

to keep the material 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.

Band treatment

Use the following formula to calculate the amount of Princep 4L needed per acre for band treatment.

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

Corn

Nitrogen solution or complete liquid fertilizer may replace all or part of the water as a carrier for Princep 4L. Do not apply after corn has emerged, as there is danger of liquid fertilizer causing crop injury. Use 10-40 gals. of spray mixture per acre.

Preplant

Broadcast in the spring after plowing at the appropriate rate in the following table. Apply before, during, or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation of Princep 4L. Best results will be obtained when Princep is applied within 2 weeks prior to planting.

Preemergence

Apply before weeds and corn emerge. Use the appropriate rate in the following table.

Note: Under dry weather conditions, preplant applications may give better weed control than preemergence.

Soil	Broadcast* rate per acre
Sand, silt, and loam that is low in organic matter	4 pts.
Soil containing moderate amounts of clay and organic matter	4-8 pts.
Loam that is high in organic matter and clay (including dark prairie soils of Corn Belt)	6 pts.
Peat, muck, and high-organic clay	8 pts.

*For calculation of band treatment rate, see General Information section.

Quackgrass Control

Broadcast 6-8 pts. per acre in the fall. Plow 2-3 weeks later, or if erosion is a problem, delay plowing until spring. Do not plant any crop except corn in the spring following treatment. Do not graze treated area.

Precautions: 1) Do not apply more than 8 pts. of Princep 4L per acre per year. 2) Do not plant any crop except corn until the following year as injury may occur. 3) Following harvest of the treated crop, plow and thoroughly till the soil in fall or spring to minimize possible injury to spring-seeded rotational crops, regardless of the rate used. 4) If Princep 4L is used at a rate higher than 6 pts. per acre or equivalent band rate, a crop of untreated corn should precede the next rotational crop. 5) Do not apply Princep 4L preplant incorporated for weed control in corn in the High Plains and Intermountain areas of the West (including central and western Kansas, western Nebraska, western Oklahoma, and the Panhandle of Texas) where rainfall is sparse and erratic or where irrigation is required. 6) In the High Plains and Intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required, use Princep 4L when only corn is to follow corn or a crop of untreated corn is to precede other rotational crops. 7) In western Minnesota and eastern parts of the Dakotas, Nebraska and Kansas, do not rotate to soybeans if the rate applied was more than 4 pts. per acre or equivalent band rate as injury may occur. 8) Do not plant sugar beets, tobacco, vegetables (including dry beans), spring-seeded small grains, or small-seeded legumes and grasses the year following Princep 4L application as injury may occur.

Princep 4L Plus AAtrex 4L Tank-Mix Combination for Weed Control in Corn

Apply the tank-mix combination of Princep 4L plus AAtrex 4L either before, during, or after planting corn but before weeds emerge to control early germinating annual weeds and late competing grasses. One application will control most annual broadleaf and grass weeds including fall panicum, crabgrass, barnyardgrass, foxtail, velvetleaf, carpetweed, morningglory, lambsquarters, pigweed, and ragweed. Apply in 10-40 gals. of water per acre.

Preplant

Apply the tank mixture as a broadcast treatment in the spring after plowing either before, during, or after final seedbed preparation. If soil is tilled or worked after application, avoid deep

incorporation of Princep 4L plus AAtrex 4L. Best results will be obtained when the tank mix is applied within 2 weeks before planting.

Preemergence

Apply the tank mixture during or shortly after planting but prior to crop and weed emergence.

Soil	Preplant and preemergence broadcast* rates per acre	
	Princep 4L	AAtrex 4L
Sand, loamy sand, sandy loam	2 pts.	2 pts.
Silt loam and clay loam low in organic matter	2.4 pts.	2.4 pts.
Silt loam and clay loam with medium to high organic matter and clay (including dark prairie soils of the Corn Belt)	3 pts.	3 pts.

*For calculation of preemergence band treatment rate, see General Information section.

Precautions: 1) If weeds develop, a shallow cultivation will generally result in better weed control. 2) Following harvest of the treated crop, plow (moldboard or disk-plow) and thoroughly till the soil in fall or spring to minimize possible injury to spring-seeded rotational crops, regardless of the rate used. 3) Do not plant any crop except corn until the following year, as injury may occur. 4) Do not plant sugar beets, tobacco, vegetables (including dry beans), spring-seeded small grains, or small-seeded legumes and grasses the year following application or injury may occur.

Refer to the AAtrex 4L label for further directions, limitations and cautions.

Fruit Crops

Apply the spray to the orchard or vineyard floor avoiding contact with fruit, foliage, or stems. Apply only to orchards or groves where trees have been established one year or more, unless specified differently. Make only one application per year except as noted otherwise. Recommended rates are based on broadcast treatment. For band applications or spot appli-

cations around fruit trees, reduce the broadcast rate of Princep 4L and water per acre in proportion to the area actually sprayed.

Apples

Apply 2-4 qts. per acre.

Grapes

Apply 2-4.8 qts. per acre any time between harvest and early spring.

Precaution: Do not use in vineyards established less than three years.

Grapefruit, Lemons, Oranges

Arizona (lemons and oranges only): Apply a split application of 1.6 qts. per acre in the spring plus 1.6 qts. per acre in the fall.

California: Apply 2-4 qts. per acre in a single application; or apply 2 qts. per acre in the fall and 2 qts. per acre in the spring. Do not use in the Imperial, Coachella, or Palo Verde Valleys.

Florida (grapefruit and oranges only): Apply 6.4-9.6 qts. per acre in the spring.

Texas (grapefruit and oranges only): Apply 4-4.8 qts. per acre.

Precautions (all areas): 1) Do not use in nurseries. 2) Do not apply to bedded grapefruit, lemons, or oranges. 3) To avoid possible injury, do not apply to trees under stress from freeze damage for one year after the freeze.

Nonselective Weed Control on Noncrop Land

Princep 4L may be used to provide long-term weed control on industrial sites, highway medians and shoulders, railroad rights-of-way, lumber yards, petroleum tank farms, and in non-crop areas on farms, such as around buildings, equipment and fuel storage areas, along fences, roadsides, and lanes. Aerial applications may be made where it is feasible.

Best results are obtained when Princep 4L is applied before weeds emerge. If weed growth has begun and removal is not feasible, include a contact or translocated herbicide in the

spray. Use at least 1 gal. of water for each 1 qt. of Princep 4L; use more water if practical for both ground and aerial applications.

Annual broadleaf and grass weeds (including barnyardgrass, cheat, crabgrass, lambsquarters, foxtail, ragweed, puncturevine, and turkey mullein): Apply 4.8-10 qts. per acre.

Annual and perennial broadleaf and grass weeds (including quackgrass, bluegrass, redtop, burdock, Canada thistle, orchardgrass, purpletop, smooth brome, dogfennel and plantain): Apply 2 1/2-5 gals. per acre.

Hard-to-kill perennial weeds (including bull thistle and sow-thistle): Apply 5-10 gals. per acre

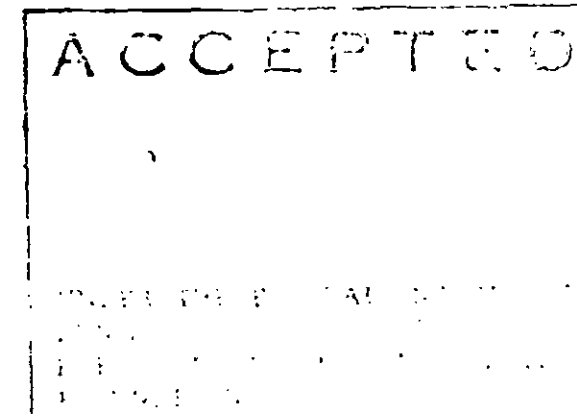
For longer residual control in regions of high rainfall and a long growing season, apply 5-10 gals. per acre.

Princep™ and AAtrex™ trademarks of CIBA-GEIGY for simazine and atrazine respectively.

U S Patent No. 2,891,855

CIBA-GEIGY
**Technical
Simazine**

Net Weight 50 Pounds



**A Herbicide For
Formulating Use**

Active Ingredient: 97%
Simazine: 2-chloro-4, 6-bis
(ethylamino)-s-triazine
Inert Ingredients: 3%
Total: 100%

CAUTION:

KEEP OUT OF REACH OF CHILDREN.

Harmful if swallowed. Avoid contact with eyes, prolonged contact with skin, inhalation of dust and contamination of food and feed.

Do not contaminate domestic or irrigation water supplies or lakes, streams or ponds.

Do not reuse container. Return to reconditioner or destroy by perforating or crushing and burying in a safe place away from water supplies.

**DIRECTIONS FOR USE AND
CONDITIONS OF SALE
AND WARRANTY**

IMPORTANT: Read the entire **Directions for Use** and the **Conditions Of Sale And Warranty** before using 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 impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather 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 expressed 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.

No end use for this product other than reformulation is intended or implied by the above Conditions Of Sale And Warranty.

Chemical and Physical Properties

Please refer to: Technical Bulletin Simazine

Labeling for Formulated Products

Further data may be necessary to support registration of products formulated from CIBA-GEIGY Technical Simazine if the specimen labels of registered products are not followed closely.

U.S. Patent No. 2,891,855

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CIBA-GEIGY