

with common #100
100-603

Princep[®]

Caliber[®] 90

Herbicide

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

Ten Pounds
Net Weight

Active Ingredient:
Simazine: 2-chloro-4,
6-bis (ethylamino)-
s-triazine 90%
Inert Ingredient..... 10%
Total: 100%

EPA Est. 100-LA-1
EPA Reg. No. 100-603

Princep Caliber 90 is a
water dispersible
granule

Keep Out of Reach
of Children.

Caution

See additional pre-
cautionary statements
on back of bag.

See directions for use
on panel below.

CIBA-GEIGY

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Grapes

Apply 2-5 lbs. per acre only once between harvest and early spring.

Precaution: Do not use in vineyards established less than three years. Do not apply on gravelly, sand, or loamy sand soil.

Grapefruit, Lemon, Orange

AZ (Lemons and Oranges only): Apply a split application of 1.75 lbs. per acre in the spring plus 1.75 lbs. per acre in the fall.

CA: In grapefruit, lemons, and oranges, apply 2-4 lbs. per acre in a single application, or apply 2 lbs. per acre in the fall and 2 lbs. per acre in the spring. Do not use in the Imperial, Coachella, or Palo Verde valleys.

FL (Grapefruit and Oranges only): Apply only once per year. For control of weeds, apply under General Information. Apply 1-10 lbs. per acre in the spring. To also control mulch weeds, use 6-10 lbs. per acre either pre-emergence or before vines are 12 inches tall.

TX (Grapefruit and Oranges only): Apply 4-5 lbs. per acre.

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

Macadamia Nuts

Apply 2-4 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.

Olives

Apply 2-4 lbs. per acre following grove preparation in the fall. Repeat annually in midwinter.

Peaches, Plums, Sweet Cherries

Apply 1.75-4 lbs. per acre. Apply in late fall to early spring prior to weed emergence.

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

Pecans

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	2-3 lbs.
Loamy clay and low in organic matter	2-3 lbs.
Clay soil high in organic matter	3-4 lbs.

Precautions: Do not use west of the Pecos River in TX or 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.

Strawberries

Oregon and Washington: For control of chickweed, groundset, mustard, and sheep sorrel, apply broadcast at 1-2 lbs. per acre in fields where overhead irrigation is used to achieve this product. Apply after harvest at time of bed renovation. In fields where overhead irrigation is not available, apply during early October through November.

Precaution: Make only one application per growing season. Do not apply within 4 months after transplanting. Even overhead irrigation to 1/2 inch immediately following post-harvest application. Do not use on sand.

Walnuts

Apply 2-4 lbs. per acre.

Precautions: 1) Do not apply on gravelly, sand, or loamy 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.

Tenacity with Euxin 80W for Grapefruit and Oranges

Use in grapefruit and oranges in FL and TX for control of weeds listed in the following directions and under General Information. Apply in late fall or early spring in a minimum of 40 gal. of water per acre thoroughly covering existing vegetation, but avoiding contact with citrus fruit, foliage, or stems. Do not spray when windy. Apply when weeds have resumed active growth in the spring, but before they exceed 4 inches in the fall (early or as noted for weeds). 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. Do not use 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 this product and Euxin 80W.

FL (All Area): Apply 4 lbs. of this product plus 5 lbs. of Euxin 80W per acre. Controls mulch weeds when applied either pre-emergence or on vines up to 24 inches tall.

FL (Bedded Area): Apply 2.5 lbs. of this product plus 5 lbs. of Euxin 80W per acre. Controls mulch weeds when applied either pre-emergence or on vines up to 12 inches tall.

TX: Apply 3.5-4 lbs. of this product plus 2-3 lbs. of Euxin 80W per acre plus 2 lbs. non-ionic surfactant, such as X-775, per 100 gal. of spray mixture. Add surfactant to spray tank first, controls bulrush, mallow, and many weeds. Texas Panhandle, sandhill, and alfalfa and gives top 1/2 of bermudagrass. Use 4 lbs. of this product per acre for longer term control. Use 3 lbs. of Euxin 80W per acre for control of heavy weed growth and for top 1/2 of johnsongrass. Use the higher rate of both products for control of mallow.

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strawberry

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Precautions. To avoid possible injury, do not use in nurseries or around trees that have been established in the ground less than 10 years or where trees are under stress from freeze damage for one year after the freeze. Do not use on soil less than 10% organic matter or on poorly drained soil. Do not treat trees planted in irrigation furrows. Do not treat established trees such as fence or windbreak. Do not use on areas replanted with other trees or desirable plants, nor in such situations as drainage ditches or in areas replanted with other desirable plants or trees. Most established freeze-damaged areas may be planted to citrus trees one year after the sap fall on. Do not root to other crops after two years after sap fall on. Call on

Total Mixture with Paraquat
This tank mix is effective in the following full and not-cropt-for sale of pre-emergence and to residual control of annual broadleaf and grass weeds claimed for this product above. This combination is also effective in control and suppression of perennial weeds.

USE THIS DATA FILE ON THESE CROPS	STAPLES	BEANS
almonds (CA only)	various (AZ & CA only)	peas and pumpkins
apples	malabar nut	walnuts
avocados (CA & FL only)	olives	
cherries (leaves and seeds)	orange	
figs	orange	

Apply the release when under appropriate drip on its label plus 1-2 extra paragon(s) in 50-200 galls (100-300 gall) per percent of water open, active to the ground level, according contact with fruit foliage or stem. Apply as non-toxic wetting solution. Such as 1/2 to 1/4 of 100 galls of spray. As soon as needed are cut and new growth is developing. For measure degree need to control terminal buds, use of spot leafy bud paragon(s) for growth control. Apply the last one in early once a year. Do not spray under windy conditions. Use a tried for spraying. If less or more.

and the fact that the bird was found in a nest of its own kind, it is not surprising that the bird was found in a nest of its own kind.

In week 400 in Florida, the tank mix also controls bud scale, retinal mites, and at the higher rate of each, the thrips and the aphids of both products are instant killers. Spraying needs continuation into December and January to the degree of both products for instant effects on thrips and aphids.

per acre in total and ranges in fruit weight per acre in several areas and 7-10 lb per acre in other areas.

Based on a proposal containing 2 the paragraph which begins

space) with no new traffic space in the plan. On the other hand, the

Apply the Purcell Calbur to the vine given under the appropriate crop on the label plus 2.5-3.3 lbs. of Sulfur A or 2.2 lbs. of Sulfur A-50 to 40 gals. of water per acre. Refer to the Sulfur 75W or Sulfur A-50 label to determine the correct amount of Sulfur to use. Observe all precautions and limitations on the Purcell and Sulfur labels.

Field and Forage Crops

Allegis
Pure Allegis at least one year old, pure Allegis less than one year old, and Allegis-Orthopressure mixtures at least one year old

all or part of this water used as a carrier, except fluid fertilizers, should not be used when allaria is actively growing, an injury may occur. Check the physical compatibility of the products in the jug before use. Refer to the "General Information" section of this label for a compatibility test procedure.

Pure Algalin At Least One Year Old (All Animals Listed)

ADVICE: It is unproven whether the treatment will help the patient. The patient may be actively dying or soon dying.

Δ H ₂ O region	Soil Moisture	Rate per Area
Moisture controlled		

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TABLE 1

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Pure Alfalfa Less Than One Year Old (Northeastern U.S. Only)

Pure alfalfa which has been seeded in the spring before June 1 and has become well established may be treated in the fall after the last cutting but before permanently frozen ground conditions. Alfalfa may be actively growing, semi-dormant, or dormant when this product is applied. Apply 0.9 lb. per acre to control henbit, wild mustard, common lambsquarters, common chickweed, German moss, slysum, downy brome (cheatgrass), wild oats, tanysmum, pigweed, speedwell, and pepperweed.

Established Alfalfa-Orchardgrass Mixtures (Northeastern U.S. Only)

Apply only to alfalfa-orchardgrass mixtures which have been established at least one year. Make a single application in the fall after the alfalfa-orchardgrass mixture has gone dormant. Applications should be uniformly broadcast at the rate of 0.9 lb. per acre to control henbit, wild mustard, common lambsquarters, common chickweed, German moss, slysum, downy brome (cheatgrass), wild oats, tanysmum, pigweed, speedwell, and pepperweed.

Precautions (For Each Use): 1) Do not use on gravelly, sand, or loamy sand soil, or on soil low in organic matter, or crop injury may occur. 2) Applications made to alfalfa growing on highly calcareous or highly alkaline soil may result in crop injury. 3) Use only in areas where frost occurs and alfalfa goes into a semi-dormant or dormant state. 4) Do not apply on snow. 5) This product will not control dodder and established perennial or biennial weeds such as dandelion, white clover, quackgrass, cinquefoil, wild carrot, and dock. 6) Temporary crop chlorosis may appear on areas where overlapping occurs. The spray should be shut off when turning around at the end or corners of the field. 7) Do not rotate to any crops except corn for the growing season following application as injury may occur.

Note: Allow 11 days between application and grazing of dairy and beef cattle and sheep, and allow 60 days between application and cutting for hay.

Tank Mixture with Paraquat for Alfalfa (WA, OR, NV, UT, ID, MT, WY, CO, and the California counties of Del Norte, Butte, Modoc, Shasta, Lassen, Plumas, Sierra and Nevada)

Controls large, small, and slender spurs and gives improved control of bluegrass, cheatgrass, common chickweed, and tanysmum. Apply 0.9-1.75 lbs. of this product plus 1.3 pts. of paraquat in 20-100 gal. of water per acre with ground equipment or in 5-10 gal. of water per acre aerially. Refer to the alfalfa regional rate chart for rates of this product on specific soil textures. Use 1 pt. of paraquat when weeds and grasses are less than 4 inches tall. Apply when weeds are succulent and growth is 1-6 inches tall. Apply to established alfalfa after the last fall cutting when the crop is dormant and before spring growth starts. Do not apply to corn for the following season. Do not cut alfalfa for hay or silage until 60 days after application. Do not graze dairy or beef cattle within 60 days after application. Observe all precautions and limitations on the labeling of this product and paraquat.

*Based on a product containing 60% paraquat and 40% water. *0.00000 revised*

Forage Bermudagrass (Such as Coastal and Midland)

For preemergence control of most annual broadleaf and grassy weeds including barnyardgrass, crabgrass, Brachiaria spp., goosegrass, foxtail, carpetweed, carpenterweed, annual morningglory, pigweed, common purslane, Russian thistle, common chickweed, cornflower, and burdock. Apply this product shortly after springing. Apply it to established bermudagrass from fall to spring depending on the weed problem, but before weed emergence. Use the appropriate rate in the following table in a minimum of 15 gal. of water per acre for ground application and in a minimum of 1 gal. of water for each 0.9-1.3 lbs. of this product per acre for aerial application.

Soil texture	Rate per acre
Fine sand y soil low in organic matter	0.9 lb.
Sandy loam soil	1.3-2.2 lbs.
Loam and clay soil low in organic matter	2.2-2.6 lbs.
Clay soil	2.6-3.5 lbs.

Precautions: 1) Do not use on bermudagrass in NM and the High Plains of TX. 2) Do not apply within 7 days after cutting.

Note: Do not graze dairy or beef cattle or sheep for 30 days after 0.9-2.6 lbs. per acre application or for 60 days after 3.5 lbs. per acre application. Do not cut for hay for 60 days after 0.9-2.6 lbs. per acre application or for 90 days after 3.5 lbs. per acre application.

Comments:

Nitrogen solutions or complete fluid fertilizers may replace all or part of the water as a carrier in the spray. Determine the physical compatibility of this product with fertilizer before use. Refer to the General Information section of this label for a compatibility test. Do not apply after corn has emerged as there is danger of liquid fertilizers causing crop injury.

Preemergence: Apply before weeds and corn emerge. Use the appropriate rate in the table below.

Preplant: Apply in the spring after plowing at the appropriate rate in the table below. Apply before, during, or after final seedbed preparation. If soil is tilled or worked after application, broad deep incorporation. Best results will be obtained when this product is applied within 2 weeks before planting.

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

Soil texture	Broadcast rate per acre
Coarse-textured soil: Sand, silt, and loam that is low in organic matter	2.2 lbs.
Medium-textured soil: Soil containing a moderate amount of clay and organic matter	2.6 lbs.
Fine-textured soil: Loam that is high in organic matter and clay (including dark prairie soils of Corn Belt)	3.3 lbs.
Organic top: Peat, muck, and high-organic clay	4.4 lbs.

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

To control quackgrass, Apply 3.3-4.4 lbs. per acre in the fall. Plow two to three 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.

Note: If weeds develop, particularly under relatively dry conditions, a shallow cultivation will generally result in better weed control.

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Precautions: 1) Do not apply more than 4.4 lbs. per acre to corn per year. 2) Do not rotate to any crop except corn until the following year or injury may occur. 3) After harvest, 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 more than 3.3 lbs. is used per acre (or equivalent rate in a band), a crop of untreated corn should precede the next rotational crop. 5) Do not apply preplant incorporated in corn in the High Plains and Intermountain areas of the West (including central and western KS, western NE, western OK, and the Panhandle of TX) where rainfall is sparse and evaporation is high or where irrigation is required. 6) In the High Plains and Intermountain areas of the West where rainfall is sparse and irrigation is required, use this product to control weeds in corn only when corn is to be harvested in a crop of untreated corn is to precede another rotational crop. 7) In western MN and eastern parts of the Dakotas, NE, and KS, do not plant soybeans following corn treated with this product if more than 2.2 lbs. per acre (or equivalent rate in a band) was applied or injury may occur. 8) Injury may occur to soybeans planted in north central and northeast IA, south central and west MN, northeast NE, southeast SD, and other areas the year following application on soils having a calcareous surface layer. 9) Do not plant sugarbeets, tobacco, vegetable and field dry beans, spring-seeded small grains, or small-seeded legumes and grasses the year after an application or injury may occur.

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Aatrex 5L

Tank Mixtures on Corn:
Aatrex: Use this product in a preplant or preemergence tank mixture with Aatrex Nine-O, Aatrex 80W, or Aatrex 4L (4LC) for control of many annual weeds, including crabgrass, crabgrass fall panicum, foxtail, lambsquarters, morningglory, pigweed, ragweed, and velvetleaf.
Apply at the rate of 1.1 lb. per acre for most weeds and the 2.2 lb. per acre for expected heavy infestations of crabgrass and fall panicum.

Soil texture	Broadcast rate per acre			
	1:1 Ratio		2:1 Ratio	
	Princep Caliber 90	Aatrex 80W*	Princep Caliber 90	Aatrex 80W*
Sand, loamy sand, sandy loam, loam, silt loam, silty clay loam, sandy clay loam, silty clay loam, sandy clay or silty clay with low organic matter	1.1 lbs	1.25 lbs	1.5 lbs	0.83 lb
Loam, silty 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 prairie soils of the Corn Belt	1.6 lbs	1.6 lbs	2.1 lbs	1.2 lbs

added

*When using Aatrex 4L (4LC) or Aatrex Nine-O, use equivalent rates. One lb. of Aatrex 80W equals 0.8 qt. of Aatrex 4L (4LC) or 0.9 qt. of Aatrex Nine-O.

Refer to the Aatrex label for complete directions and use 0.9 lb. of this product for each pound of Princep 80W. Also refer to the Aatrex label and the Corn section of this label for precautions and limitations.

Eradicane: Use in a preplant incorporated tank mixture for control of all weeds claimed on both the Princep and Eradicane labels including partial control (suppression) of shattercane (wild cane). 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 gals. 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 termite grass infestations. For partial control (suppression) of shattercane, broadcast and incorporate immediately before planting 1.1-2.2 lbs. of this product plus 7.3 lbs. of Eradicane 6.7E (or 8 lbs. Eradicane Extra) per acre. For control of the other weeds claimed on both labels, broadcast and incorporate 1.1-2.2 lbs. of this product plus 4.75-7.3 lbs. of Eradicane 6.7E (or 5.33 lbs. of Eradicane Extra) per acre. Observe all precautions and limitations on the Princep and Eradicane labels.

Paraquat: Use in a tank mixture where corn will be planted directly in a cover crop, established, 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 this product to the spray tank, mix thoroughly with water, and then add paraquat and a nonionic surfactant. Provide constant agitation during mixing and application to keep the mixture in suspension.

Apply 2.2-3.3 lbs. of this product plus 1-2 lbs. of paraquat* in 20-60 gals. 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 pt. per 100 gals. of spray volume.

For further information, see General Information, caution and warning statements, precautions, and notes on the Princep and the paraquat labels.

*Based on a product containing 2 lbs. paraquat per gallon.

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Sutan: Use in a preplant incorporated tank mixture for control of all weeds claimed on both the Princep and Sutan labels including partial control (suppression) of shattercane (wild cane). 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 gals. of spray volume per acre. Refer to the Sutan 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 1.1-2.2 lbs. of this product plus 7.3 lbs. of Sutan 6.7E per acre. For control of the other weeds claimed on both labels, broadcast and incorporate 1.1-2.2 lbs. of this product plus 4.75 lbs. of Sutan 6.7E per acre. Observe all precautions and limitations on the Princep and Sutan labels.

Sugarcane:
Apply 2.2-4.4 lbs. per acre at planting or after harvest if ratoon crop is to be grown, but before weeds of sugarcane emerge. This product may also be applied interline directed or over the sugarcane to provide continuing control of germinating weeds.

Precautions: 1) Do not apply more than one 2.2-4.4 lbs. application over the plants or more than two interline directed applications. 2) Do not apply after close in. 3) Total application should not exceed 11.1 lbs. per acre crop cycle.

Note: Cornfields or grasses treated for preplant control.

Grasses Grown for Seed (Pacific Northwest Only):
Perennial ryegrass, Highland or Astoria bentgrass, orchardgrass, tall fescue, and fine fescues such as walters, Ryegrass, Pennlawn, Chequamegon, and related species. For the control of broadleaf weeds and annual grasses including annual ryegrass, tall fescue, silver chaffgrass, and downy brome (cheat), apply 2.2 lbs. in a minimum of 15 gals. of water per acre as soon as rains start. Early application is important.

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

Note: 4-6 weeks between last application and grazing of dairy and beef cattle and sheep, and allowed 14 weeks between last application and cutting for hay.

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birds or
tree foil

Maintenance, Christmas Tree Plantings, Shelterbelts**Maintenance (see list below)**

Apply 2.2-4 lbs. in at least 25 gals. 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 2.2-4 lbs. in at least 25 gals. of water per acre after transplanting. Use the same rate for annual maintenance applications.

For quackgrass control apply 4 lbs. per acre in the fall or apply a split application of 2 lbs. per acre in the fall plus 2 lbs. per acre in early spring after quackgrass begins growth.

Precautions: 1) Do not use on seedbeds or during beans. 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 shelterbelts transplants less than three years of age. 3) Do not apply more than once a year, except as directed for quackgrass control.

Apply to these species of trees and shrubs, as recommended below:

Conifers

Aspen
Austrian pine
Bishop pine
Colorado pine
Douglas fir
Engelmann spruce
Lodgepole pine
(shore pine)
Monterey pine
Mugho pine
red pine
(Norway pine)
Scotch pine
white pine
blue spruce

*For CA only

Norway spruce
red spruce
white spruce
balsam fir
Douglas fir
Franklin
hemlock
juniper
red cedar
white cedar
yellow pine spp.

Deciduous Trees and Woody Ornamentals

American elm
Siberian elm
boxelder
bush honeysuckle
catalpa
cottonwood
dogwood
hackberry
holly (var. spp.)
(max. 3.5 lbs. A)
honey locust
Oregon grape
(Manchurian spp.)

Prunus spp.
(max. 3.5 lbs. A)
red oak
Russian olive
sawtooth
palm (2.2 lbs. A)
hollyhock
cactus

Surflan Tank Mix: On Christmas tree plantings, use the tank mix for pre-emergence control of weeds listed on this label and the Surflan 75W or Surflan A 5 label. Use on field grown conifer species listed on the labels for each herbicide plus ground fir, spruce, Engelmann spruce, black spruce, Colorado blue spruce, Coulter pine, giant redwood, and Western white pine. Broadcast the mixture as a directed spray to the soil surface or as an overlap spray using 2.2-4 lbs. of Princep Caliber 90 and 2.5-5.33 lbs. of Surflan 75W (or 2.4 lbs. of Surflan A 5). Apply in sufficient water per acre to uniformly treat the area. Follow overlap sprays with sprinkler irrigation to move the herbicide from leaf surfaces to the soil. Remove weed growth before application. Mix weed residues, prunings or trash into the soil, or remove them before treatment. Soil should be in good tilth and free of clods at time of application. Shallow cultivation (1-2 inches) after treatment will not reduce weed control. Observe all precautions and limitations on the Princep and Surflan labels.

Tree Plantations 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 tree foliage contact. Do not use on seed nurseries or during may occur. Apply only once per year.

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

Black Walnuts

Apply 2.2-4 lbs. per acre

Slash Pine and White Pine

Use 1 - establish in the South only. Apply 4-6 lbs. per acre

Lebby Pine

Use for establishment in the South only. Apply either 4-6 lbs. of this product per acre or a tank mix of 1.5-3 lbs. of this product plus 1.2 lbs. of Aatrex 60W (or 0.9-1.75 lbs. Aatrex 4L or 0.8-1.6 lbs. Aatrex 4L or 4L) per acre. The tank mix provides broad spectrum annual weed control (see list in General Information section of this label) and better weed control in mulched and irrigated areas than the product alone.

Tree Seedlings in Illinois

Remove weed growth before application. Apply 2.2-4 lbs. of this product per acre in a minimum of 25 gals. of water after transplanting but before weed emergence. Use on the following species of trees:

American beech
balsam fir
black locust
black walnut
eastern red cedar
honey locust
maple
pecan
red oak
Russian olive
sweet gum
white ash
white oak
yellow poplar

*Instead of this product alone, on these species a tank mix of 2.2 lbs. of this product + 2.5 lbs. of Aatrex 60W (or 2.2 lbs. Aatrex 4L or 2.2 lbs. Aatrex 4L or 4L) per acre may be applied in a minimum of 25 gals. of water.

Precautions: Apply only once per year. On sandy soil, do not use more than 2.2 lbs. of this product per acre. And do not use the tank mix. Do not apply the tank mix directly to seedlings after the start of bud break.

Root Grasses for Sod**St. Augustinegrass, Centipedegrass, and Zoysia Grass**

Apply 2.2-4 lbs. per acre, according to soil texture as indicated below:

Muck or peat	4-6 lbs.	Old beds	within 2 days after lifting of sod
		New beds	3-4 days after springing or plugging
Sandy soil	2-2 lbs.	Old beds	within 2 days after lifting of sod
		New beds	7-10 days after springing or plugging

If weeds regrow, apply an additional 2.2 lbs. on muck or peat, or 1.1 lbs. on sandy soil.

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

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Turfgrass for Fairways, Lawns, and Similar Areas

Bermudagrass, Centipedegrass, St. Augustinegrass, and Zoysia Grass

Apply this product after October 1 before emergence of winter annual weeds for control of annual bluegrass, butchervine, carpet burweed, chickweed, corn speedwell, henbit, pop daisy, and spurge. This product 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 this product in late winter before the weeds emerge. Apply in a minimum of 15 gals. of water per acre or 1 gal. per 1,000 sq. ft.

When annual bluegrass is the major weed, use 1 lb. of this product per acre (0.4 oz. per 1,000 sq. ft.). Use 2.2 lbs. per acre (0.8 oz. per 1,000 sq. ft.) for control of the other weeds named above. Do not exceed 1 lb. per acre per treatment on newly sprigged turfgrass or on hybrid bermudagrass such as Tiflawn, Tifway and Emerald.

For continued summer annual weed control, apply another 1 lb. 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 reasonably free of infestations of insects, mites, nematodes, and diseases. Do not use on golf greens. Do not use north of NC or east of the high rainfall areas of eastern OK and eastern TX. Do not use on much or alkaline 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 4 months before or 6 months after treatment.

Vegetable Crops

Asparagus (Established)

Apply 2-4 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.

Precautions (WA and OR only): 1) Do not apply to 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.

Artichokes

Apply 2-4 lbs. per acre as a directed spray after the last fall foliage.

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

Nonselective Weed Control on Noncrop Land

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

This product provides long-term weed control on industrial sites, highway medians and shoulders, railroad rights-of-way, lumberyards, petroleum tank farms, and in noncrop areas on farms, such as around buildings, equipment and fuel storage areas, along fences, 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 accessible to livestock or allow livestock to graze treated weed foliage.

Aerial applications may be made where feasible. Use at least 1 gal. of water for each 0.9 lb. of this product for both ground and aerial applications. Use more water if practical.

To control annual broadleaf and grass weeds including barnyardgrass, chickweed, crabgrass, common lambsquarters, foxtail, ragweed, puncturevine, and turkey mulch, apply 5.3-11.1 lbs. per acre.

To control most annual and many perennial broadleaf and grass weeds including quackgrass, bluegrass, redtop, burdock, Canada thistle, orchardgrass, purpletop, smooth brome, dogfennel, and plantain, apply 11.1-22.2 lbs. per acre.

To control hard-to-kill perennial weeds including bush clover and soybean, apply 22.2-44.4 lbs. per acre. For control of annual and perennial weeds including all the above, apply 22.2-44.4 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 dumping is prohibited. Pesticide spray mixture or rinse water that cannot be used according to label instructions must be disposed of according to applicable federal, state, or local procedures. Completely empty bag by shaking and tapping sides and bottom. Loosen clinging particles. Empty residue into application equipment. These steps of bags must be taken immediately by the user in accordance with state and local ordinances.

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing dust or spray mist. Avoid contact with eyes, skin or clothing.

First Aid: In case of contact, immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists.

Environmental Hazards

Do not contaminate domestic livestock or irrigation water supplies, or lakes, streams, or ponds. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply when weather conditions favor drift from treated areas.

Athel[®] trademark of CIBA-GEIGY for atrazine

Calher[®] trademark of CIBA-GEIGY

Comper[®] trademark of KALO Laboratories, Inc.

Fragicane[®] trademark of Stauffer Chemical Co.

Ev[®] trademark of CIBA-GEIGY for ametryn

Nine-O[®] trademark of CIBA-GEIGY

Princap[®] trademark of CIBA-GEIGY for simazine

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Agricultural Division
CIBA-GEIGY Corporation
Greensboro, North Carolina 27414
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100-603

OCT 29 1982

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

Dear Mr. Conn:

Subject: Various Amendments
Princep Caliber 90
EPA Registration No. 100-683
Your Resubmissions: 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 combination xxx.

Sincerely yours,

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

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TS-767;Mountfort;DCR-04133;WANG-0875C;tfm;Raven;479-2013;10/28/82

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