

Princep 4G  
brand of Simazine

DIRECTIONS FOR USE AND CONDI-  
TIONS OF SALE AND WARRANTY

Granular Herbicide

IMPORTANT: Read the entire  
Directions For Use and the  
Conditions Of Sale And Warranty  
before using this product.

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



\_\_\_\_\_ Pounds  
Net Weight

16 4.3

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

Princep 4G is a 4%  
granular herbicide

Caution: Keep out of reach of  
children. Harmful if swallowed.  
Avoid 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. Destroy  
when empty.

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, ineffec-  
tiveness or other unintended consequences may result because  
of such factors as weather conditions, presence of other mate-  
rials, or the manner of use or application even though the  
product is used in accordance with Directions. All such risks  
shall be assumed by the Buyer.

Geigy warrants that this product conforms to the chemical des-  
cription 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. Geigy makes no express or implied  
warranty of Fitness or Merchantability or any other express or  
implied warranty. In no case shall Geigy or the Seller be  
liable for consequential, special or indirect damages result-  
ing from the use or handling of this product. 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 Geigy.

GENERAL INFORMATION

Princep 4G is a herbicide that should be applied before weeds  
emerge or following removal of weed growth. It 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, rainfall  
or irrigation 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.

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

Princep can be used to provide long-term weed control on industrial sites, highway medians and shoulders, railroad rights-of-way, lumberyards, petroleum tank farms, and in nearby areas on farms, such as around buildings, equipment and fuel storage areas, along fences, roadsides, and lanes.

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

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

To control hard-to-kill perennial weeds (such as bindweed and sow thistle): Broadcast 500-1000 lbs. per acre.

For longer residual control in regions of high rainfall and a long growing season, broadcast 500-1000 lbs. per acre.

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

Nurseries, Christmas Tree Plantings, and Shelter Belts

Established Nursery Stock (see list below)

Broadcast 50-75 lbs. per acre in fall or spring to nursery stock established at least one year after transplanting. Apply prior to weed emergence.

Shelter Belts and Christmas Tree Plantings (see list below)

Broadcast 50-100 lbs. per acre after transplanting and prior to weed emergence. For band applications reduce the rate of Princep 4G in proportion to the area treated. For example: Apply 25-50 lbs. according to your soil type in a 4-foot band one mile long or 1-2 lbs. per 1,000 sq. ft. Remove weed growth before application. Use the same rate for annual applications in established plantings.

Precautions: 1) Do not use Princep 4G on seedbeds or cutting beds. 2) Do not apply to Christmas tree or shelter belt transplantations less than three years of age. 3) Do not apply Princep more than once a year, except as directed for grass control.

Apply Princep 4G to these species of trees and shrubs, as recommended above:

American Elm	Douglas Fir	Red Pine
Arbovitae	Fraser Fir	(Norway Pine)
Austrian Pine	Hemlock	Red Spruce
Balsam Fir	Honey Locust	Russian Olive
Barberry	Juniper	Scotch Pine
Blue Spruce	Mugho Pine	Siberian Elm
Boxelder	Norway Spruce	White Cedar
Bush Honeysuckle	Oregon Grape	White Pine
Caragana	(Mahonia spp.)	White Spruce
Cotoneaster	Red Cedar	Yew (Taxus spp.)
Dogwood	Red Oak	

USDA Reg. No. 100-435  
U. S. Patent No. 2,891,855

Geigy

Geigy Agricultural Chemicals  
Division of Geigy Chemical Corporation  
Ardley, New York

November 15, 1967

# Aquazine™

algicide

For algae and submerged  
weed control in ponds



**Active Ingredient:**

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

EPA Reg. No. 100-437

**Caution:**

Keep out of reach  
of children.  
See additional  
caution statements  
on panel at left.

See directions for  
use on panel at right.

**Five Pounds**  
Net Weight

**CIBA-GEIGY**

1. Broad spectrum algae control.
2. Usually season-long submerged  
weed control.
3. May be used in ponds containing fish.
4. No special equipment needed to apply.

**Caution**

Keep out of reach of children.  
Harmful if swallowed. Avoid inhalation of dust.  
Avoid contamination of food and feed.  
Do not contaminate domestic or irrigation water  
supplies. Do not contaminate water by cleaning  
of equipment or disposal of wastes. Apply this  
product only as specified on this label.  
Do not reuse container. Destroy when empty.  
Store in a dry place.  
Aquazine™ trademark of CIBA-GEIGY  
for simazine.  
U.S. Patent No. 2,891,855  
Agricultural Division  
CIBA-GEIGY Corporation  
Greensboro, North Carolina 27409  
CGA 47L1

(15)

1. Broad spectrum algae control.
2. Usually season-long submerged weed control.
3. May be used in ponds containing fish.
4. No special equipment needed to apply.

#### Directions for Use

Aquazine may be used in ponds for control of submerged aquatic weeds and algae. Control of submerged weeds is usually season-long. Algae may be controlled for one to three months or may require retreatment later in the season. Aquazine may be used in ponds containing fish. Use only in ponds which will have little or no water runoff after treatment. Do not use Aquazine as a spot treatment.

#### When to Apply

Treat ponds after seasonal flow has ceased early in the weed and algae growth period. Treat when 5-10% of the pond surface is covered with scum (algae mats), and/or while submerged aquatic weeds are actively growing and before they reach the surface of the water. As a general rule, ponds in northern areas may be treated between May 1 and June 15. In southern areas, where water warms up and weed growth is earlier, ponds may be treated between April 1 and May 15.

High water temperatures cause more rapid natural decay of dead weeds and algae which can cause fish distress; therefore, apply Aquazine before water temperatures exceed 75 F.

Do not treat ponds having an extremely heavy infestation of weeds and algae such as occurs in mid and late summer, since rapid decomposition of heavy growth greatly reduces the oxygen content of the water which may cause fish distress and mortality.

#### Dosage Rates

The appropriate rate of Aquazine depends on the types of algae and submerged weeds present and the extent of the infestation. Rates are given in terms of lbs. of

Aquazine per acre foot of water. Determine the number of acre feet of water in a pond by multiplying the surface acres by the average depth in feet. Use the following guidelines to determine the dosage per acre foot of water:

#### Algae Control

Most unicellular algae (algae which impart a green, yellow, red or brown turbid color to the water) and many floating mat (pond scum) algae may be controlled with 1.7 to 3.4 lbs. of Aquazine per acre foot of water. If the algae infestation is light, use 1.7 lbs. If infestation is moderate, use 2.5 to 3.4 lbs. of Aquazine per acre foot.

Cladophora, Chara and water net algae require 4.25 lbs. of Aquazine per acre foot of water. Most other algae which form on the bottom soil (benthic) or which produce underwater plumes that later break loose and float on the surface, also require 4.25 lbs. per acre foot.

Algae control should be started within seven days after application.

#### Submerged Weed Control

Submerged weeds including pond weeds (*Potamogeton* spp.), naiad (*Najas* spp.) and hornmillfoil (*Myriophyllum* spp.) may be controlled by 3.4 lbs. of Aquazine per acre foot of water. Use 3.4 lbs. for light infestations and 4.1 to 6.8 lbs. of Aquazine per acre foot of water for moderate infestations. For control of water hyacinth (*Eichhornia* spp.) use 8.5 lbs. of Aquazine per acre foot.

Weed control should be started four to six weeks

#### How to Apply

After determining the amount of Aquazine required to treat the entire pond, mix or dilute portions such as 5 or 10 lbs. with some water in a pail or bucket to

form a thin paste or slurry. Toss the paste or slurry into the pond from the shoreline. Repeat this operation at several different locations around the pond edges until the required amount has been applied. It is not necessary to use spray equipment or evenly distribute Aquazine over the surface since it will dissolve in the pond water and evenly distribute itself throughout the entire pond. Care should be taken not to spill the paste or slurry on the grass or vegetation on the pond banks as injury to such vegetation will occur.

#### Retreatment for Algae Control

Due to uncontrollable factors such as infestation with later germinating algal species, some ponds may require retreatment in mid or late summer. If retreatment becomes necessary, apply the first signs that algae mats are beginning to build up. Do not retreat until just before freezing temperatures are expected, since water oxygen may be lowered during ice cover.

#### Use of Fish and Water

- (1) Fish taken from treated ponds may be used for human consumption.
- (2) Treated ponds may be used for swimming.
- (3) Water from treated ponds should not be used for irrigation or spraying of agricultural crops, lawns, or ornamental plantings, or for watering cattle, goats, hogs, horses, poultry, or sheep or for watering fruit trees or ornamentals.

**Precaution:** Do not treat ponds which have bordering trees with roots visibly extended into the water, since injury to these trees may occur. Usually trees 50 feet or more from the pond's edge will not be injured.

1. Broad spectrum algae control.
2. Usually season-long submerged weed control.
3. May be used in ponds containing fish.
4. No special equipment needed to apply.

#### 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, formula, and analysis stated on the label. The purpose intended in the Directions for Use suggests that the various risks referred to above by 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.

#### 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 even though the product is used in accordance with Directions. All such risks shall be assumed by the Buyer.

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. Geigy makes no express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Geigy or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. 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 Geigy.

#### GENERAL INFORMATION

Princep 4G is a herbicide that should be applied before weeds emerge or following removal of weed growth. It 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, rainfall or irrigation 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.

3.

Princep 4G controls many annual broadleaf and grass weeds such as: annual bluegrass, annual ryegrass, common chickweed, crabgrass, (*Digitaria* spp.), lambsquarters, pigweed.

#### DIRECTIONS FOR USE

##### Selective Weed Control

In each case where a range of dosage rates is given, the lower rate should be used on light soils and soils low in organic matter; the higher rate should be used on heavy soils and soils high 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.

Princep 4G should be distributed 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

Broadcast a single application of 50-100 lbs. per acre in the spring before bud break and weed emergence, or split the application, broadcasting 50 lbs. per acre in the spring before bud break and weed emergence and follow with a second application of 50 lbs. per acre in the fall. Do not apply when fruit is present.

To control quackgrass, broadcast 100 lbs. per acre in the fall or split the application, broadcasting 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: 1. On new plantings (less than 6 months old), use one-half the above rates. 2. Do not apply when fruit is present.

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

Princep can be used to provide 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.

To control most annual broadleaf and grass weeds (such as barnyardgrass, cheatgrass, crabgrass, lambsquarters, foxtail, ragweed, puncturevine, and turkey mallein): 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, dog fennel, and plantain): Broadcast 250-500 lbs. per acre.

To control hard-to-kill perennial weeds (such as bull thistle and sow thistle): Broadcast 500-1000 lbs. per acre.

For longer residual control in regions of high rainfall and a long growing season, broadcast 500-1000 lbs. per acre.

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

Nurseries, Christmas Tree Plantings, and Shelter Belts

Established Nursery Stock (see list below)

Broadcast 50-75 lbs. per acre in fall or spring to nursery stock established at least one year after transplanting. Apply prior to weed emergence.

Shelter Belts and Christmas Tree Plantings (see list below)

Broadcast 50-100 lbs. per acre after transplanting and prior to weed emergence. For band applications reduce the rate of Princep 4G in proportion to the area treated. For example: Apply 25-50 lbs. according to your soil type in a 4-foot band one mile long or 1-2 lbs. per 1,000 sq. ft. Remove weed growth before application. Use the same rate for annual maintenance applications in established plantings.

Precautions: 1) Do not use Princep 4G on seedbeds or cutting beds. 2) Do not apply to Christmas tree or shelter belt transplants less than three years of age. 3) Do not apply Princep more than once a year, except as directed for quackgrass control.

Apply Princep 4G to those species of trees and shrubs, as recommended above:

American Elm	Douglas Fir	<u>Red Pine</u>
Arborvitae	Fraser Fir	(Norway Pine)
Austrian Pine	Hemlock	<u>Red Spruce</u>
Balsam Fir	Honey Locust	<u>Russian Olive</u>
Barberry	Juniper	<u>Scotch Pine</u>
Blue Spruce	Mugho Pine	<u>Siberian Elm</u>
Boxelder	Norway Spruce	<u>White Cedar</u>
Bush Honeysuckle	Oregon Grape	<u>White Pine</u>
Caragana	(Mahonia spp.)	<u>White Spruce</u>
Cotoneaster	Red Cedar	<u>Yew (Taxus spp.)</u>
Dogwood	Red Oak	

weeds (unspecified)

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