

Marked Copy

Caparol®

ACCEPTED
OCT 19 1982
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 100-471

80W

Herbicide

For selective weed control in cotton and celery

Four Pounds
Net Weight

Active Ingredient:
Prometryn: 2, 4-bis
(isopropylamino)-
6-(methylthio)-
s-triazine 80%
Inert Ingredients: 20%
Total: 100%

EPA Reg. No. 100-471
EPA Est. 100-AL-1

Caparol 80W is a wettable powder

Keep Out of Reach of Children.

Caution

See additional precautionary statements on left panel.

See directions for use on panel at right.

CIBA-GEIGY

DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product.

Conditions of Sale and Warranty

The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application any of which are beyond the control of CIBA-GEIGY or the Seller. All such risks shall be assumed by the Buyer.

CIBA-GEIGY warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use, subject to the inherent risks referred to above. **CIBA-GEIGY makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall CIBA-GEIGY or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product.** CIBA-GEIGY and the Seller offer this product and the Buyer and user accept it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of CIBA-GEIGY.

Directions for Use

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

FAILURE TO FOLLOW PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR PERFORMANCE, AND OR ILLEGAL RESIDUES.

General Information

Caparol 80W is a selective herbicide that may be applied either before or after weeds emerge for control of most annual broadleaf weeds and grasses, including groundcherry, lambsquarters, annual morning glory, malva, mustard, black nightshade, pigweed (careless weed), purslane, Florida pusley, ragweed, smartweed, teaweed (prickly sida), barnyardgrass (watergrass), crabgrass, foxtail, goosegrass, junglerice, *Panicum* spp., signalgrass (and other *Brachiaria* spp.), and wild oats. Caparol also controls shallow-germinating seedlings of cocklebur, coffee weed, and sandbur. It does not control johnsongrass, bermudagrass, other established perennials, or sprangletop at selective rates.

When applied before weeds emerge, Caparol enters weeds through their roots. Thus, its effectiveness depends on moisture to move it into the soil. Under very dry soil conditions after application, a shallow cultivation or rotary hoeing will generally result in better weed control.

When applied to emerged weeds, Caparol provides foliar knockdown and/or residual control of later germinating weeds, depending on the rate applied.

Following many years of continuous use of this product and chemically related products, biotypes of some of the weeds listed on this label have been reported which cannot be effectively controlled by this and related herbicides. Where this is known or suspected, we recommend the use of this product in combination with other registered herbicides which are not triazines. Consult with your State Agricultural Extension Service for specific recommendations.

Equipment and Mixing

Thoroughly clean sprayer prior to use. Do not use a sprayer contaminated with 2,4-D or other materials, as crop damage or sprayer clogging may result.

Use conventional spray equipment with hydraulic or mechanical agitation except in California and Arizona where only mechanical agitators are recommended. Screens in nozzles and in suction and in-line strainers should be no finer than 50-mesh. Use a pump with capacity to maintain 35-40 psi at the nozzles. If hydraulic agitation is used, the pump should also provide sufficient agitation in the tank to keep the mixture in suspension.

Nozzles: For preplant incorporated or preemergence application, use flat fan nozzle tips. For postemergence band application, use off-center nozzle tips. For postemergence broadcast application, use flat fan or off-center nozzle tips. Use flood nozzle tips only in Arizona and California for lay-by treatment in cotton at least 18 inches tall.

Mixing: Mix the proper amount of Caparol 80W with water in a clean pan to form a slurry. Pour the slurry into the spray tank partially filled with water, and then add the rest of the water. Provide agitation during mixing and application to maintain a uniform suspension.

Cleaning: Wash sprayer thoroughly with clean water immediately after use. Do not use the same sprayer on sensitive crops, as even small residues of Caparol in the tank may cause injury to these crops.

Seedbed Preparation

To insure proper placement of Caparol 80W, seedbeds must be well prepared and as free as possible from trash and lumps. A firm seedbed is best for obtaining effective weed control. Uniformity in height and width of seedbed is essential for proper postemergence applications of Caparol 80W. Beds should be low and flat. Take care to avoid planter marks. Wide planter wheels or rollers are recommended. Wheel furrows should be uniform in depth. Mount the sprayer so that it follows the same rows as the planter.

Band Treatment

For band treatment, calculate the amount of Caparol 80W needed by the formula:

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

Cotton

Caparol 80W may be applied preplant incorporated or preemergence and/or postemergence as recommended in the following tables. The postemergence applications may follow preplant incorporated or preemergence treatments of Caparol 80W.

Apply Caparol 80W in a minimum of 20 gals. of water per acre as a broadcast or band application at the rates indicated in the following tables.

Do not use on glandless cotton varieties as crop injury will occur.

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

Preplant Incorporation (Arizona, California, and New Mexico)

Apply Caparol 80W at the appropriate rate in Table 1 as a broadcast or band treatment. If broadcast, treat the flat soil surface prior to tilling. If banded, apply over partially finished or finished beds. Incorporate up to 4 inches deep immediately after application with PTO-driven equipment, double disk, rolling cultivator, or bed conditioner.

Table 1: Preplant Incorporation

Region	Soil texture	Broadcast rate per acre
Arizona	sand, loamy sand	Do not use
California and New Mexico	sandy loam (AZ & CA only)	1.5-2 lbs
	sandy loam, loams (NM only)	2 lbs
	silt loam, clay	3 lbs

Precautions: Do not use Caparol 80W in cut areas of newly leveled fields, in areas of excess salt, or in areas where flooding over the beds is likely to occur as crop injury may result. Do not plant cotton in tractor wheel depressions as crop injury may result. On mulch planted cotton, water back only after cotton seedlings are well established. In New Mexico, apply either preplant incorporated or preemergence (not both) — see Preemergence section.

Preemergence

Apply at planting or shortly after planting at the appropriate rate in Table 2. Caparol 80W may be used on cotton planted flat on beds or in furrows. To avoid concentration of Caparol 80W in the seed furrow, do not make broadcast applications to cotton planted in furrows deeper than 2 inches. Band applications may be made to cotton planted in furrows deeper than 2 inches, but band width should not exceed the width of the bottom of the furrow. If banded, do not cover treated bands with soil while cultivating untreated row middles. Do not use on sand or loamy sand on shallow soils with caliche subsoils, or on areas with caliche outcroppings.

Cotton may be replanted in soil previously treated with Caparol 80W. Do not apply a second preemergence application of Caparol 80W as injury may occur.

Table 2: Preemergence

Region	Soil texture	Broadcast rate per acre
Mid-South & Southeast other than Mississippi River Delta in Miss	sandy loam	2-2.5 lbs
	silt and clay loam	3 lbs
	Sharkey clay (Arkansas only)	3.5 lbs
Miss. River Delta in Miss	sandy loam	2.5-3 lbs
	silt and clay loam	3.5 lbs
	Sharkey clay	Do not use
Blacklands of Texas & Okla., Texas Gulf Coast, & Texas Coastal Bend	loam	1.5 lbs
	clay	3 lbs
Rio Grande Valley of Texas*	loam	2 lbs
	clay	3 lbs
High Plains, Rolling Plains and Edwards Plateau of Texas, Southwest Texas and New Mexico**	sand, loamy sand	Do not use
	sandy loam	1 lb.
	loam, sandy clay loam	1.5 lbs
	other clay soils	2 lbs
Arizona and California	Do not use	

*Rio Grande Valley of Texas—Furrow irrigation cotton—If adequate rain does not fall soon after application, a shallow cultivation will insure good weed control

**New Mexico—Apply either preplant incorporated or preemergence (not both);—See Preplant Incorporation section

Winter Weed Control in Texas

For control of winter weeds only, such as henbit (purpletop) and seedling dock on fall bedded cotton land in the Texas Gulf Coast and Blacklands of Texas, apply 0.75-1 lb. of Caparol 80W per acre in the fall or winter to land that will be planted to cotton the following spring. For best results, apply before weeds emerge. Caparol 80W will give effective control of emerged henbit if applied before it reaches 4-6 inches tall. For postemergence henbit control, add a suitable surfactant such as X-77[®] at 0.5% of spray volume or an emulsifiable oil at 1.0% of spray volume to the spray tank.

Postemergence Directed

Be especially careful in applying Caparol 80W postemergence to prevent contact of the spray with cotton leaves or injury may occur. Use precision application equipment so the spray is accurately directed to the base of the cotton plants and still thoroughly covers the soil and weeds beneath the cotton plants. Apply during calm periods to prevent drift. Use leaf lifters or shields if leaf contact cannot be avoided merely by directing the spray. Apply only when all plants have exceeded the minimum recommended height. Apply to level, well prepared surfaces such as relatively clod-free beds made with bed-shapers.

Do not apply to furrow-planted cotton until furrows are leveled (plowed in). Do not treat cotton under stress from drought, cultivator damage, or fertilizer application.

When applying to emerged weeds, add 2 qts. of surfactant per 100 gals. of spray mixture. Use a surfactant that is compatible with Caparol 80W when applied in cotton and is approved by EPA for use on food and feed crops. Examples include X-77, Triton c, and Triton.

Chemical Hoe (Emerged Weeds only): Apply Caparol 80W at the appropriate rate in Table 3 two or three times if necessary. In cotton 3-6 inches tall, be extremely careful to avoid spray contact with cotton leaves by applying Caparol 80W with a precision applicator equipped with fenders or shields such as Bell Row Shield, Dickey Fenders, or W&A Fenders. In cotton less than 10 inches tall, apply only if cotton is bed or flat-planted.

Table 3: Chemical Hoe

Height of cotton and area of use	Height of weeds	Broadcast rate per acre
3 to 6 inches (Arkansas, Louisiana, Mississippi, Missouri, Tennessee, and Texas)	less than 1 inch	0.6 lb
6 or more inches (all regions)	less than 2 inches	0.6-0.8 lb

Lay-by (Emerged Weeds and Germinating Weeds): Apply Caparol 80W at the appropriate rate in Table 4, once per season when cotton is at least 12 inches tall (18 inches where flood nozzles are used in Arizona and California). Apply before weeds are 2 inches tall.

Table 4: Lay-by

Region	Soil texture	Broadcast rate per acre
Mid-South and Southeast	sandy	1.5 lbs
	loam	1.75 lbs
	clay	2 lbs
Blacklands of Texas and Oklahoma	loam	1 lb
	clay	2 lbs
High Plains of Texas and New Mexico	sandy	1 lb
	loam and clay	1.5 lbs
Southwest Texas	loam	1.5 lbs
	clay	2 lbs
Rio Grande Valley of Texas	Do not use	
Arizona and California (Do not use in the Coachella Valley)	sand and loamy sand	Do not use
	sandy loam	1.5-2 lbs.
	loam	2 lbs

Rotational Crops

The following vegetable and cover crops may be planted in the fall when Caparol 80W was applied on cotton by no more than one of these methods that year: preplant incorporated, preemergence, or only one chemical hoe treatment.

Vegetables

cabbage, okra, onions, peas, red beets, sweet corn

Cover Crops (must be plowed down and not used for food or feed)

oats, sorghum, winter barley, winter rye, winter wheat

Spring-seeded crops in California and Arizona and spring-seeded vegetables in the Rio Grande Valley of Texas should not be planted until after April 1.

Caparol 80W Combinations for Cotton

Prowl[®] (Arizona, California, New Mexico, and the upper and lower El Paso Valley of Texas)

This preplant incorporated tank mixture controls all weeds listed on this label and on the Prowl cotton label. Apply prior to listing or over partially finished or finished beds and incorporate immediately. Refer to the Prowl label for specific mixing, spraying, and incorporation methods. Continuous agitation in the spray tank is required to keep the material in suspension.

Apply the tank mixture with ground equipment in at least 10 gals. of water per acre at the appropriate rates from Table 5.

Table 5: Tank Mixture with Prowl

Soil texture	Broadcast rate per acre	
	Prowl	Caparol 80W
sand, loamy sand	Do not use	
sandy loam	1-1.5 pts	1.5-2 lbs
loam	1.5-2 pts	2 lbs
silt loam, silt, sandy clay loam	1.5-2 pts	2-3 lbs
clay loam, silty clay loam, clay	1.5-3 pts	2-3 lbs

Use the high rate for each soil texture above if heavy weed populations are anticipated. Use the 3 pt. rate of Prowl for heavy clay soils.

Precautions: Do not use in cut areas of newly leveled fields, in areas of excess salt, or in areas where flooding over the beds is likely to occur as crop injury may result. Do not plant cotton in tractor wheel-de; rations or crop injury may result. Do not use this tank mixture when cotton is irrigated up as crop injury may result. On mulch planted cotton, water back only after cotton seedlings are well established.

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

Rotational Crops: If treated crop is lost, cotton may be replanted. Do not rework the soil. Refer to the Cotton section of this label for rotational crop restrictions.

Treflan[®] EC Tank Mixture (Arizona, California, New Mexico and the upper and lower El Paso Valley of Texas)

This combination controls weeds listed on this label and on the Treflan label. This combination also controls shallow-germinating seedlings of cocklebur and coffee-weed.

Follow procedures on the Treflan label for soil preparation and incorporation. Apply the tank mix combination to the flat soil before disking.

Mix Caparol 80W in a clean pail with water to form a slurry; pour into spray tank one-half to three-fourths full of water, allow it to disperse with agitation, add Treflan EC, and then add the rest of the water. Continuous agitation in the spray tank is required to keep the material in suspension. Apply the tank mixture in at least 20 gals. of water per acre at the appropriate rates from Table 6.

Table 6: Tank Mixture with Treflan EC

Soil texture	Broadcast rate per acre	
	Treflan EC	Caparol 80W
sand, loamy sand	Do not use	
sandy loam	1 pt	1 1/2-2 lbs ^a
medium soils	1 1/2 pts	2 1/2 lbs
fine soils	2 pts	2 1/2 lbs
muck or peat	Do not use	

^aUse less than 2 lbs. per acre only in Arizona and California.

Precautions: Do not use in cut areas of newly leveled fields, in areas of excess salt, or in areas where flooding over the bed is likely to occur as crop injury may result. Do not plant cotton in tractor wheel depressions or crop injury may result. On mulch planted cotton, water back only after cotton seedlings are well established.

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

Rotational Crops: Cabbage, celery, okra, onions, and peas may be planted in the fall after a spring application of Treflan + Caparol. Winter barley, rye and wheat can be planted in the fall if they are plowed down and not used for food or feed. Refer to the Treflan EC label for other directions and precautions.

Treflan EC Split Application (Arizona and California)

Apply a preplant incorporated application of Treflan EC as directed on that label, except use the appropriate rate from Table 6. Do not apply Treflan EC before January 1. Follow at planting or just before planting with a preplant incorporated treatment of Caparol 80W as directed in the Cotton section of this label, except use the appropriate rate from Table 6.

DSMA or MSMA

For faster knockdown of the weeds controlled by Caparol 80W alone, apply 0.6-0.8 lb. of Caparol 80W plus 3 lbs. active ingredient of DSMA or 2 lbs. active ingredient of MSMA per acre, following the same directions, precautions, and limitations as given on this label for Caparol 80W applied alone postemergence directed (chemical hoe). If needed, make a second application 1-3 weeks after the first application. Do not apply after first bloom.

Several formulations of DSMA and MSMA are available under various trade names from several manufacturers. Observe the directions, limitations, and precautions on the label of the product used.

Celery

Seedbeds (Florida)

Broadcast 0.75-1 lb. in a minimum of 20 gals. of water per acre after celery has 2-5 true leaves. Application may be made over the celery. Apply only after seedbed covers have been removed from seedbeds for at least one week. Apply only once per year to seedbeds.

Direct-seeded Celery (California only)

Apply Caparol 80W at rates given below in a minimum of 20 gals. of water per acre. Within the rate ranges given, use the lower rates on coarse-textured soils and soils low in organic matter, use the higher rates on fine-textured soils and soils high in organic matter.

Preemergence: Broadcast 1.5-2 lbs. per acre at planting or shortly after planting before celery emerges.

Postemergence: Broadcast 1-1.25 lbs. per acre after celery has 2-5 true leaves. Application may be made over the celery. Apply before weeds are 2 inches tall.

To Avoid Injury to Direct-seeded Celery: (1) Make either one preemergence or one postemergence application (not both) per celery crop. (2) Do not use on sand or loamy sand. (3) Do not apply if celery is under water stress. (4) Do not apply postemergence treatments of Caparol 80W with other pesticides. Apply only after foliar applications of other pesticides are dry. (5) Do not apply within two weeks after an application of a herbicidal oil, such as carotol.

Transplants

Apply one application at the appropriate rate from Table 7 in a minimum of 20 gals. of water per acre during the 2-6 week period after transplanting. Within the rate ranges given, use the lower rate on relatively coarse-textured soils and soils low in organic matter, use the higher rate on relatively fine-textured soils and soils high in organic matter. Application may be made over the celery. Apply before weeds are 2 inches tall.

Table 7: Transplanted Celery

State	Soil	Broadcast rate per acre
Florida	sandy or muck	1-2 lbs
	coarse-textured	1.25-2 lbs
California	fine-textured	2-2.5 lbs
	coarse-textured	2-3 lbs
Hawaii	fine-textured	3-4 lbs
	fine-textured or muck	1.25-2.5 lbs
Michigan	fine-textured or muck	1.25-2.5 lbs
Wisconsin	fine-textured	2-2.5 lbs

Rotational Crops

The following crops may be seeded 5 months after applying no more than 2.5 lbs. Caparol 80W per acre on celery: cabbage, celery, corn, okra, onions, peas, and red beets.

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 to loosen clinging particles. Empty residue into application equipment. Then dispose of bags in a sanitary landfill or by incineration if allowed by state and local authorities.

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Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed, inhaled, or absorbed through skin. Causes eye irritation. Avoid breathing vapors, 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 swallowed, contact your local poison control center, hospital, or physician. If the patient is unconscious, maintain breathing and heartbeat (cardiopulmonary resuscitation). If the patient is conscious and alert, induce vomiting (syrup of ipecac or stimulate the back of the throat with a finger). Never give anything by mouth to an unconscious person.

If in eyes, flush with plenty of water. If on skin, wash with plenty of soap and water. Get medical attention if irritation persists. If inhaled, remove victim to fresh air.

Note to the Physician: If ingested, there is no specific antidote. Induce emesis or lavage stomach. Give a saline laxative and supportive therapy.

Environmental Hazards

Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated.

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Caparol[®] trademark of CIBA-GEIGY for prometryn.

Prowl[®] trademark of American Cyanamid for pendimethalin.

Treflan[®] trademark of Elanco Products for trifluralin.

X-77[®] trademark of KALO Laboratories, Inc.

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