

AAtrex 4LC

Herbicide

For use by commercial applicators

For season-long weed control in corn and sorghum

For weed control in certain other crops; in noncrop areas; and industrial sites

Active Ingredients:

Atrazine: 2-chloro-4-ethylamino-6-isopropylamino-s-triazine 40.8%
Related compounds 2.2%

Inert Ingredients: 57.0%

Total: 100.0%

AAtrex 4LC contains 4 lbs. active ingredients per gallon.

Keep Out of Reach of Children.

Caution

See additional precautionary statements inside booklet.

EPA Reg. No. 100-535

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CIBA-GEIGY

DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire Directions for Use and the Conditions of Sale and Warranty before use of this product.

Conditions of Sale and Warranty

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 possible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unwanted consequences may result because of such factors as weather, soil conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of CIBA-GEIGY or the Seller. All such risks shall be assumed by the Buyer.

CIBA-GEIGY 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 subject to the inherent risks referred to above. **CIBA-GEIGY makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall CIBA-GEIGY or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product.** CIBA-GEIGY and the Seller offer this product and the Buyer and user accept it subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of CIBA-GEIGY.

Directions for Use

For use in corn, sorghum, sugarcane, pineapple, and certain other crops. For use in noncrop areas and industrial sites.

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

Do not apply this product in such a manner as to directly or through drift expose workers or other persons, except those knowingly involved in the application. The area being treated must be vacated by uninvolved persons.

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

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

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must be given which inform workers of areas or fields that may not be entered without specific protective clothing until sprays have dried, and appropriate actions to take in case of accidental exposure as described under **Precautionary Statements** on this label. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: **CAUTION Area treated with AAtrex 4LC on (date of application). Do not enter without appropriate protective clothing until sprays have dried.** In case of accidental exposure, flush eyes or skin with plenty of water. Call a physician if irritation persists. Remove and wash contaminated clothing before reuse.

General Information

This herbicide controls many annual broadleaf and grass weeds in corn, sorghum, sugarcane, pineapple, and certain other crops specified on this label. It is also effective in noncrop areas and industrial sites for control of most annual and many perennial broadleaf and grass weeds. 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 listed on this label have been reported which cannot be effectively controlled by this and related herbicides. Where this is known or suspected and weeds controlled by this product are expected to be present along with resistant biotypes, we recommend the use of this product in combinations or in sequence with other registered herbicides which are not triazines. If only resistant biotypes are expected to be present, use a registered non-triazine herbicide. Consult with your State Agricultural Extension Service for specific recommendations.

Since this product acts mainly through contact, its effectiveness depends on moisture to move it into the root system. Weeds develop a shallow cultivation or rotary hoeing will generally result in better weed control.

This product is noncorrosive to equipment and is not highly flammable and has low environmental toxicity.

Apply this product as a pre-emergence or post-emergence spray.

Where the use of this product is recommended for the control of weeds in corn, sorghum, sugarcane, and pineapple, the application rate should be based on the moisture content of the soil.

Note: CIBA-GEIGY does not warrant the effectiveness of this product when used in combination with other herbicides. For more information, consult the label of the other herbicide.

Application Procedures

Ground application: Use this product in a backpack sprayer with nozzles that provide a variable spray pattern. Be certain that nozzles are not clogged. Use a backpack sprayer or a calibrated sprayer for broadcast application.

season and when changing carriers. Use a carrier which will use a minimum of 10 gal. of spray mixture. Always use the manufacturer's recommended spray volume and nozzle type for the equipment.

Use a pump with capacity to handle at least 40 gal. of spray mixture to provide sufficient agitation. The pump should be able to handle a minimum of 20% slurry of a fine-textured centrifugal pumps which provide proper shear action for mixing and mixing this product. The pump should provide a minimum of 10 gal. minute 100 gal. tank size or smaller through a 1/2" or 3/4" diameter sparger tube or jets.

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

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

$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \text{broadcast rate per acre} = \text{amount needed per acre of field}$$

Aerial application: Use aerial application only where broadcast applications are specified. Apply in a minimum of 1 qt. of water for each quart of this product applied per acre. For postemergence treatments on corn and sorghum, apply recommended rate in a minimum of 2 gal. of water. **Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.**

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

Application in water or liquid fertilizer: Nitrogen solution or complete liquid fertilizer may replace all or part of the water as a carrier for preemergence, preplant incorporated, or preplant surface ground application on corn and sorghum. Check the compatibility of this product with liquid fertilizer and nitrogen solution as shown below before use. Do not apply a nitrogen solution or complete liquid fertilizer after corn or sorghum emergence, except as noted under **Lay-by treatment** for corn or sorghum.

Compatibility Test: Since liquid fertilizers can vary even within the same analysis, always check compatibility with herbicide(s) each time before use, be especially careful when using complete suspension or fluid fertilizers as serious compatibility problems are more likely to occur. Commercial application equipment may improve compatibility in some instances. The following test assumes a spray volume of 25 gals. per acre. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure:

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

Dry herbicides: For each pound to be applied per acre, add 1/5 level teaspoon to each jar.

Liquid herbicides: For each pint to be applied per acre, add 1/5 teaspoon or 2.5 milliliters to each jar.

4. After adding all ingredients, put lids on and tighten, and invert each jar ten times to mix. Let the mixtures stand 15 minutes and then look for separation, large flakes, precipitates, or a heavy oil film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the two jars. If the mixture separates, but can be

recombined, the mixture is compatible. If the mixture separates and cannot be recombined, the mixture is incompatible. If the mixture separates and cannot be recombined, the mixture is incompatible. If the mixture separates and cannot be recombined, the mixture is incompatible.

Application in water plus emulsifiable oil or oil concentrate. Apply in a minimum of 10 gal. of water per acre. Use petroleum-derived oil or oil concentrate, or single or mixed crop-derived oil or concentrate. Do not use emulsifiable oil or oil concentrate with preemergence water-based sprays on corn and sorghum, including weed control. However, under certain conditions, the use of the type of oil may seriously interfere with the product. To minimize this possibility, observe the following directions:

1. Use one of the following properly emulsified:
 1. A suitable oil concentrate containing at least 1% but not more than 20% suitable emulsifier or surfactant blend.
 2. Petroleum-derived oil containing at least 1% suitable emulsifier.

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

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

Center pivot sprinkler application.

Preemergence or postemergence. Apply this product in center pivot tank mixtures with other herbicides in those states which are registered for center pivot application with irrigation water. Apply either after planting before crop and weeds emerge, or after crop emergence, but before lay-by (20-30 inches), and before weeds exceed 1.5 inches in height. Apply at rates recommended on this label. Prepare mixture with a minimum of 1 part water to 1 part product. Injecting a larger volume of a more dilute slurry per hour will assure more accurate calibration of metering equipment. Maintain sufficient agitation to keep herbicide in suspension. Meter slurry into irrigation water during entire period. Apply in 1/2 inch of water. Use the lower water 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 slurry into system through a positive displacement pump.

Refer to supplemental literature published by CIBA-GEIGY for more information on calibration.

Precautions: (1) Apply only through irrigation systems containing anti-siphon and check valves to prevent contamination or 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 controls 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 providing 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.

AAtrex 4LC Applied Alone-- Corn or Grain Sorghum

Preplant Surface Applied, Preplant Incorporated or Preemergence or Postemergence at 4 pt. A with O

Soil texture	Preplant Surface Applied	Preplant Incorporated	Preemergence or Postemergence
Very fine to fine	4 pt. A	4 pt. A	4 pt. A
Medium	4 pt. A	4 pt. A	4 pt. A
Coarse	4 pt. A	4 pt. A	4 pt. A

Postemergence with Emulsifiable Oil or Oil Concentrate in Water (at 2.4 pt. A)

Weed	Emulsifiable Oil	Oil Concentrate
Annual weeds	2.4 pt. A	2.4 pt. A
Mustards	2.4 pt. A	2.4 pt. A
Pigweed	2.4 pt. A	2.4 pt. A
Lambsquarters	2.4 pt. A	2.4 pt. A
Wild buckwheat	2.4 pt. A	2.4 pt. A
Velvetleaf	2.4 pt. A	2.4 pt. A

Corn

Preplant Surface-Applied (Broadleaf and grass control): Use on medium- and fine-textured soils with minimum tillage or no-tillage systems only in CO IL IN IA KS KY MN MO MT NE ND SD WI WY. Apply at the recommended rate of AAtrex shown in Table 1 for the soil texture as a split treatment 30-45 days prior to planting and the remainder at planting. Applications made less than 30 days prior to planting may be as effective as a split or single treatment. On coarse-textured soils, do not apply more than two weeks prior to planting.

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

Note: To the extent possible, do not plow treated areas or move untreated soil to the surface and do not till with windrows until the summer.

Preplant Incorporated (Broadleaf and grass control): Use in spring after wind attack. Apply at the recommended rate before planting. Apply at the recommended rate after planting. Apply at the recommended rate after planting.

Preemergence (Broadleaf and grass control): Use in spring after wind attack. Apply at the recommended rate before planting.

Postemergence (Broadleaf and grass control): Use in spring after wind attack. Apply at the recommended rate after planting.

Table 1: Broadleaf and Grass Weed Control on Corn*

Soil texture	Broadcast rate A
COARSE	
Sand, loam, sand loam, loam	4.0
MEDIUM	
Loam, silty loam, silty clay loam, silty clay, clay, silty clay, clay, silty loam, silty clay with low organic matter	4.0
FINE	
Loam, silty loam, silty clay, silty loam, silty clay, silty clay with medium to high organic matter, and clay with no to dark pink soil of the Corn Belt	4.0

*For tank and other combinations, see the label of the herbicide used.

Broadleaf control: Eastern U.S. and western U.S. use the AAtrex 4LC rate of 4 pt. A. In the West, U.S. and eastern Canada, use the AAtrex 4LC rate of 4 pt. A plus 1 pt. O. In the West, U.S. and eastern Canada, use the AAtrex 4LC rate of 4 pt. A plus 1 pt. O. In the West, U.S. and eastern Canada, use the AAtrex 4LC rate of 4 pt. A plus 1 pt. O.

By treatment (Broadleaf and grass control): Use in spring after wind attack. Apply at the recommended rate before planting. Apply at the recommended rate after planting.

Postemergence with emulsifiable oil or oil concentrate in water: Use in spring after wind attack. Apply at the recommended rate after planting.

Type Oil	Ground Application	Aerial Application
Non-solvent based	2.4 pt. A	2.0 pt. A
Solvent based	2.4 pt. A	2.0 pt. A

Note: Crop- and/or petroleum-derived concentrates should contain at least 1% but not more than 2% sulfate emulsifier or compatible broadleaf petroleum derivatives should contain at least 1% sulfate emulsifier.

Broadleaf and grass control: For postemergence control of those weeds listed under **Preplant Incorporated and Pre-emergence**, broadcast 4 pt. A plus emulsifiable oil or oil concentrate after weed emergence, but before weeds reach 15 inches in height.

Broadleaf control: For postemergence control of those weeds listed under **Postemergence with emulsifiable oil or oil concentrate in water**, broadcast 2.4 pt. A plus emulsifiable oil or oil concentrate before pigweed and lambsquarters reach 6 inches in height and before all other weeds reach 4 inches in height. A cultivation may be necessary if all weeds are not controlled or if weeds regrow.

Precautions for applications with emulsifiable oil or oil concentrate in water: (1) Do not apply when crop is under stress from prolonged cold, wet weather, poor fertility, or other factors, or when crop is wet and succulent from recent rainfall, or crop injury may occur. (2) Inbred lines of any breeding stock may be severely injured by applications with emulsifiable oil or oil concentrate. (3) Adding other insecticides, herbicides, and fertilizers or other materials is not recommended because they may cause compatibility problems or crop injury. (4) Store and handle emulsifiable oil and oil concentrate carefully. Oil contaminated with even a small amount of water will not emulsify properly when added to the tank. Do not mix more than one application per season, except as recommended for control of yellow nutsedge, grass, and Canada thistle.

Problem weeds

Yellow nutsedge and Canada thistle: This product will control yellow nutsedge, Canada thistle, and Canada thistle. In the West, U.S. and eastern Canada, use the AAtrex 4LC rate of 4 pt. A plus 1 pt. O. In the West, U.S. and eastern Canada, use the AAtrex 4LC rate of 4 pt. A plus 1 pt. O.

Alternative methods: Use for control of yellow nutsedge in the West, U.S. and eastern Canada, use the AAtrex 4LC rate of 4 pt. A plus 1 pt. O. In the West, U.S. and eastern Canada, use the AAtrex 4LC rate of 4 pt. A plus 1 pt. O.

Preplant 4 pt. A plus 1 pt. O: Emulsifiable oil or oil concentrate. Apply after planting in the West, U.S. and eastern Canada, use the AAtrex 4LC rate of 4 pt. A plus 1 pt. O. In the West, U.S. and eastern Canada, use the AAtrex 4LC rate of 4 pt. A plus 1 pt. O.

Preplant 4 pt. A: Preplant incorporated. Apply in the West, U.S. and eastern Canada, use the AAtrex 4LC rate of 4 pt. A plus 1 pt. O. In the West, U.S. and eastern Canada, use the AAtrex 4LC rate of 4 pt. A plus 1 pt. O.

Postemergence 2.4 pt. A plus emulsifiable oil or oil concentrate: Use in the West, U.S. and eastern Canada, use the AAtrex 4LC rate of 4 pt. A plus 1 pt. O. In the West, U.S. and eastern Canada, use the AAtrex 4LC rate of 4 pt. A plus 1 pt. O.

Apply after rain or irrigation. Do not apply if rain or irrigation is expected within 24 hours. Do not apply if rain or irrigation is expected within 24 hours.

4. Broadcast 4 pt AATrex 4LC in a 100 ft wide swath. Do not apply if rain or irrigation is expected within 24 hours.
5. Do not use seedling stage herbicides. Do not use AATrex 4LC on seedling stage corn. Do not use AATrex 4LC on seedling stage corn.
6. Do not apply AATrex 4LC to corn plants that are less than 10 inches tall. Do not apply AATrex 4LC to corn plants that are less than 10 inches tall.

Quackgrass control on land going into corn production
Spot application: Broadcast 4 pt AATrex 4LC in a 100 ft wide swath. Apply a second application at 4 pt AATrex 4LC 2-3 weeks later or after planting but before weeds are 10 inches tall. A second application will control quackgrass and other annual grass weeds.

Single application: Broadcast 8 pt AATrex 4LC in a 100 ft wide swath 2-3 weeks later.

Tank Mixtures for Corn

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

Dual [®] (metolachlor)	Lasso [®] or Lasso EC [®] + Roundup
Dual + paraquat	Lasso or Lasso EC + paraquat
Dual + Roundup [®] (glyphosate)	Paraquat
Dual + Princep [®]	Princep
Dual + Princep + paraquat	Princep + paraquat
Dual + Princep + Roundup	Princep + Roundup
Bexton [®] or Ramrod [®] (propachlor)	Roundup
Lasso [®] or Lasso EC (alachlor)	Sutan [®]

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

Note: When the labels of the above herbicides refer to atrazine 80W use equivalent rates of AATrex 4LC. One lb of 80W equals 1 pt of 4LC.

Princep 80W, Princep 4L (4LC), or Princep Caliber 90
 In addition to the weeds listed under AATrex 4LC Applied Alone — Corn and Grain Sorghum — Preplant Surface-Applied, Preplant Incorporated, or Preemergence, this product also controls crabgrass, tall panicum, and carpetweed.

Broadcast tank mix before planting and before weeds emerge but before crop and weeds emerge. Atrazine is the most effective for control of most weeds. Use this atrazine tank mix for heavy infestations of crabgrass and tall panicum. Do not use if any weeds develop.

Preplant Surface-Applied: Use on medium and fine textured soils with minimum tillage or no tillage systems only in CO, IL, IA, KS, KY, MN, MO, MI, NE, ND, SD, WI, and WY. Apply at the recommended rate of AATrex and Princep shown in Table 2 for the soil texture as a spot treatment 3-4 days prior to planting. Applications made less than 30 days prior to planting may be made after a spot or single treatment of tank mixture. Do not apply more than two weeks prior to planting. Refer to the AATrex 4LC label for details.

If weeds are present at time of treatment, atrazine tank mix combination with a contact herbicide for extra control of 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 to the surface during planting or when the soil is being worked.

Preplant Incorporated: Apply to the soil and incorporate in the spring before, during, or after final seedbed preparation. Avoid deep incorporation. For best results, till with a moldboard plow before planting.

Apply after rain or irrigation. Do not apply if rain or irrigation is expected within 24 hours. Do not apply if rain or irrigation is expected within 24 hours.

4. Broadcast 4 pt AATrex 4LC in a 100 ft wide swath. Do not apply if rain or irrigation is expected within 24 hours.
5. Do not use seedling stage herbicides. Do not use AATrex 4LC on seedling stage corn. Do not use AATrex 4LC on seedling stage corn.
6. Do not apply AATrex 4LC to corn plants that are less than 10 inches tall. Do not apply AATrex 4LC to corn plants that are less than 10 inches tall.

Table 2. Tank Mixtures with Princep on Corn

Soil texture	Broadcast rate A			
	1:1 Ratio [*]		1:2 Ratio ^{**}	
	This product	Princep 80W [†]	This product	Princep 80W [†]
fine sandy loam or loam	1 pt	1.5 lb	1.5 pt	2.25 lb
clay loam or loam	1 pt	1.5 lb	1.5 pt	2.25 lb
sandy clay loam	2.4 pt	3.6 lb	3.6 pt	5.4 lb
silty clay or silty clay with low organic matter	3 pt	4.5 lb	4.5 pt	6.75 lb
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	3 pt	4.5 lb	4.5 pt	6.75 lb
including dark prairie soils of the Corn Belt	3 pt	4.5 lb	4.5 pt	6.75 lb

^{*}For control of most weeds.

^{**}For control of expected heavy infestations of crabgrass and tall panicum.

[†]When using Princep Caliber 90 or Princep 4L (4LC), use equivalent rates. One lb of Princep 80W equals 1.5 lb of Princep Caliber 90 or 1.6 pt of Princep 4L (4LC).

Princep 80W, Princep 4L (4LC), or Princep Caliber 90 plus Roundup: Use as a tank mixture for preemergence and post-emergence control of certain broadleaf and grass weeds where Roundup is not effective. Roundup is not effective on established and previous crop residues. Refer to Roundup label for all directions, weeds controlled, precautions, and limitations.

Princep 80W, Princep 4L (4LC), or Princep Caliber 90 plus Paraquat: Use as a tank mixture with Princep and Paraquat for preemergence and post-emergence weed control where corn will be planted directly into a cover crop residue. Do not use previous crop residues. AATrex 4LC, Princep, and Paraquat and a nonionic surfactant should be thoroughly mixed in a water spray tank. Broadcast 4 pt AATrex 4LC, 3.6 pt Princep 80W, or 4.5 pt Princep Caliber 90 or 4.5 pt Princep 4L (4LC) and 1.5 lb Paraquat. Apply 2-3 days before planting. Do not apply more than two weeks prior to planting. Refer to the AATrex 4LC label for details.

Do not apply to corn plants that are less than 10 inches tall. This mixture will not control weeds growing in the soil.

Note: Do not apply to corn plants that are less than 10 inches tall. Do not apply to corn plants that are less than 10 inches tall. Do not apply to corn plants that are less than 10 inches tall.

Note: Do not apply to corn plants that are less than 10 inches tall. Do not apply to corn plants that are less than 10 inches tall. Do not apply to corn plants that are less than 10 inches tall.

Rotational crops

Tank Mixtures for Grain Sorghum

Iqran 80W Use as tank mixture with Dual BE for control of weeds listed on the Dual BE label. Use as tank mixture with Dual BE for control of weeds listed on the Dual BE label.

Dual BE: Use as tank mixture with Iqran 80W for control of weeds listed on the Dual BE label. Use as tank mixture with Iqran 80W for control of weeds listed on the Dual BE label.

Winter Weed Control in Texas

For postemergence control of winter weeds in sorghum, sorghum seeding dock, and annual triticale, sorghum, and sorghum Coast and Blacklands of Texas. Apply Dual BE or Iqran 80W to the weeds in November or December for control of weeds listed on the Dual BE label or Iqran 80W label. For best results, add a suitable surfactant, such as X-77, at the rate of 0.5% of the spray volume, an emulsifiable oil at the rate of 1% of the spray volume, or an oil concentrate at the rate of 1% of the spray volume.

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

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

AAtrex 4LC Alone — Chemical Fallow

Wheat-Sorghum-Fallow: To control annual broadleaf and grass weeds following wheat harvest and in the following sorghum crop when grown under minimum tillage, broadcast 6 pt A to wheat stubble immediately following wheat harvest. If 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 AAtrex. 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 AAtrex 4LC Applied Alone — Corn or Grain Sorghum — Preplant Surface-Applied, Preplant Incorporated, or Preemergence.

Precautions: 1. Use only on soils that are not treated with soil. 2. When sorghum fallow cropping procedure is used, follow label directions. 3. Do not apply to living sorghum harvest.

Apply: Do not graze or feed forage from treated areas. Weeds will not plant any crop other than those on this label within 6 months following treatment.

Wheat-Corn-Fallow (KS, NE): This product controls or retards growth of bromes, chess, Koch, mustard, proso millet, Russ, and white wild radish, wild sunflower, and yellow wild radish after wheat harvest. Weed control may extend into following corn crop grown under minimum tillage.

Follow directions for use, rate, and preplanting on the Wheat-Sorghum-Fallow section above, substituting corn for sorghum.

Wheat-Fallow-Wheat (CO, KS, MT, NE, ND, SD, and WY): Preemergence herbicide for control of weeds listed on the main label. Apply to wheat stubble immediately following wheat harvest. For best results, add a suitable surfactant, such as X-77, at the rate of 0.5% of the spray volume, an emulsifiable oil at the rate of 1% of the spray volume, or an oil concentrate at the rate of 1% of the spray volume. Treat only stubble ground. Treat only once during same fallow period. Refer to paraquat label for further directions.

Tank Mixtures for Chemical Fallow

Wheat-Sorghum-Fallow (Wheat-Corn-Fallow, KS, NE)
Iqran 80W Use as tank mixture with Dual BE for control of weeds listed on the Dual BE label. Use as tank mixture with Dual BE for control of weeds listed on the Dual BE label.

Use as tank mixture with Dual BE for control of weeds listed on the Dual BE label. Use as tank mixture with Dual BE for control of weeds listed on the Dual BE label.

Paraquat: If weeds are present at application, a tank mix with paraquat may be used. Broadcast 1-2 pt of AAtrex 4LC plus 1-2 pt of paraquat in 20-60 gal of water A by ground equipment. Add 0.5-1 pt of a nonionic surfactant, such as X-77, per 100 gal of spray mixture. Add AAtrex to spray tank first and thoroughly mix with water. Then add paraquat followed by surfactant. Use the 2 pt rate of paraquat if weeds are 4-6 inches tall. This mixture will not control weeds taller than 6 inches. Apply to stubble ground. Treat only once during same fallow period. Refer to paraquat label for further directions.

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

Iqran 80W Use as tank mixture with Dual BE for control of weeds listed on the Dual BE label. Use as tank mixture with Dual BE for control of weeds listed on the Dual BE label.

Paraquat: If weeds are present at application, a tank mix with paraquat may be used. Broadcast 1-2 pt of AAtrex 4LC plus 1-2 pt of paraquat in 20-60 gal of water A by ground equipment. Add 0.5-1 pt of a nonionic surfactant, such as X-77, per 100 gal of spray mixture. Add AAtrex to spray tank first and thoroughly mix with water. Then add paraquat followed by surfactant. Use the 2 pt rate of paraquat if weeds are 4-6 inches tall. This mixture will not control weeds taller than 6 inches. Apply to stubble ground. Treat only once during same fallow period. Refer to paraquat label for further directions.

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

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

Precautions: 1. Do not use on sand soil or heavy clay soil. 2. Do not treat eroded hillsides, ditches, and rocky outcrops or exposed calcareous subsoil or heavy clay soil. 3. Do not treat soils of the Fossil and Garden series in western NE and adjoining counties in CO and WY if injury may occur. 4. Do not treat soils with calcareous surface layers or heavy clay soil. Avoid spraying at

Apply: Do not graze treated areas within 6 months after application.

Aerial application: In order to assure that spray will be controlled by the target area when used according to label directions, make applications at a maximum height of 10 ft using low drift nozzles at a maximum pressure of 40 psi. For best application to sorghum when wind speed does not exceed 10 mph, to assure that spray will not adversely affect adjacent sensitive plants, apply AAtrex 4LC alone by aircraft at a minimum wind distance of 400 ft from sensitive plants, or apply AAtrex 4LC + Iqran 80W at a minimum upwind distance of 600 ft from sensitive plants. When applying AAtrex 4LC + Iqran 80W by aircraft, use a minimum of 1 gal of water per acre.

Proso Millet

For control of proso millet in sorghum, sorghum seeding dock, and sorghum Coast and Blacklands of Texas. Apply Dual BE or Iqran 80W to the weeds in November or December for control of weeds listed on the Dual BE label or Iqran 80W label.

For the list of weeds controlled, see Dual BE or Iqran 80W label.

Rotational crops

Hanqeland

Use as tank mixture with Dual BE for control of weeds listed on the Dual BE label. Use as tank mixture with Dual BE for control of weeds listed on the Dual BE label.

Precautions: (1) Do not apply within 30 days of fruiting or of planting. (2) Do not apply in combination with surfactants or other spray additives, or injury may occur. (3) Do not use north of NC.

Turf Grasses for Sod

St. Augustinegrass, Centipedegrass, and Zoysia Grass
Broadcast 4-8 pt A at planting. For best results, the following are listed under **AAtrex 4LC Applied Alone - Corn or Grain Sorghum - Preplant Surface-Applied, Preplant Incorporated or Preemergence.**

Muck or peat	8 pt	Old beds: Within 2 days after finishing New beds: 3-4 days after spreading and putting
Sandy soil	4 pt	Old beds: Within 2 days after finishing New beds: 7-10 days after spreading and putting

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

Precautions: (1) Do not apply within 30 days of fruiting or of planting. (2) Do not apply in combination with surfactants or other spray additives, or injury may occur. (3) Do not use north of NC.

Macadamia Nuts

For preemergence control of many broadleaf and grass weeds including crabgrass, foxtail, wreggrass, Florida panthergrass, scarisneedles, and fireweed. Broadcast 4-8 pt A before harvest and before weeds emerge. Repeat as necessary. Do not spray when nuts are on ground during harvest period. Do not apply to soil.

Pineapple

For control of burdock, castanetweed, annual, the seedling and bindweed, adiantum, amaranth, and other weeds. Apply to the weed source (ridge and/or soil) at 10-12 pt A. Repeat spray immediately after planting and before harvest. Make additional blanket or intersperse applications at 4-6 pt A at 2-4 month intervals as needed. Provide sufficient irrigation (1/2-1 gal of water/A) to assure thorough coverage.

Precautions: (1) Do not apply more than 10 pt A per year. (2) Repeated monthly applications may slow plant growth and delay fruiting.

Note: Do not apply within 45 days of fruiting. Do not feed harvest forage to be fed to livestock.

Guava

Use only on established plantings which are at least 18 months old. Apply as a directed spray at 4 pt A of AAtrex 4LC. Use 1/2 gal of spray mix preemergence or early postemergence to weeds. When applying postemergence, the use of a surfactant and greater spray volume (80-100 gal of spray mix per acre) may enhance weed control. Do not apply more frequently than at 4 month intervals. Do not apply more than 10 pt of AAtrex 4LC per year. This product controls many annual, broadleaf and grass weeds including the weed purslane, scarlet pimpernel, sparrowgrass, and sowthistle.

Do not allow sprays to contact fruit or fruit.

Conifers

For control of annual broadleaf weeds which are of the seedling stage after transplanting. Broadcast 4-8 pt A before planting.

Precautions: (1) Do not apply within 30 days of fruiting or of planting. (2) Do not apply in combination with surfactants or other spray additives, or injury may occur. (3) Do not use north of NC.

For the control of weeds in the AAtrex 4LC Applied Alone - Corn or Grain Sorghum - Preplant Surface-Applied, Preplant Incorporated, or Preemergence.

Quackgrass control: Broadcast 8 pt A in 1/2 inch of water per 1/4 acre and 1/2 gal of spray per 1/4 acre between 1/2 and early spring when trees are dormant and before quackgrass is more than 15 inches tall.

Note: Temporary injury to trees may occur following the use of AAtrex on coarse-textured soil.

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

Aerial application: In order to assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft above vegetation, using low drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply AAtrex 4LC by aircraft at a minimum downwind distance of 400 ft from sensitive plants.

Nonselective Weed Control on Noncrop Land

This product provides long-term weed control on industrial sites, highway medians and shoulders, railroad rights-of-way, lumber yards, petroleum tank farms, and noncrop areas on farms, such as around buildings, equipment and fuel storage areas, along fences, and lanes. Do not use near adjacent desirable plants or greenhouses, or injury may occur.

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

Note: Do not allow livestock to graze treated areas.

Annual broadleaf and grass weeds (including barnyard grass, crabgrass, crabgrass, lambquarters, foxtail, rayed puncturevine, and turkey mullein). Broadcast 4-8 pt A.

Hard-to-kill annual and many perennial broadleaf and grass weeds (including bluegrass, burdock, Canada thistle, dryden, orchardgrass, parrot, quackgrass, purple top, redtop, and smooth bromegrass). Broadcast 10-12 pt A.

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

For under-residue control in rotation of high traffic and long growing seasons, broadcast 20-40 qt A.

For small areas @ 2600 sq ft (200 sq ft) - equivalent to 10 pt A.

Tank Mixture with Princep 80W or Princep Caliber 90

Use only for long-term control of broadleaf and grass vegetation in areas listed in respective labels. Do not use on crop and/or near desirable trees, shrubs or other plants. No greenhouses or injury may occur.

The tank mixture rates shall be as follows: (1) For applications as described in above **General Information** section, use 1/2 pt of Princep provides preemergence control.

For best results, apply this mixture to the weeds with 1/2 gal of water postemergence. For best results, use 1/2 gal of water for each qt of mixture.

Use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre.

General Information
 The active rates will also control weeds in soybeans, corn, and other crops. For information on the use of AAtrex 4LC, see the label for AAtrex 4LC.

The active rates will also control weeds in soybeans, corn, and other crops. For information on the use of AAtrex 4LC, see the label for AAtrex 4LC.

Use 5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre.

Use 2.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre.

For small areas, 7.1 fl oz of AAtrex 4LC plus 2.3 fl oz of diuron 80W plus 2.3 fl oz of Princep Calber 90 per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre.

Tank Mixture with Diuron 80W

Use only for long-term control of broadleaf weeds in non-crop areas listed in respective labels. Do not use in areas where trees, shrubs or other plants are present. Damage to plants may occur.

This tank mixture has activity and mode of action similar to that described in above **General Information**. For best results, application should be made when weed growth begins or apply to young actively growing weeds up to 6 inches tall. For increased contact activity, add 2.0 pts per 100 gal of spray volume of Surfactant WK at 2 pts per 100 gal of spray volume. Add surfactant as last ingredient to herbicide tank mixture.

Use sufficient water for thorough ground application. Apply at least 1 gal of water for each pint of AAtrex 4LC. Use water combination. More water may be needed for heavy weeds. With Machine agitation during mixing and application.

Broadleaf tank mixtures at the following rates will control weeds listed. Use the lower rates for control of weeds in areas where trees, shrubs or other plants are present. Damage to plants may occur.

Use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Karmex 50W per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Karmex 50W per acre.

Use 5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Karmex 50W per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Karmex 50W per acre.

Use 2.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Karmex 50W per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Karmex 50W per acre.

To determine compatibility of tank mixtures, mix equal volumes of each in a small container at the rate of application. If the mixture remains mixed and uniform, the tank mixture may be sprayed.

For small areas, 7.1 fl oz of AAtrex 4LC plus 2.3 fl oz of diuron 80W plus 2.3 fl oz of Karmex 50W per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Karmex 50W per acre.

Tank Mixture with Ontrack 8E

Use in a tank mixture with AAtrex 4LC for control of weeds in corn and soybeans.

Broadleaf tank mixtures at the following rates will control weeds listed. Use the lower rates for control of weeds in areas where trees, shrubs or other plants are present. Damage to plants may occur.

Use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre.

General Information
 The active rates will also control weeds in soybeans, corn, and other crops. For information on the use of AAtrex 4LC, see the label for AAtrex 4LC.

The active rates will also control weeds in soybeans, corn, and other crops. For information on the use of AAtrex 4LC, see the label for AAtrex 4LC.

Use 5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre.

Use 2.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre.

For small areas, 7.1 fl oz of AAtrex 4LC plus 2.3 fl oz of diuron 80W plus 2.3 fl oz of Princep Calber 90 per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre.

Tank Mixture with Oust

Use in a tank mixture with AAtrex 4LC for control of weeds in corn and soybeans. For information on the use of Oust, see the label for Oust.

This tank mixture has activity and mode of action similar to that described in above **General Information**. For best results, application should be made when weed growth begins or apply to young actively growing weeds up to 6 inches tall. For increased contact activity, add 2.0 pts per 100 gal of spray volume of Surfactant WK at 2 pts per 100 gal of spray volume. Add surfactant as last ingredient to herbicide tank mixture.

Use sufficient water for thorough ground application. Apply at least 1 gal of water for each pint of AAtrex 4LC. Use water combination. More water may be needed for heavy weeds. With Machine agitation during mixing and application.

Broadleaf tank mixtures at the following rates will control weeds listed. Use the lower rates for control of weeds in areas where trees, shrubs or other plants are present. Damage to plants may occur.

Use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Karmex 50W per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Karmex 50W per acre.

Use 5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Karmex 50W per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Karmex 50W per acre.

Use 2.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Karmex 50W per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Karmex 50W per acre.

To determine compatibility of tank mixtures, mix equal volumes of each in a small container at the rate of application. If the mixture remains mixed and uniform, the tank mixture may be sprayed.

For small areas, 7.1 fl oz of AAtrex 4LC plus 2.3 fl oz of diuron 80W plus 2.3 fl oz of Karmex 50W per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Karmex 50W per acre.

Storage and Disposal

Pesticide Disposal
 Do not contaminate water, food, or feed by storage or disposal. Pesticide containers should be triple rinsed. Do not reuse or refill. Do not use for any other purpose. Do not use for any other purpose.

Use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre for control of weeds in corn. For control of weeds in soybeans, use 4.5 gal of AAtrex 4LC plus 1.5 gal of diuron 80W per acre plus 1.5 gal of Princep Calber 90 per acre.

Do not apply to water bodies. Do not apply to areas where runoff is likely to occur. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply when weather conditions favor drift from treated areas.

For more information, contact your local extension agent.

For more information, contact your local extension agent. Do not apply to water bodies. Do not apply to areas where runoff is likely to occur. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply when weather conditions favor drift from treated areas.

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed. Irritated or abraded skin. Do not breathe vapors or spray mist. Avoid contact with eyes, skin or clothing.

First Aid: If swallowed, contact your local poison control center, hospital, or physician. If the patient is unconscious, maintain breathing and heartbeat (cardiopulmonary resuscitation). If the patient is conscious and alert, induce vomiting (syrup of ipecac or stimulate the back of the throat with a finger). NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON!

In case of skin contact, remove contaminated clothing and wash with soap and water. In case of contact with eyes, flush with plenty of water. Get medical attention if irritation persists.

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

Environmental Hazards

Do not apply directly to any body of water. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply when weather conditions favor drift from treated areas.

AAIrex[®] trademark of CIBA-GEIGY for atrazine

Bexton[®] trademark of Dow Chemical Company for product

Caiber[®] trademark of CIBA-GEIGY

Complex[®] trademark of KALO Agriculture Chemicals, Inc.

Concept[®] trademark of CIBA-GEIGY

Dual[®] trademark of CIBA-GEIGY for metolachlor
U.S. Patent No. 3,937,730

Igran[®] trademark of CIBA-GEIGY for terbufos
U.S. Patent No. 3,634,062

Karmex[®] trademark of E. I. duPont de Nemours & Co., Inc.

Lasso[®] trademark of Monsanto Company for glyphosate

Ontrack[®] trademark of CIBA-GEIGY

Oust[®] trademark of E. I. duPont de Nemours & Co., Inc.

Princep[®] trademark of CIBA-GEIGY for simazine

Ramrod[®] trademark of Monsanto Company for propachlor

Roundup[®] trademark of Monsanto Company for glyphosate herbicide

Sutan+[®] trademark of Stauffer Chemical Company for butylate

Unite[®] trademark of Hopkins Agricultural Chemicals Co.

X-77[®] trademark of KALO Agriculture Chemicals, Inc.

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