Princep® 4G

Granular Herbicide

For weed control in certain crops, ornamental plantings, on industrial sites, and around-the-farm

Active Ingredient:
Simazine: 2-chloro-4,6-bis(ethylamino)-s-triazine .................................................. 4%
Inert Ingredients: ........................................................................................................ 96%
Total: ....................................................................................................................... 100%

Princep 4G is a granular herbicide

Keep Out of Reach of Children.

Caution

See additional precautionary statements at end of label booklet.

See directions for use inside booklet.

EPA Reg. No. 100-435

50 Pounds
Net Weight

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 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 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

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

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR WEED CONTROL, AND/OR ILLEGAL RESIDUES.

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

Written or oral warnings must be given to workers who are expected to be in an area about to be treated with this product. Oral warnings must inform workers of areas or fields that may not be entered without specific protective clothing during application 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 will be treated with Princep 4G. Do not enter without appropriate protective clothing during application. In case of accidental exposure, flush eyes or skin with plenty of water. Call physician if irritation persists. Remove and wash contaminated clothing before reuse.
General Information

Apply Princep 4G herbicide before weeds emerge or following removal of weed growth. Princep controls a wide variety of annual broadleaf and grass weeds when used at selective rates in agricultural crops and ornamental plantings. When used at higher, nonselective rates in noncrop areas, it also controls many perennial broadleaf and grass weeds.

Since Princep enters weeds mainly through their roots, moisture is needed to move it into the root zone. Very dry soil conditions and lack of rainfall following application may necessitate shallow cultivation.

Princep 4G is noncorrosive to equipment, nonflammable, and has low electrical conductivity.

Annual Weeds Controlled

- alyssum
- annual bluegrass
- annual morningglory
- annual ryegrass
- barnyardgrass (watergrass)
- burclover
- carelessweed
- carpetweed
- common chickweed
- crabgrass (Digitaria spp.)
- downy brome (cheatgrass)
- fall panicum
- fiddleneck
- filaree
- fireweed
- fivehook bassia
- Flora's paintbrush
- junglerice
- knawel (German moss)
- common lambsquarters
- nightshade
- pepperweed
- pigweed
- pineappleweed
- prickly lettuce
- common purslane
- quackgrass
- ragweed
- rattle fescue
- redmaids
- Russian thistle
- shepherdspurse
- signalgrass (Brachiaria spp.)
- silver hairgrass

/Continued ... 5
Florida pusley
foxtails
goosegrass
groundsel
henbit

smartweed
spanishneedles
speedwell
tansymustard
wild mustard
wild oats
witchgrass
yellow flower pepperweed

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 sequential combination 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.

Selective Weed Control

Where a range of dosage rates is given, use the low rate on coarser textured soil and soil lower in organic matter; use the high rate on finer textured soil and soil higher in organic matter. For band applications, reduce the rate of Princep 4G in proportion to the area treated. For example: when applying a 2-foot band to a crop planted in rows 6 feet apart, apply one-third the recommended rate of Princep 4G per acre of field.

Distribute Princep 4G uniformly over the soil surface by means of a cyclone-type spreader or other suitable application equipment. For treatment of small areas, application by hand may be adequate.

After treatment with Princep 4G, do not plant any crop other than those specified on this label until the following year or injury may occur. Do not rotate with oats, sugar beets, or vegetables.
Fruit Crops

Blueberries

Apply 50-100 lbs. per acre in the spring before bud break and weed emergence, or apply a split application of 50 lbs. per acre in the spring before bud break and weed emergence, and 50 lbs. per acre in the fall. On plantings less than 6 months old, use 1/2 the above rate.

To control quackgrass, apply 100 lbs. per acre in the fall or split the application, applying 50 lbs. per acre in the fall and 50 lbs. per acre in the early spring, when quackgrass is actively growing and before bud break.

Note: Do not apply when fruit is present, or illegal residues may result.

Caneberries; i.e., blackberries, boysenberries, loganberries, raspberries

Apply 50-100 lbs. per acre in the spring before bud break and weed emergence. On plantings less than 6 months old, use 1/2 the above rate.

To control quackgrass, apply 100 lbs. per acre in the fall or split the application, applying 50 lbs. per acre in the fall and 50 lbs. per acre in the early spring, when quackgrass is actively growing.

Note: Do not apply when fruit is present, or illegal residues may result.

Cranberries

Massachusetts: Apply up to 100 lbs. per acre either in the spring before cranberry growth or in the fall after harvest.

Other areas: Apply 50 lbs. per acre in the spring before new cranberry growth.

Grapefruit and Oranges

Florida: Apply 160-240 lbs. per acre in the spring (March-April) prior to weed emergence. Repeat annually.

Texas: Apply 100-125 lbs. per acre in the spring prior to weed emergence. Repeat annually.
Precautions: To avoid crop injury, 1) Do not use in nurseries. 2) Do not apply to bedded citrus. 3) Use only where trees have been established in the grove for one year or more. 4) Do not apply to trees under stress from freeze damage for one year after the freeze. 5) Avoid contact with fruit or foliage.

Nurseries, Christmas Tree Plantings, Shelterbelts

Nurseries (see list below)

Apply 50-75 lbs. per acre in fall or spring.

Precaution: To avoid plant injury, do not apply for at least one year after transplanting.

Christmas Tree Plantings and Shelterbelts (see list below)

Remove weed growth before application. Apply 50-100 lbs. per acre after transplanting. Use the same rate for annual maintenance applications.

For quackgrass control, apply 100 lbs. per acre in the fall or apply a split application of 50 lbs. per acre in the fall plus 50 lbs. per acre in early spring, after quackgrass begins growth.

Precautions: To avoid tree injury, 1) Do not use Princep 4G on seedbeds or cutting beds. 2) In CA, OR, and WA, do not apply to Christmas trees or shelterbelts sooner than one year after transplanting. In other areas, do not apply to Christmas tree or shelterbelt transplants less than three years of age. 3) Do not use until soil is firmly settled around roots. 4) Do not apply more than once a year, except as directed for quackgrass control.
Apply Princep 4G to these species of trees and shrubs, as recommended above:

**Conifers**
- arborvitae
- Austrian pine
- *Bishop pine*
- *knobcone pine*
- lodgepole pine (shore pine)
- *Monterey pine*
- Musho pine
- red pine (Norway pine)
- Scotch pine
- white pine
- blue spruce
- Norway spruce
- red spruce
- white spruce
- balsam fir
- Douglas fir
- Fraser fir
- white fir
- hemlock
- juniper
- red cedar
- white cedar
- yew (*Taxus* spp.)

**Deciduous Trees and Woody Ornamentals**
- American elm
- Siberian elm
- barberry
- boxelder
- bush honeysuckle
- caragana
- cotoneaster
- dogwood
- eucalyptus
- holly (*Ilex* spp.) (max. 80 lbs./A)
- honey locust
- Oregon grape (*Mahonia* spp.)
- *Pieris* spp. (max. 80 lbs./A)
- red oak
- Russian olive
- *oleander*
- *palm* (50 lbs./A)
- *bottle brush*
- *carob*

*For California only*
Turfgrass for Fairways, Lawns, and Similar Areas

Bermudagrass, Centipedeagrass, St. Augustinegrass, and Zoysia Grass

Apply Princep 4G after October 1 before emergence of winter annual weeds for control of annual bluegrass, burclover, carpet burweed, chickweed, corn speedwell, henbit, hop clover, and spurweed. Princep 4G will control annual bluegrass even if it is emerged at time of treatment. For control of summer annual weeds listed in the General Information section of this label, also apply Princep 4G in late winter before the weeds emerge.

Where annual bluegrass is the major weed, use 25 lbs. of Princep 4G per acre (9 oz. per 1,000 sq. ft.). Use 50 lbs. per acre (18 oz. per 1,000 sq. ft.) for control of the other weeds named above. Do not exceed 25 lbs. per acre per treatment on newly sprigged turfgrass or on hybrid bermudagrass such as Tiflawn, Tifway, and Ormond.

For continued summer annual weed control, apply another 25 lbs. per acre at least 30 days after the previous application, but not after April 15. However, do not make more than two applications of this product per year.

Precautions: On newly sprigged turfgrass and hybrid bermudagrass, temporary slowing of growth and yellowing may occur following application. To avoid turf injury, 1) Use only on turfgrass reasonably free of infestations of insects, nematodes, and diseases. 2) Do not use on golf greens. 3) Do not use north of NC (except may be used in Virginia Coastal Plains) or west of the high rainfall areas of eastern OK and eastern TX. 4) Do not use on muck or alkaline soils. 5) Do not apply over the rooting area of trees or ornamentals not listed on this label. 6) Do not overseed with desirable turfgrass within 4 months before or 6 months after treatment. 7) Do not apply this product to newly seeded bermudagrass until it has overwintered and has a well-developed rhizome system. Do not exceed 4'lb product/A within 12 months of seeding bermudagrass.
Nonselective Weed Control on Noncrop Land

Apply Princep 4G at rates recommended below. Use the higher rates on heavy clay and muck soils. Best results are obtained when Princep 4G is applied before weeds emerge.

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

Princep 4G 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, roadsides, and lanes.

Precaution: Do not use this product for nonselective weed control on land to be cropped, near adjacent desirable trees, shrubs or plants, or in greenhouses, as injury may occur.

To control most annual broadleaf and grass weeds (such as barnyardgrass, cheatgrass, crabgrass, lambsquarters, foxtail, ragweed, puncturevine, and turkey mullein): Broadcast 250 lbs. per acre.

To control most annual and many perennial broadleaf and grass weeds (including quackgrass, bluegrass, redtop, burdock, Canada thistle, orchardgrass, purple top, smooth brome, dogfennel, and plantain): Broadcast 250-500 lbs. per acre.

To control hard-to-kill perennial weeds (such as bull thistle and sowthistle): Broadcast 500-1,000 lbs. per acre.

For longer residual control in regions of high rainfall and a long growing season: Broadcast 500-1,000 lbs. per acre.

For small areas, 5 3/4 lbs. per 1,000 sq. ft. is equivalent to 250 lbs. per acre.
Storage and Disposal

Store in a dry place. Do not contaminate water, food, or feed by storage or disposal. Improper disposal of unused pesticide is a violation of federal law. If wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Completely empty bag into application equipment. Dispose of empty bag and box in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. Stay out of smoke from burning containers.

For minor spills, follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call (919) 292-7100 day or night.

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Causes eye irritation. Harmful if swallowed, inhaled, or absorbed through the skin. Avoid breathing dust. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

First Aid: If in eyes, flush with plenty of water. Get medical attention if irritation persists. If on skin, wash with plenty of soap and water. If inhaled, remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth; get medical attention.

Environmental Hazards

Do not apply directly to water or wetlands. Do not contaminate water by cleaning of equipment or disposal of wastes. Simazine is a chemical which can travel (seep or leach) through soil and can contaminate groundwater which may be used as drinking water. Simazine has been found in groundwater as a result of agricultural use. Users are Continued ... 12
advised not to apply simazine where the water table (groundwater) is close to the surface and where the soils are very permeable, i.e., well-drained soils such as loamy sands. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

Princep® trademark of CIBA-GEIGY for simazine

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Princep® 4G (Box and Booklet)

Revisions made:

1/29/81
Added triazine resistant weed statement.

10/14/82
Updated weed list, added turfgrass, updated Nurseries section, added IWC greenhouse restriction, added Storage & Disposal section, revised Precautionary Statements, revised language throughout copy.

9/20/83
Added tree seedlings in N. Central U.S.

2/28/84
Added farmer safety statements and revised storage and disposal statements. Revised crop precautions.

9/25/85
Revised environmental hazards to include a groundwater advisory statement approved by EPA for simazine.

11/1/85
Add turfgrass use precaution concerning bermudagrass.

8/21/86
Deleted tree seedlings.