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Princep

80W

ACCEPTED
with comment
EPA 251382 Apr
100-437

Herbicide

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

Active Ingredient:
Simazine: 2-chloro-
4, 6-bis (ethylamino)-
s-triazine 80%
Inert Ingredients: 20%
Total: 100%

Princep 80W is a
wettable powder
Keep Out of Reach
of Children.

Caution

See additional
precautionary state-
ments on left panel
of bag.

Five Pounds
Net Weight

EPA Reg. No. 100-437

See directions for use on
panel at right.

CIBA-GEIGY

EPA Est. 100-AL-1

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 whether 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 suitable for use in the conditions specified in the Directions for Use. 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 of 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 PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR WEED CONTROL, AND/OR ILLLEGAL RESIDUES.

General Information

Apply Princep 80W Herbicide before weeds emerge at sites removal of seed growth. Princep controls a wide variety of annual broadleaf and grass weeds which used at varying rates in agricultural crops and ornamental plantings. When used at higher, nonselective rates in noncrop areas, it also controls many perennial broad leaf and grass weeds.

Where a range of application 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.

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

Princep 80W is noncorrosive to equipment, nonflammable, and has low electrical conductivity.

Annual Weeds Controlled

Annual bluegrass	Annual bromegrass	Annual ryegrass	Barnyard grass	Carolinian bluegrass	Common chickweed	Crayweed	Crabgrass (Digitaria spp.)	Downy brome	Chenopod grass	Lilac panicum	Lodgrass	Trifolium	Trifolium	Trifolium	Trifolium	Trifolium	Trifolium	Trifolium	Trifolium
Annual bluegrass	Annual bromegrass	Annual ryegrass	Barnyard grass	Carolinian bluegrass	Common chickweed	Crayweed	Crabgrass (Digitaria spp.)	Downy brome	Chenopod grass	Lilac panicum	Lodgrass	Trifolium	Trifolium	Trifolium	Trifolium	Trifolium	Trifolium	Trifolium	Trifolium

Following many years of experience 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 IR-5 and related herbicides. Where this is known or suspected, add weeds controlled by this product are expected to be controlled with resistant biotypes. We recommend the use of this product in 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 Experiment Service for specific recommendations.

Application Procedures

Ground application: Use conventional ground spray equipment with nozzles that provide accurate and uniform application. Be certain that nozzles are on 10-foot spacing and the same size. Calibrate sprayer before use and recalibrate at the start of each season and when changing nozzles. Unless otherwise specified, use a minimum of 20 gals. of spray mixture per acre.

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

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

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

Band width in inches	Broadcast rate per acre	Amount needed per acre of field
20 inches	1.0	0.2
30 inches	1.0	0.3
40 inches	1.0	0.4
50 inches	1.0	0.5
60 inches	1.0	0.6
70 inches	1.0	0.7
80 inches	1.0	0.8
90 inches	1.0	0.9
100 inches	1.0	1.0

Aerial application: Use aerial application only where specified in the use directions. Apply a minimum of 1 gal. of water for each 1-1.5 lbs. of wettable powder applied per acre. 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. Wash thoroughly before eating and at the end of each day's operation.

Mixing procedures: All water: (1) Be sure sprayer is clean and not contaminated with any other materials. (2) Fill tank to full with clean water, nitrogen solution, or complete fluid 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 from bag into tank. (6) Continue filling tank until 90% full. Increase agitation. (7) Add tank mix herbicide after the product is thoroughly suspended. (8) Flush filling tank. (9) Empty tank as completely as possible before refilling to prevent buildup of emulsifiable concentrate residue from previous tank mix herbicides. (10) If an emulsifiable concentrate, mix starts to build up in tank, drain and clean with strong detergent solution or solvent. (11) Clean sprayer thoroughly, immediately after use by flushing system with water containing a detergent.

Compatibility test: Nitrogen solutions or complete fluid fertilizers may replace all or part of the water in the spray mixture. Some liquid fertilizers can be mixed with the herbicide in the same analysis. Check compatibility each time before use. Be especially careful when using complete suspension or fluid fertilizers as serious compatibility problems are more apt 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 quart of water.
- 2) To one of the jars add 1/2 tsp. or 1 milliliter of a compatibility agent approved for this use (1/2 tsp. is equivalent to 2 pts. per 100 gals. spray). Shake or stir gently to mix. Examples of compatibility agents include Complex and Uniflo.
- 3) To both jars add the appropriate amount of herbicide (1/2 tsp. 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 herbicide for this test follows:

Dry herbicides	For each pound per acre add 1/4 teaspoon to each jar
Liquid herbicides	For each pint per acre add 0.5 teaspoon or 2.5 milliliters to each jar

- 4) After adding all ingredients, put lids on and tighten, and shake each jar 100 times to mix. Let the mixtures stand 15 minutes and then isolate separation. Large lumps, precipitates, oils, haziness, 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 reformed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (a) Stir the dry herbicides in water before adding to (b) add 1/2 of the compatibility agent to the fertilizer and the other 1/2 to the emulsifiable concentrate or flowable herbicide before addition to the mixture. If still incompatible, do not use the liquid fertilizer and herbicide in the same spray tank.

Herbicide Crops and Perennial Crop Registration

To avoid crop injury, observe the following precautions: (1) If foraging treated land the year following application, plant only corn, unless otherwise stated on this label. (2) If registering perennial crops or a foraging land to crops other than corn, do not apply Princep in the year preceding plant registration.

Fruit and Nut Crops

Apply the spray to the ground or a ground floor and do not 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 applications around trees in fruit or nut plantings, reduce the broadcast rate at Princep 80W and water per acre in proportion to the area actually sprayed.

Almonds and Peaches (CA only)

Apply 1.25-2.5 lbs. of Princep 80W per treated acre in a 2-4 ft. band on each side of the tree row. Apply before weeds emerge in late fall or early winter. Weeds controlled by 1.25 lbs. of Princep 80W include buckhorn, common chickweed, wild mustard, and shepherdspurse. Apply only once per year.

Precautions: 1) Do not treat trees established in the grove less than 3 years. 2) Do not treat Mission (Texas) variety of almonds. 3) Do not apply to almond trees propagated on plum rootstocks. 4) Do not register almonds or peaches in treated soil for 12 months after treatment. 5) Do not apply on gravelly sand or loamy sand soil or on soil with less than 1% organic matter. 6) Do not treat areas where water will accumulate.

Apples, Pears, and Cherries

Apply 2.5-5 lbs. per acre.
Precautions: Do not apply on gravelly sand, or loamy sand soil.

Blackberries and Raspberries (Blackberries, boysenberries, loganberries, raspberries)

Apply 2.5-5 lbs. per acre in the spring or apply a split application of 2.5 lbs. per acre in the spring plus 2.5 lbs. per acre in the fall. Apply a minimum of 40 gals. of water per acre.
On plantings less than 6 months old, use 1/2 the above rate.
To control quackgrass, apply 5 lbs. per acre in the fall or split the application applying 2.5 lbs. per acre in the fall plus 2.5 lbs. per acre in the spring, when quackgrass is actively growing.

Note: Do not apply when fruit is present.

Cranberries

MA: Apply up to 5 lbs. per acre either before spring growth begins or in the fall after harvest.
Other areas: Apply 2.5 lbs. per acre before spring growth begins.

Timothy

Apply 2.5-5 lbs. per acre in the fall or apply a split application of 2.5 lbs. per acre in the fall plus 2.5 lbs. per acre in the spring.
Precautions: 1) If trees are planted on a hillside, excessive soil erosion may result from the elimination of weeds. 2) Do not apply on gravelly sand, or loamy sand soil.

Note: Do not apply when nuts are on the ground during the harvest period.

Grapes

Apply 2.5-5 lbs. per acre any time between August and early spring.
Precaution: Do not use on vineyards established less than three years. Do not apply on gravelly, sand, or loamy sand soil.

Grapefruit, Lemons, Oranges

AZ (lemons and oranges only): Apply a split application of 2 lbs. per acre in the spring plus 2 lbs. per acre in the fall.
CA (lemons, lemons, and oranges): Apply 2.5-5 lbs. per acre in a single application or apply 2.5 lbs. per acre in the fall and 2.5 lbs. per acre in the spring. Do not use in the Imperial, Coachella, or Salton Valley.

FL (Grapefruit and Oranges only): Apply only once per year. For control of weeds established, General Information, apply 8-12 lbs. per acre in the spring to control muscadine vine. Use 10-12 lbs. per acre either pre- or post-harvest or before vines are 12 inches tall.

TX (Grapefruit and Oranges only): Apply 5 lbs. per acre.

Precautions (In areas): 1) Do not use in nurseries. 2) Do not apply to bedded grapefruit lemons or orange. 3) To avoid possible injury, do not apply to trees under stress from freeze damage.

Macadamia Nuts
Apply 2-5 lbs. in 50 gals. of water per acre before harvest and just prior to weed emergence. Repeat application as necessary. Do not apply when nuts are on the ground during the harvest period.

Olive
Apply 2-5 lbs. per acre for on grove preparation in the fall. Repeat annually in the fall.

Peaches, Plums, Sweet Cherries
Apply 2-5 lbs. per acre. Apply in late fall to early spring prior to weed emergence.

Precautions: 1) Do not apply on gravelly sand or heavy sand soil. 2) Peaches use only in AR, LA, MD, OK, TX, and states east of the Miss River. For California, see specific directions in the section. Almonds and Plums (CA only) 3) Plums and sweet cherries use only in MO and states east of the Miss River except TN.

Precautions: Apply the appropriate rate in the following table before weed emergence in the spring.

Soil texture	Rate per acre
Sand, loamy sand	Do Not Use
Sandy loam	2-5 lbs
Loam or clay soil low in organic matter	2-3-3 lbs
Clay soil high in organic matter	3-5-5 lbs

Precautions: Do not use west of the Pecos River in TX or in NM, AZ, or CA, or injury will occur. Do not make applications to transplanted trees that have been established less than two years in the grove or injury may occur.

Note: Do not apply when nuts are on the ground. Do not allow animals to graze treated areas.

Raspberries
Oregon and Washington: For control of chickweed, groundsel, mustard, and shepherdspurse, apply broadcast 25 lbs. per acre in fields where overhead irrigation is used to accrete this product. Apply after harvest at time of bed renovation. In fields where overhead irrigation is not available, apply during early October through November.

Precautions: Make only one application per growing season. Do not apply within 4 months after transplanting. Limit overhead irrigation to 1/2 inch immediately following postharvest application. Do not use on sand.

Precautions: 1) Do not apply on gravelly, sand, or heavy sand soil. 2) Leveling and tilling operations after application will lessen effectiveness of weed control.

Note: Do not apply when nuts are on the ground.

Princep 80W Plus Evik® 80W for Grapefruit and Orange

Use in grapefruit and oranges in FL and TX for control of weeds listed in the following directions and under General Information. Apply the rates given below in a minimum of 40 gals. of water per acre thoroughly covering bed and vegetation. Do not spray when windy. Apply when weeds have resumed active growth in the spring, but before they exceed 4 inches in height (except as noted for vines). Apply only once per year. To avoid possible injury, do not use in nurseries, or around trees that have been established in the grove less than two years, or where trees are under stress from freeze damage for one year after the freeze. Do not apply within 30 days before harvest. Do not graze treated areas. Observe all precautions and limitations on the labeling of Princep 80W and Evik 80W.

FL (R-028 Area): Apply 5 lbs. of Princep 80W plus 5 lbs. of Evik 80W per acre, controls milium when applied either pre-emergence or on vines up to 24 inches tall.

FL (Bedded Area): Apply 4 lbs. of Princep 80W plus 6 lbs. of Evik 80W per acre, controls balsamorhiza when applied either pre-emergence or on vines up to 12 inches tall.

TX: Apply 4-5 lbs. of Princep 80W plus 2-3 lbs. of Evik 80W per acre plus 2 qts. nonionic surfactant, such as X-77 at 100 gals. of spray mixture (add surfactant to spray tank last), controls pigweed, marestail, ivy leaved, leafy spurge, sandbur, and sunflower, and grass (POA) of johnsongrass. Use 5 lbs. of Princep 80W per acre for longer residual control. Use 3 lbs. of Evik 80W per acre for control of heavy weed growth and for to P-400 johnsongrass. Use the higher rate of both products for control of marestail.

Princep 80W Plus Biomaxil 80W for Grapefruit and Orange (Florida Only)

Use in grapefruit and oranges in FL for control of bahamapapp, black nightshade, carpenterweed, crabgrass, nutweed, bayweed, Florida pusley, nutweed, pepperweed, pigweed, purslane, ragweed, tallgrass, adan, chickweed and sandbur, and for partial control of bermudagrass, brome grass, pangoligrass, piggrass, and toadgrass. Apply 4-8 lbs. of Princep 80W plus 3-4 lbs. of Biomaxil 80W per acre beneath trees in a minimum of 40 gals. of water per acre before or soon after weed growth begins. Avoid contact of 10' dia and fruit with spray or mist. Apply only once per year. Use the lower rate for light weed infestations or applications in bedded citrus areas. Use the higher rate for heavy weed infestations only in side grown citrus areas. Temporary yellowing of citrus leaves may occur following treatment.

Precautions: To avoid possible injury, do not use in nurseries, or around trees that have been established in the grove less than four years, or where trees are under stress from freeze damage for one year after the freeze. Do not use on soil with less than 1% organic matter or on poorly drained soil. Do not treat diseased trees, such as those with foot rot. Do not use in groves interplanted with other trees or desirable plants, nor in home grapefruit or orange plantings, or in areas where roots of other desirable plants or trees may extend. Treated areas may be planted to citrus trees one year after application. Do not rotate to other crops within two years after application.

Princep 80W Plus Paraquat

This tank mix is effective in the following fruit and nut crops for bit of existing vegetation and for residual control of the annual broadleaf and grass weeds claimed for Princep 80W applied alone. This combination is also effective for top-kill and suppression of perennial weeds.

- Use this tank mix on these crops:
- almonds (CA only)
 - apples
 - avocados (CA & FL only)
 - cherries (sour and sweet)
 - filberts
 - grapefruit (CA, FL & TX only)
 - grapes
 - peaches (AZ & CA only)
 - macadamia nuts
 - olives
 - oranges & peaches*
 - pears
 - peaches*
 - plums*
 - walnuts

Apply the Princep 80W rate given under the appropriate crop on this label plus 1-2 qts. paraquat in 50-200 gals. (30-50 gals. for pecans) of water per acre to the orchard floor, avoiding contact with fruit, foliage, or stems. Add a non-ionic surfactant, such as X-77, at 0.5 qt. per 100 gals. of spray. Apply when weeds are succulent and new growth is 1-6 inches tall. For mature weeds or difficult to control perennial weeds, repeat or spot treat with paraquat if regrowth occurs. Apply the tank mix only once per year. Do not spray under windy conditions. Use a shield for young trees or vines.

Add Princep 80W to the spray tank last (refer to Mixing Instructions section of this label), then add paraquat, and add the surfactant last. Provide constant agitation during mixing and application to keep the mixture in suspension.

Refer to the Princep 80W and paraquat labels for former directions, specific weeds controlled, and precautions and limitations on each crop.

In grapefruit and oranges in Florida, apply 4 lbs. Princep 80W per acre in bedded areas and 8-12 lbs. Princep 80W per acre in side areas.

Allowed in CA, AR, LA, MD, OK, TX, and states east of the Miss River. As appropriate, refer to Princep 80W sections "Almonds and Peaches (CA only)" or "Peaches, Plums, Sweet Cherries" for rate of Princep 80W and other information.

* Limited to MO and states east of the Miss River except TN.

* Based on a product containing 2 lbs. paraquat/gallon (2.0).

Princep 80W Plus Surflan®

- Use this tank mix in the following crops for pre-emergence control of all weeds claimed on both labels:
- almonds
 - apples
 - avocados
 - cherries
 - cherries
 - grapes
 - grapefruit
 - lemons
 - oranges
 - peaches
 - pears
 - peaches
 - plums
 - plums
 - walnuts

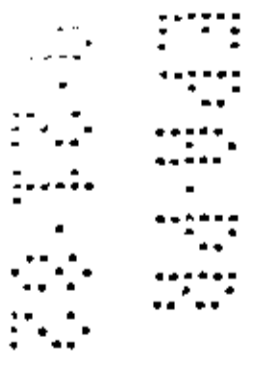
Apply the Princep 80W rate given under the appropriate crop on this label plus 2.5-3.5 lbs. of Surflan 75W or 2.4 qts. of Surflan A, B, or 20-40 gals. of water per acre. Refer to the Surflan 75W or Surflan A, B label for complete tank mix directions. Observe all precautions and limitations on the Princep and Surflan labels.

deleted Louisiana strawberries

added

added revised

added 147196



100 439

added

Soil texture	Broadcast rate per acre			
	1:1 Ratio		2:1 Ratio	
	Princep 80W	AAtrex 50W*	Princep 80W	AAtrex 50W*
Sand, heavy sand, sandy loam	1.25 lbs	1.25 lbs	1.67 lbs	0.83 lbs
Loam, silt loam, silty clay loam, sandy clay loam, silty clay loam, sandy clay or silty clay with low organic matter	1.5 lbs	1.5 lbs	2 lbs	1 lb
Loam, silt loam, silty clay loam, sandy clay loam, silty clay loam, sandy clay or silty clay with medium to high organic matter and clay (including dark granular soils of the Corn Belt)	1.8 lbs	1.8 lbs	2.4 lbs	1.2 lbs

*When using AAtrex 4L (4LC) or AAtrex Nine-O use equivalent rates. One lb of AAtrex 50W equals 0.8 gal of AAtrex 4L (4LC) or 0.9 gal of AAtrex Nine-O.

Refer to the AAtrex label for complete directions. Also refer to the AAtrex label and the Corn section of this label for precautions and limitations.

Eradicane Use in a pre- or incorporated tank mixture for control of all weeds claimed on both the Princep and Eradicane labels (including) partial control (suppression) of shattercane (in corn). Fluid fertilizer may replace all or part of the water in the spray. Check the physical compatibility of mixture with fertilizer before use. Refer to the General Information section of this label for a compatibility test procedure. Use a minimum of 20 gal. of spray volume per acre. Refer to the Eradicane label for incorporation directions. Use the higher rate of Princep on fine-textured soil and where heavy broadleaf infestations are expected. Use the higher rate of Eradicane for heavy nutsedge and bermudagrass infestations. For partial control (suppression) of shattercane, broadcast and incorporate immediately before planting 1.25-2.5 lbs. of Princep 80W plus 7.33 pts. of Eradicane 6 TE for 8 pts. Eradicane 6 TE per acre. For control of the other weeds claimed on both labels, broadcast and incorporate 1.25-3.75 lbs. of Princep 80W plus 7.33 pts. of Eradicane 6 TE for 5.33 pts. of Eradicane 6 TE per acre. Observe all precautions and limitations on the Princep 80W and Eradicane labels.

Parquat Use in a tank mixture where corn will be planted directly in a cover crop established sod, or previous crop residues. This combination controls existing vegetation and provides residual control of the annual broadleaf and grass weeds listed under General Information.

Add Princep 80W to the spray tank, mix thoroughly with water, and then add parquat and a non-ionic surfactant. Provide constant agitation during mixing and application to keep the mixture in suspension.

Apply 2.5-3.75 lbs. of Princep 80W plus 1-2 pts. of parquat in 20-60 gal. of water per acre as a broadcast spray either before or after planting but before corn emerges. Add a nonionic surfactant at the rate of 0.5 gal. per 100 gal. of spray volume.

For further information, see general information, caution and warning statements, precautions, and notes on the Princep 80W and the parquat labels.

*Based on a product containing 2 lbs. paraquat/gal. per gal.

Solan-6 Use in a preplant incorporated tank mixture for control of all weeds claimed on both the Princep and Solan-6 labels including partial control (suppression) of shattercane (in corn). Fluid fertilizer may replace all or part of the water in the spray. Check the physical compatibility of mixture with fertilizer before use. Refer to the General Information section of this label for a compatibility test procedure. Use a minimum of 20 gal. of spray volume per acre. Refer to the Solan-6 label for incorporation directions. Use the higher rate of Princep on fine-textured soil and where heavy broadleaf infestations are expected. For partial control (suppression) of shattercane, broadcast and incorporate immediately before planting 1.25-2.5 lbs. of Princep 80W plus 7.33 pts. of Solan-6 6 TE per acre. For control of the other weeds claimed on both labels, broadcast and incorporate 1.25-3.75 lbs. of Princep 80W plus 4.75 pts. of Solan-6 6 TE per acre. Observe all precautions and limitations on the Princep 80W and Solan-6 labels.

Eradicane Apply 2.5-5 lbs. per acre at planting or after harvest of cotton crops to be grown. But before weeds or sugarcane emerge. Princep 80W may also be applied in the same directed or over the top application to provide continuing control of germinating weeds.

Precautions: 1) Do not apply more than one 2.5-5 lb. application over the plants or more than two intensive directed applications. 2) Do not apply after close-in. 3) Total application should not exceed 17.5 lbs. per acre crop cycle.

Note: Do not feed or graze treated forage to livestock.

Grasses Green for Seed (Pacific Northwest Only) Perennial ryegrass, Highland or Astoria bentgrasses, orchardgrass, tall fescue, and fine fescues such as Italian Ryegrass, Chewings, and related species. For the control of broadleaf weeds and annual grasses including annual ryegrass, tall fescue, Italian ryegrass and downy brome (sheep) apply 2.5 lbs. Princep 80W in a minimum of 15 gal. of water per acre as soon as fall rains start. Early application is important.

Precaution: Apply only to grasses from which at least one seed crop has been cut.

Note: Allow 30 days between last application and grazing of dairy and beef cattle and sheep. And allow 60 days between last application and milking for dairy.

Christmas Tree Plantings, Shelterbelts

Shelterbelts (see list below)

Apply 2.5-3.75 lbs. in at least 25 gal. of water per acre in fall or spring at least one year after transplanting.

Christmas Tree Plantings and Shelterbelts (see list below)

Remove weed growth before application. Apply 2.5-5 lbs. in at least 25 gal. of water per acre after transplanting. Use the same rate for annual maintenance applications.

For quackgrass control apply 5 lbs. per acre in the fall or apply a solid application of 7.5 lbs. per acre in the fall plus 2.5 lbs. per acre in early spring, after quackgrass begins growth.

Precautions: 1) Do not use Princep 80W 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 trees or shelterbelt transplanting less than three years of age. 3) Do not apply more than once a year, except as directed for quackgrass control.

Apply Princep 80W to these species of trees and shrubs, as recommended above:

- | | |
|---|--|
| <ul style="list-style-type: none"> Comifers alder Austrian pine B-shed pine knobcone pine incense pine (shore pine) Monterey pine Mugo pine red pine (resay pine) Scotch pine white pine blue spruce Norway spruce red spruce white spruce Balsam fir Douglas fir Fraser fir white fir hemlock larch red cedar white cedar Yew | <ul style="list-style-type: none"> Deciduous Trees and Woody Ornamentals American elm Siberian elm barberry boxelder Burn Nonesuch caragana castanet dogwood eastern white pine holly (tree spp.) (ma 4 lbs. A) honey locust Oregon grape (Rhodod. spp.) Prinz spp. (ma 4 lbs. A) red oak Russian olive alder palm (2.5 lbs. A) beetle brush crab |
|---|--|

*For Christmas only

Spraying Tank Mix: On Christmas tree plantings, use this tank mix for preemergence control of weeds listed on the Solan 6W or Solan 6 S and Princep 80W labels. Use an herbicide carrier species listed on the labels for each herbicide plus grand fir, spruce fir, Engelmann spruce, black spruce, Colorado blue spruce, Coulter pine, giant redwood, and white fir. Broadcast the mixture as a directed spray to the soil surface as an overtop spray, using 2.5-5 lbs. of Princep 80W and 0.87-5.33 lbs. of Solan 6W (or 2.4-8 lbs. of Solan 6 S). Apply in sufficient water per acre to thoroughly wet the area. Follow overtop sprays with spotwee eradication to move the herbicide from leaf surfaces to the soil. Remove weed growth before application. Use weed residues prunings or brush on the soil, or remove them before treatment. Soil should be in good till and free of clods at time of application. Shallow cultivation (1-2 inches) after treatment will help reduce weed control. Observe all precautions and limitations on the Princep 80W and Solan 6 labels.

Use Precautions for Timber

Apply in the spring before weeds emerge or following removal of weed growth. Apply before or after seedling transplanting. If applying after transplanting application may be made over the top of tree seedlings before new growth appears. If new growth is present direct the spray to avoid fire for ign contact. Do not use on seed nurseries of injury may occur. Apply only once per year.

The following rates are based on broadcast treatment in 20-100 gal. of water per acre. For band or spot applications, reduce the broadcast rate in proportion to the area actually sprayed.

deleted birdsfoot trefoil

Dark Walnuts
Apply 2.5-5 lbs. per acre

Black Pine and White Pine
Use for establishment in the South only. Apply 5-7.5 lbs. per acre

Stately Pine
Use for establishment in the South only. Apply 8-10 lbs. of Princep 80W per acre or a tank mix of 4-6 lbs. of Princep 80W plus 1-2 lbs. of AAtrex 50W (or 0.9-1.7 gal. of AAtrex 4L or 0.9-1.8 gal. of AAtrex 9L) or 4-6 lbs. of AAtrex 50W per acre. The tank mix provides broad spectrum annual weed control (see the General Information section of this label) and better weed control in the 1-2 year areas than Princep 80W alone.

Use Seedlings in Illinois
Remove weed growth before application. Apply 2.5-5 lbs. of Princep 80W per acre in a minimum of 25 gal. of water after transplanting but before weed emergence. Use on the following species of trees:

- | | |
|--|---|
| <ul style="list-style-type: none"> American beech Balsam fir Black locust black walnut eastern red cedar honey locust maple | <ul style="list-style-type: none"> oak red oak Russian olive sweet gum white ash white oak yellow poplar |
|--|---|

*Instead of Princep 80W alone, on these species a tank mix of 2.5 lbs. of Princep 80W + 2.5 lbs. of AAtrex 50W (or 2 lbs. of AAtrex 4L or 2 lbs. of AAtrex 9L) per acre may be applied in a minimum of 25 gal. of water.

Precautions: Apply only once per year. On sandy soil do not use more than 2.5 lbs. Princep 80W per acre and do not use the tank mix. Do not apply the tank mix directly to seedlings after the start of bud break.

Herbicides for Sod

St. Augustinegrass, Centipedegrass, and Keyhole Grass
Apply 2.5-5 lbs. per acre, according to soil texture as indicated below:

Much or peat soil	5 lbs.	Old beds	within 2 days after lifting of sod
		New beds	3-4 days after sprigging or plugging
Sandy soil	2.5 lbs.	Old beds	within 2 days after lifting of sod
		New beds	7-10 days after sprigging or plugging

If weeds remain, apply an additional 2.5 lbs. on much or peat or 1.25 lbs. on sandy soil.

Precautions: 1) Do not apply within 30 days before cutting or lifting. 2) Do not use north of FL.

Herbicides for Fallow, Lawns, and Similar Areas

Screwbean, Centipedegrass, St. Augustinegrass, and Keyhole Grass

Apply Princep 80W after October 1 before emergence of winter annual weeds for control of annual bluegrass, winter annual ryegrass, chickweed, corn speedwell, henbit, hpp clover, and spurreck. Princep 80W will control annual bluegrass even if it has emerged at time of treatment. For control of summer annual weeds listed in the General Information section of this label, also apply Princep 80W in late winter before the weeds emerge. Apply in a minimum of 15 gal. of water per acre at 1 gal. per 1,000 sq. ft.

Where annual bluegrass is the major weed, use 1.25 lbs. of Princep 80W per acre (0.5 gal. per 1,000 sq. ft.). Use 2.5 lbs. per acre if it is not. If 1 ton control of the other weeds named above. Do not exceed 12.5 lbs. per acre per treatment on newly sprigged turfgrass or on hybrid bermudagrass such as Telenor, Tandy, and Omond.

For continued summer annual weed control, apply another 1.25 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: To avoid injury, use only on turfgrass immediately free of infestations of insects, nematodes, and diseases. Do not use on golf greens. Do not use north of FL or west of the high rainfall areas of eastern OK and eastern TX. Do not use on much or saline soils. Do not apply over the rooting area of trees or ornamentals not listed on this label. On newly sprigged turfgrass, temporary slowing of growth may follow application. On hybrid bermudagrass, temporary yellowing may occur. Do not overseed with desirable turfgrass within 6 months before or 6 months after treatment.

Vegetable Crops

Asparagus (Established)

Apply 2.5-5 lbs. per acre to beds established one year or more. Apply once per year either after disking in the spring before weeds emerge or following harvest after removal of existing weed growth. Spring application must be made at least 3 days before first cutting.

deleted AAtrex 5L

deleted AAtrex 5L

#476 2207

revised

added

Precautions (WA and DR only) 1) Do not apply on
gravelly, sand, or loamy sand soil or crop injury
may result. 2) Do not allow irrigation water to
stand or to form pools in the field or injury may
occur.

Directions

Apply 2.5-5 lbs per acre as a directed spray after the
last fall tillage.

Precautions 1) Do not apply on gravelly, sand, or
loamy sand soil. 2) Apply only once per year.

Nonselective Weed Control on Noncrop Land

Best results are obtained when Princep ROW is applied
before weeds emerge. If weed growth has begun and
removal is not feasible, include a contact or translo-
cated herbicide in the spray.

Princep ROW provides long-term weed control on
industrial sites, highway medians and shoulders, rail-
road rights-of-way, farmyards, petroleum tank
lines, and noncrop areas on farms, such as around
buildings, equipment and fuel storage areas, along
fences, roadsides, and lanes. 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. Do not use in areas
susceptible to frostkill or allow irrigation to bring
fertilizer to foliage.

Aerial applications may be made where it is feasible.
Use at least 1 gal of water for each lb of Princep ROW
for both ground and aerial applications. Use more
water if practical.

To control annual broadleaf and grass weeds
(including barnyardgrass, cereal ryegrass, common
lambsquarters, foxtail, ragweed, sunflower and
buckeye mallow) apply 8-12.5 lbs per acre.

To control most annual and many perennial broadleaf
and grass weeds (including quackgrass, blunders,
redtop, burdock, Canada thistle, orchardgrass, pur-
slane, smooth stem dogfennel and plantain) apply
12.5-25 lbs per acre.

To control hard-to-kill perennial weeds (including
bell thistle and southwistle) apply 25-50 lbs per acre.

For larger residual control in regions of high rainfall
and a long growing season, apply 25-50 lbs per acre.

Storage and Disposal

Store in a dry place. Do not contaminate water, food, or
feed by storage, disposal, or cleaning of equipment.
Open burning is prohibited. Pesticide spray mixture
or stock water that cannot be used according to label
instructions must be disposed of according to applica-
ble federal, state, or local procedures. Completely
empty bags by shaking and tapping sides and bottom to
loosen clinging particles. Empty residues into applica-
tion equipment. Then dispose of bags in a sanitary
landfill or by incineration if allowed by state and local
authorities.

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Causes eye irritation. Harmful if inhaled or
absorbed through the skin. Avoid breathing dust
or spray mist. Avoid contact with eyes, skin, 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 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 contaminate domestic livestock or irriga-
tion water supplies, or lakes, streams, or ponds.
Do not contaminate water by cleaning of equip-
ment or disposal of wastes.

AAtres® trademark of CIBA-GEIGY for atrazine

Compo® trademark of NALCO Laboratories, Inc.

Erad-cane® trademark of Stauffer Chemical Co.

Erik® trademark of CIBA-GEIGY for ametryn

Princep® trademark of CIBA-GEIGY for simazine

Wine-O® trademark of CIBA-GEIGY

Surflan® trademark of Eanco Products Co.
for bromoxynil

Solo® trademark of Stauffer Chemical Co.

Unna® trademark of
Monsanto Agricultural Chemical Co.

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Agricultural Division
CIBA-GEIGY Corporation
Greensboro, North Carolina 27419

CCA 81102

OCT 29 1982

Mr. Richard Conn
Ciba-Geigy Corp.
Agricultural Division
P. O. Box 11422
Greensboro, NC 27409

Dear Mr. Conn:

Subject: Various Amendments
Princop 80W Herbicide
EPA Registration No. 100-437
Resubmission Dated October 15, 1982

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records.

In the biotype statement, add the word sequential so as to read xxx sequential combinations xxx.

Sincerely yours,

Richard P. Mountfort *RP*
Product Manager (23)
Fungicide-Herbicide Branch
Registration Division (TS-767)

TS-767:RPMountfort;DCR-04133;WANG-0675C;lwy;Raven:479-2013;10/26/82