atrazine 4L or Atrazine 4L plus oil in a minimum of 2 gallons of water per acre. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive drift may occur.

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.

Atrazine 4L in water application

Atrazine 4L, a liquefied formulation, should be mixed with water and applied as a spray. Pour Atrazine 4L into the tank during or after filling. Hydraulic (jet) or mechanical agitation is recommended during mixing and application to keep the materials in suspension. All return lines to the tank must discharge below liquid level and agitation should not be so violent as to cause air bubbles to form in the liquid. Wash sprayer thoroughly after use.

Atrazine 4L in liquid fertilizer applications

Nitrogen solutions or complete liquid fertilizers may replace all or part of the water as a carrier for pre-emergence and preplant applications of Atrazine 4L. Mixing should be accomplished as described under water applications. Do not apply after corn or sorghum has emerged as there is danger of liquefied fertilizers causing crop injury.

IMPORTANT—Check the compatibility of this product with liquid fertilizers and/or nitrogen solutions before use.

Application in water plus emulsifiable oil or oil concentrate

Adding emulsifiable oil or oil concentrate to postemergence water-based sprays may improve weed control. However, under certain conditions, use of either emulsifiable oil or oil concentrate may seriously damage corn or sorghum. To minimize this possibility, follow directions, procedures, and precautions below.

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. Several oils and crop oil concentrates of these types are on the market. Emulsifiable oil and oil concentrate 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 other products like 2,4-D or other materials, as crop injury may result. (2) Fill tank 1/2 to 3/4 full with clean water. (3) Start agitation. (4) Pour product directly from container into tank. (5) Add emulsifiable oil or oil concentrate or a tank mix herbicide. (6) Finish filling tank with water, nitrogen solution, or liquid fertilizer. (7) Empty tank as completely as possible before refilling to prevent buildup of oil or emulsifiable concentrate residue in tank. Maintain agitation to avoid separation of other materials from water, nitrogen solution, or liquid fertilizer remaining in tank. (8) If an oil or oil concentrate film starts to build up in tank, drain it and clean with strong detergent solution or solvent. (9) Clean sprayer thoroughly immediately after use by flushing system with water containing a detergent. (10) For liquid nitrogen or liquid fertilizer, use suction screens of 16-mesh or finer.

NOTE: (1) Do not use oil in ATRAZINE 4L sprays when corn or sorghum is under stress from prolonged cold, wet weather, poor fertility, or other factors or when corn or sorghum is wet and succulent from recent rainfall as crop injury may occur. (2) Do not use oils in sprays when treating seed 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. (5) Do not make more than one application of ATRAZINE 4L and emulsifiable oil. Water temperature and time of day the tank must be made up will also affect.

CORN

One application will control most of the broadleaf and grass weeds such as barnyardgrass, witchgrass, Panum cap-weed, green foxtail, wild oats, large chaff, crabgrass, barn foxtail, velvet leaf, morningglory, and spurreck. It also controls ragweed, nightshade, purslane, and mustard.

ATRAZINE 4L may be applied either before planting or after planting at the rate indicated in Table 1.

For preplant and green emergence applications, use water solutions or complete liquid formulations. Use at least a part of the water as a carrier for ATRAZINE 4L. Apply after corn has emerged as there is increased soil fertilizer available.

PREPLANT: Broadcast or spot apply at the rate indicated in Table 1.

Apply before planting or after planting. Do not apply if corn is in the soil or if corn has emerged. Do not incorporate ATRAZINE 4L into the soil. The rate obtained when ATRAZINE 4L is used as a tank mix will vary prior to planting.

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

POSTEMERGENCE: Apply before weeds exceed 1 1/2 inches in height at the rate indicated in Table 1

TABLE I For Control of Broadleaf and Grasses'	
Soil Texture	Atrazine 4L Broadcast Rate
Light Soils: sands, loamy sands and sandy loams	4 pints
Medium Soils: silt and clay loams that are low in organic matter	4 1/2 pints
Heavy Soils: silt and clay loams with medium to high organic matter and clays (including the dark prairie soils to the Corn Belt)	6 pints
Peats, musk and high organic clays (apply postemergence only)	6 pints

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

Lay-by treatment (Broadleaf and grass control)

Broadcast 2-4 pt A in a minimum of 5 gal of water or nitrogen solution before weeds are 1-5 inches high and corn is 20-30 inches high. When using nitrogen solutions, direct the spray to lower 2-4 inches of corn stalks to avoid corn foliage injury. Maintain agitation in spray tank during application.

Postemergence with emulsifiable oil or oil concentrate in water.
IMPORTANT: Be sure to read precautions under use with water plus emulsifiable oil or oil concentrate in water.

BROADLEAF AND GRASS CONTROL Broadcast 4 pt A after weed emergence, but before weeds reach 1-5 inches in height. Add emulsifiable oil at rate of 1 qt A for ground applications and 0.5 gal A for aerial applications. Add oil concentrate at rate of 1 qt A for ground applications.

BROADLEAF CONTROL Broadcast 2.4 pt A for control of broadleaf weeds such as annual morningglory, cocklebur, lambsquarters, mustard, pigweed, ragweed, smartweed, and wild buckwheat. Add emulsifiable oil at rate of 1 gal A for ground applications and 0.5 gal A for aerial applications. Add oil concentrate at rate of 1 qt A ground applications. Apply before pigweed and lambsquarters reach 6 inches in height and before all other weeds reach 4 inches in height. A cultivation may be necessary if all weeds are not controlled or if weeds regrow.

PROBLEM WEEDS

For control of yellow nutsedge and Canada Thistle

Atrazine 4L will control yellow nutsedge (*Cyperus 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 infestation where neither weed species is a problem. If regrowth of yellow nutsedge or Canada thistle occurs following the last application of Atrazine during the season, cultivate once. When Atrazine 4L is applied postemergence to the weeds, 1 gallon of emulsifiable crop oil should be added 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 pre-emergence treatment plus a postemergence combination with emulsifiable oil or apply all the Atrazine 4L preplant or pre-emergence.

1) Broadcast 4 pts 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 4 pts. of Atrazine 4L plus 1 gal. 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 pts of Atrazine 4L per acre preplant. Follow an application of 4 pts. of Atrazine 4L plus 1 gallon of oil per acre, after the corn and weeds emerge, but before nutsedge plants reach a height of 3 inches (for nutsedge control only).

3) Broadcast 4 pts of Atrazine 4L per acre spring, or shortly after planting, but prior to crop or weed emergence. Follow with an application of 4 pts. of Atrazine 4L plus 1 gallon of oil per acre after the corn and weeds emerge, but before yellow nutsedge plants reach a height of 3 inches or Canada thistle plants reach a height of 6 inches.

4) Broadcast 8 pts. 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 thistle

plants emerge, but before nutsedge reaches a height of 3 inches or Canada thistle is more than 6 inches tall

5) Broadcast 8 pts. of Atrazine 4L per acre preplant (for yellow nutsedge control only)

6) Broadcast 8 pts. 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 8 pts. 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 pts. per acre in the fall or spring and plow 1-3 weeks later

Broadcast a second application at the rate of 4 pts. 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 grass weeds

Single application: Broadcast 6-8 pts. per acre in the fall or 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 residues—Broadcast 4-6 pts. Atrazine 4L and 1-2 pts. Paraquat CL per acre in 20-60 gallons of water per acre. Add 16 oz. to 32 oz. of nonionic surfactant per 100 gallons of diluted spray. Add Atrazine 4L to spray tank first and thoroughly mix with water. Add the Paraquat and surfactant last.

Refer to the Paraquat CL label for further directions, limitations and cautions

Atrazine 4L plus Alachlor 4EC

Use a tank mixture of Atrazine 4L plus Alachlor 4EC for the control of most annual broadleaf and grass weeds in corn (field and silage corn only) such as annual morning glory, barnyardgrass, black nightshade, brucharia, buttonweed (velvetleaf), carpetweed, cocklebur, crabgrass, fall panicum, Florida pusley, giant foxtail, green foxtail, yellow foxtail, goosegrass, lambsquarter, pigweed, purslane, mustard, common ragweed, smartweed and witchgrass

Make applications at the rate indicated in Table 2. For preplant applications, apply within 7 days of planting and incorporate to a depth of 2 to 3 inches. Use 0.4 pt. more of this product plus 1 pt. more Alachlor per acre than

indicated in Table II. Use no more than 3.2 pts. of Atrazine plus 2.5 qts. of Alachlor. For pre emergence applications, apply to the soil surface after planting but before the crop or weeds emerge. For post emergence treatments, make applications until weeds reach the two leaf stage, and the corn is no more than three inches tall.

TABLE II
Tank Mixtures of Atrazine 4L Plus Alachlor 4EC
On Corn (Field and Silage Only)

	Broadcast Rate Per Acre			
	Less than 3% organic matter		More than 3% organic matter	
Soil Texture	Atrazine 4L (pts/A)	Alachlor 4EC (qts/A)	Atrazine 4L (pts/A)	Alachlor 4EC (qts/A)
Light sandy soils	2	1.5	2	1.5
Silt loam soils	2-2.25	1.5-1.75	2-2.25	1.75-2.0
Heavy clay soils	2-2.5 3-1.5	2-2.5	2-2.5 3-1.5	2-2.5

Note: Apply in a minimum of 20 gallons of water per acre. Non pressure fluid fertilizer may replace all or part of the water used as a carrier for applications applied to the soil surface before crop emerges. Add the Atrazine 4L to the spray tank first and thoroughly mix with water. Add the alachlor last.

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

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

Atrazine 4L plus Propachlor 65W

Use a tank mixture of Atrazine 4L plus propachlor 65W for control of most annual broadleaf and grass weeds in corn (field, hybrid seed, silage and sweet corn only), such as annual morning glory, annual ryegrass, barnyardgrass (watergrass), buttonweed (velvetleaf), carpetweed, cocklebur, crabgrass, fall panicum, pigweed, pusley, giant foxtail, green foxtail, yellow foxtail, goosegrass, groundsel, jimsonweed, lamb's ears, mustard, nightshade, pigweed, purslane, ragweed, smartweed and sunflower. Broadcast 2.0 - 3.2 pts. of

Atrazine 4L plus 3.8 to 6.0 lbs. of propachlor 65W per acre on the soil surface any time from immediately after planting until broadleaf and grasses reach the two-leaf

stage. Use the lower rates of Atrazine 4L and propachlor 65W on light-textured soils low in organic matter. Use the higher rates on heavy-textured soils high in organic matter.

A minimum of 2 1/2 pts per acre of Atrazine 4L in the tank mixture will give better control of annual morning glory, buttonweed (velvetleaf), cocklebur and sunflower.

Apply in a minimum of 20 gallons of water per acre. Non-pressure fluid 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 4L to the spray tank first and thoroughly mix with water. Cut the propachlor 65W bag and fill with water to the fill line. Grasp the neck of the bag firmly and shake vigorously and add to the spray tank.

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

Precautions For All Applications to Corn

1) Do not apply more than 8 pts Atrazine 4L to corn in any one year.

2) 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 the rate used.

3) Do not graze treated area or feed treated forage to livestock for 21 days following application.

For postemergence applications plus emulsifiable oil, see additional precautions under that section 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 pts per acre (or comparable 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 in corn only when corn is to follow corn or a crop of untreated corn, or sorghum is to precede other rotational crops.

In eastern parts of the Dakotas, ND, western MN, and NE, do not rotate to soybeans if the rate applied to corn or sorghum was more than 4 pt A or equivalent band application rate, as soybean injury may occur.

6) Injury may occur to soybeans planted in north-central and northwest IA, south-central and southwest MN, northeast NE, southeast SD, and other areas the 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 and grasses the year following Atrazine 4L application or injury may occur

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

Atrazine 4L may be applied either before planting, at planting or after planting as indicated below

Preplant (Broadleaf and Grass Control):

Broadcast in the spring after plowing at the rate indicated in Table 3. 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 planting

Pre-emergence (Broadleaf and Grass Control):

Apply during or shortly after planting, but prior to weed or crop emergence at the rate indicated in Table 3

**TABLE III
Preplant and Pre-emergence Applications¹
For Broadleaf 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 loams	any level	DO NOT USE (except for pre-emergence use on bedded sorghum in Arizona and California as indicated below)
Medium and Heavy Soils	Less than 1%	
silt loams and clay loams	1% - 1 1/2%	3-1.5-4 pts
and clays	More than 1 1/2%	3-1.5-4 1/2 pts

¹Atrazine 4L should not be applied preplant to sorghum grown in N Mex, Okla, Texas, W Ks, E Co, Mo, Ala, Tenn, Miss, Ala, Ga, Fla, S. Car and N Car. Pre-emergence to sorghum grown in N Mex, Texas, Okla, W Ks, E Co, except in NE Okla and the Texas Gulf Coast

In case of planting failures, sorghum can be replanted into soil previously treated 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.

Pre-emergence Broadleaf Weed Control in Furrow Irrigated Bedded Sorghum (Arizona and California only):

For pre-emergence control of broadleaf weeds such as ground cherry, lambsquarters, morning glory, mustard, pigweed and purslane, broadcast 1 2/3 to 2 1/3 pts per acre. Use the lower rate on coarse-textured soils and soils low in organic matter and use the high rate on fine-textured soils and soils high in organic matter. Make application after bed preparation, during or after planting, but before sorghum and weeds have emerged and before the first furrow irrigation. Several regular irrigations should follow this application, making sure that all soil is thoroughly wet.

Precautions for Pre-emergence Applications of Atrazine 4L to Furrow Irrigated Bedded Sorghum Grown in Arizona and California:

To avoid possible sorghum injury, do not use on sand or loamy sand soils or on sorghum planted in the furrow. Additionally, applications made to sorghum growing on

alkali soils or where cuts, fills or erosions have exposed calcareous or alkali subsoils may result in crop injury. In case of crop failure do not replant sorghum for eight months following application. Corn may be planted immediately.

Postemergence Broadleaf and Grass Weed Control: Apply before weeds exceed 1 1/2 inches in height at the rate indicated in Table 4. Applications may be made up to close-in.

TABLE IV

Postemergence Broadleaf 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 weed control below	
Silt loam to sandy clay loam	Completely emerged	4-4 1/2 pts
Clay and Pulman y soils	At least 6 inches high	4-4 1/2 pts
Silty clay loams and heavier soils	Completely emerged	6 pts

Postemergence Broadleaf Weed Control with Atrazine 4L plus Emulsifiable Oil in Water:

Broadcast 2 1/2 pts per acre for control of broadleaf weeds such as annual morning glory, cocklebur, lambsquarters, 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 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 applications. A cultivation may be necessary if all weeds are not controlled or if regrowth of weeds occur.

Precautions for Application of Atrazine 4L plus Emulsifiable Oil in Water to Sorghum

1) Do not use oil in Atrazine 4L sprays when sorghum is under stress from prolonged cold, wet weather, poor fertility or other factors, or when sorghum is wet and succulent from recent rainfall as crop injury may occur.

2) Do not use oil in Atrazine 4L sprays when treating brood 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.

5) Do not make more than one application of Atrazine 4L emulsifiable oil in water per season.

Postemergence Broadleaf Weed Control with Atrazine 4L plus Surfactant in Oklahoma, New Mexico, Texas, Western Kansas, Colorado and Desert regions of Arizona and California only:

Broadcast 2 1/2 pts of Atrazine 4L plus 1/2-1 1/2 pts of surfactant per acre after sorghum reaches 6 inches in height but before weeds reach 1 1/2 inches in height. Apply only on sandy loam and finer textured soils.

CHEMICAL FALLOW

Wheat-Sorghum-Fallow

This treatment controls annual broadleaf and grass weeds following wheat harvest and in the following sorghum crop when grown under no-tillage.

Apply 6 pts. 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 disturbance of the soil. Use a surface planter or a planter leaving a shallow furrow. If weeds are present at planting, remove them with a sweep plow or other suitable implement before planting.

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

Note: Do not graze or feed forage from treated area to livestock. Do not plant any crop other than those on this label within 18 months following treatment.

Precautions for all Applications to Sorghum

- 1) Heavy rains immediately following application tend to result in excessive concentrations of herbicide in seed furrow, resulting in possible crop injury. Applications to newly planted sorghum should not be made until furrows are leveled (plow in). Deep planter marks or seed furrows should also 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 graze or 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 Arizona and California and for postemergence applications plus emulsifiable oil, see additional precautions under these sections 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 pts. per acre (or comparable rates in a band application), a crop of untreated corn or sorghum should precede the rotational crop.
- 4) In the High Plains and Intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required, use Atrazine 4L to control weeds in sorghum.

only when sorghum is to follow sorghum or a crop of untreated sorghum or corn is to precede other rotational crops

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

6) 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 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 4L application or injury may occur

RANGELAND

To control certain weeds, including cheatgrass (downy brome chess), common (annual) broomweed, little bluestem, medusahead, sagewort, and tumble mustard. Use lower rate where cheatgrass is major problem weed; use higher rate for other weeds.

For ground applications, use a minimum of 10 gal water/A. For aerial applications, use a minimum of 5 gal of water/A. See Application Procedures for additional information.

Establishment of perennial range grasses in West (California, Idaho, Nevada, Oregon, Utah, Washington)

Apply 1.6-2 pt A in fall after rains begin but before ground freezes. Perennial range grass may be seeded when rain begins the next fall following treatment. Plant in deep furrows such as those made by a deep furrow rangeland drill. Treated areas may be grazed 7 months after seeding. However, to provide sufficient time for establishment of desirable range grasses, treated areas should not be grazed until the fall following seeding.

Renovation of existing stands of perennial range grasses

Central Great Plains (Colorado, Kansas, Montana, Nebraska, N. Dakota, S. Dakota, Wyoming) Apply 1-2 pt/A in fall before ground freezes.

Southern Great Plains (Oklahoma, Texas) Apply 2 pt A in spring before April 30.

West (California, Idaho, Nevada, Oregon, Utah, Washington) Do not graze area to be treated for 5 months prior to application. Apply 1-1.5 pt A by ground equipment in fall before ground freezes.

Bluegrass and intermediate wheatgrass may be injured by this product at recommended rates.

Note: Do not cut or feed range grass hay. Do not graze treated areas within 7 months following fall application or 3 months following spring application. Apply only once per year.

**Warm season perennial range grasses—Midwest
Switchgrass and Big Bluestem**

For control of many annual broadleaf and grass weeds including cheatgrass, foxtails (giant, green, and yellow), lambsquarters, pigweed, ragweed, smartweed, and velvetleaf

For ground application use a minimum of 15 gal of water/A

Use only on loam, silt loam, silty clay loam, clay loam, and silty clay soils with at least 1 percent organic matter

New seeding Apply 2 qt A after planting but before weeds emerge Prepare a good, firm seedbed Plant 1/2 inch deep with a grassland drill (preferred method) or a conventional drill If a conventional drill is used on prepared seedbeds, remove all tension from the disk openers For best results, cultipack or roll after planting Clip weeds that escape in July or August Avoid clipping switchgrass or big bluestem seedlings

DOUGLAS FIR, GRAND FIR, NOBLE FIR, WHITE FIR, LODGEPOLE PINE, PONDEROSA PINE, AND SCOTCH PINE

Annual broadleaf and grass weed control: Broadcast 2-4 qt/A in 20-40 gal A between fall and early spring while trees are dormant or soon after transplanting Apply before weeds are 1.5 inches tall

Established stands Apply 2 qt A in April or early May, before weed emergence

Note: Do not cut for hay Do not graze treated areas within 4 months following application at seeding or 3 months following application to established switchgrass or big bluestem Treat only once per year

Rotational crops: See "Rotational crops" in Corn section

Quackgrass control: Broadcast 4 qt A in fall or early spring while trees are dormant and before quackgrass is more than 1.5 inches tall

Precautions: (1) Do not graze treated areas (2) Do not apply to seedbeds (3) Apply only once per year

NONSELECTIVE WEED CONTROL ON NONCROP LAND

This product provides long term weed control on industrial sites, highway medians and shoulders, railroad rights-of-way, lumberyards, petroleum tank farms, and in noncrop areas on farms, such as around buildings, equipment and fuel storage areas, along fences and lanes

Apply before or soon after weeds begin growth. Make postemergence applications when weeds are young and actively growing. Use the higher rates on the clay and muck soils. Use sufficient water to insure thorough coverage. Use at least 1 gal. of water for each quart of product, use more if practical.

Annual broadleaf and grass weeds (including barnyardgrass, cleatgrass, crabgrass, lambsquarters, foxtail, ragweed, puncturevine, and turkey mullein)
Broadcast 4-8-10 qt. A

Hard-to-kill annual and many perennial broadleaf and grass weeds (including bluegrass, burdock, Canada thistle, dogfennel, orchardgrass, plantain, quackgrass, purpletop, redtop, and smooth brome)
Broadcast 10-20 qt. A

Hard-to-kill biennial and perennial weeds (including bull thistle and sowthistle) Broadcast 20-40 qt. A

For longer residual control in regions of high rainfall and a long growing season, broadcast 20-40 qt. A

For small areas 0.25 qt. per 1,000 sq. ft. equivalent to 10 qt. A

Formulated For:
Platte Chemical Co.
150 S. Main St.
Stemont, NE 68025

ACCEPTED

OCT - 8 1969

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 34704-69