

100-620

01/05/2010

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Washington, D.C. 20460

JAN - 5 2010

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

John D. Abbott
Syngenta Crop Protection
P.O. Box 18300
Greensboro, NC 27419

Subject: Label Amendment (New Use on Carrot, Celery, Cilantro, Okra, Parsley, and
Leaf Petioles (Crop Subgroup 4B)
Prometryn Technical EPA Reg. No. 100-542
Caparol 4L EPA Reg. No. 100-620
Application Dated August 13, 2008

Dear Mr. Abbott:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, are acceptable, provided that you do the following:

1. Submit the following data for prometryn within two (2) years from the date of this letter as a condition of registration for the new uses stated above:

- a. Guideline 850.1350: Aquatic Invertebrate Life-cycle (Saltwater)
Study must be conducted on mysid shrimp (*Mysidopsis bahia*)
- b. Guideline 850.1400: Fish Early-Life Stage Toxicity Test (Saltwater)
Recommend using sheepshead minnow (*Cyprinodon variegatus*)
- c. Guideline 860.1300: Nature of the Residue – Plants
A metabolism study reflecting application of prometryn to carrot or another root crop.
- d. Guideline 860.1380 Storage Stability

- i. In the Residue Chemistry Chapter of the Prometryn RED, HED concluded that the requirements for storage stability data were not fully satisfied for reregistration because information regarding sample storage intervals and conditions was needed for celery and cotton seed samples from studies reviewed in the 10/86 Prometryn Registration Standard. These data remain outstanding. To support the proposed use on the leaf petioles subgroup, information on sample storage conditions and intervals is required from the celery studies (MRIDs 00034043, 00093529, and 00093548). If the storage intervals for celery samples from these studies exceeded 37 months, or if

storage conditions differed from those represented in the storage stability studies, additional storage stability data or new crop field trials may be required.

- ii. To support the field rotational crop study (MRID 45190601), storage stability data are required reflecting the stability of residues of prometryn in samples of beet root and wheat hay, or straw stored frozen for up to 20-24 months.
 - e. Guideline 860.1500: Crop Field Trials – Carrot
Three additional carrot trials are required in NAFTA Zones 5, 10, and 11 reflecting application according to the maximum proposed use pattern, including use of a surfactant; one of the trials should generate residue decline data.
 - f. Guideline 860.1900: Field Accumulation in Rotational Crops
Additional information is required concerning the soil characteristics and sample harvest and handling procedures at the CA and MS sites for the study reported in MRID 45190601.
 - g. Guideline 870.6200: Acute & Subchronic Neurotoxicity
 - h. Guideline 870.7800: Immunotoxicity
2. Submit and/or cite all data required for registration/registration review of your product when the Agency requires all registrants of similar products to submit data.
 3. Submit production information (in pounds or gallons produced) for this product for the fiscal year in which the uses on Carrot, Celery, Cilantro, Okra, Parsley, and Leaf Petioles (Crop Subgroup 4B) are conditionally registered, in accordance with FIFRA §29. The fiscal year begins October 1 and ends September 30. The production information will be submitted to the Agency no later than November 15, following the end of the preceding fiscal year.

This information must be submitted to:

Mr. Owen F. Beeder
 U.S. Environmental Protection Agency
 Office of Pesticide Programs
 Registration Division (7505P)
 1200 Pennsylvania Avenue, NW
 Washington, DC 20460

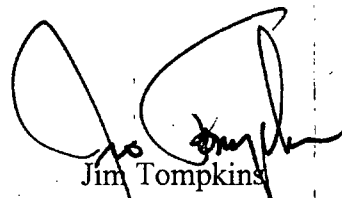
4. Make the following changes to the label for *Prometryn Technical*, Reg # 100-542:
 - a. On page 4, revise the sentence to read “The Directions for Use of this product ~~should~~ **must** be followed carefully.”

- b. On page 4, add the phrase “To the extent consistent with applicable law” directly in front of the sentences “SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS...”, “In no event shall SYNGENTA or Seller be liable...”, and “THE EXCLUSIVE REMEDY OF THE USER OR BUYER...”
 - c. On page 4, remove the phrase “and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.”
 - d. On page 5, revise the use site to read “carrot, celeriac, cilantro, cotton, leafy petioles crop subgroup 4B (**cardoon, celery, Chinese celery, celtuce, Florence fennel, rhubarb, Swiss chard**), okra, parsley, and pigeon peas.”
 - e. Revise the Container Disposal section in accordance with PR Notice 2007-4.
 - f. On page 6, revise the statement as follows and move to page 5, directly below the use sites listing.
“This product may be used to formulate product for specific use(s) not listed on the Manufacturing Use Product (MP) label **if** the formulator, **user** group, or grower has complied with the U.S. EPA **submission** requirements regarding **the** support of such use(s).”
5. Make the following changes to the label for *Caparol 4L*, Reg # 100-620:
- a. On page 1, revise the use site to read “For selective weed control in carrot, celeriac, cilantro, cotton, leafy petioles crop subgroup 4B (**cardoon, celery, Chinese celery, celtuce, Florence fennel, Swiss chard**), okra, parsley, pigeon peas, and rhubarb.”
 - b. On page 5, revise the sentence to read “Caparol 4L **must** be used only in accordance with instructions on this label or in separately published Syngenta supplemental labeling **instructions** for this product.”
 - c. Change the restricted entry interval (REI) to 12 hours for all crops.
 - d. Change the heading from “GENERAL INFORMATION” to “PRODUCT INFORMATION”.
 - e. Due to the importance of resistance management to a long-term pest-management strategy, it is suggested that resistance management grouping symbols and statements be included on the labeling as described in PR Notice 2001-5.
 - f. Throughout the label, change all instance of the crop from “celery” to “leafy petioles crop subgroup 4B”.

- g. On page 11 under Carrot, revise the restriction to read "Do not exceed ~~12~~ **8** pts/A of Caparol 4L per crop cycle."
- h. On page 12 under Celeriac, add the restriction "Do not exceed 4 pts/A of Caparol 4L per crop cycle."
- i. On page 12 under Cilantro, revise the directions to read "Make one application of Caparol 4L at the rate of 2 – **3.2** pt/A." Revise the restriction to read "Do not exceed **3.2** pt/A of Caparol 4L per crop cycle."
- j. On page 23, revise the heading to read "Application through Irrigation Systems – Chemigation and Preemergence or Postemergence Application to ~~the Crop Leafy~~ **Petioles Only**".
- k. On page 26 under Okra, remove the instructions for use of surfactants.

A stamped copy of your label is enclosed for your records. This label supercedes all previously accepted labels. You must submit one (1) copy of the final printed label before you release the product for shipment. Products shipped after eighteen (18) months from the date of this letter or the next printing of the label, whichever occurs first, must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Sincerely,



Jim Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505P)

(Front Cover of 2.5, 100, 200 gallon and Bulk Booklets)

Caparol® 4L

Herbicide

For selective weed control in carrot, celeriac, cilantro, cotton, leafy petioles crop subgroup 4B, okra, parsley, pigeon peas, and rhubarb

Active Ingredient:

Prometryn: 2,4-bis(isopropylamino)-6-(methylthio)-s-triazine 44.4%

Other Ingredients: 55.6%

Total: 100.0%

Caparol 4L contains 4 lbs. active ingredient per gallon.

Shake well before using.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-620

EPA Est. 070989-MO-001

EPA Est. _____ [Bulk]

2.5 gallons
Net Contents

100 gallons
Net Contents

200 gallons
Net Contents

____gallons [Bulk]
Net Contents

ACCEPTED
with COMMENTS
in EPA Letter Dated

JAN - 5 2010

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

100-620

| FIRST AID | |
|--|--|
| If inhaled | <ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice. |
| If in eyes | <ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice. |
| If swallowed | <ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person. |
| If on skin or clothing | <ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice. |
| Have the product container or label with you when calling a poison control center of doctor, or going for treatment. | |
| HOT LINE NUMBER | |
| For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372 | |

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if absorbed through skin or inhaled. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Do not breathe vapor or spray mist. Remove contaminated clothing and wash clothing before reuse. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves, such as barrier laminate or Viton® ≥ 14 mils

In addition, mixers and loaders supporting aerial applications must wear:

- Chemical-resistant apron
- An air-purifying respirator equipped with an R- or P-series filter (NIOSH approval number prefix TC-84A)

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statements

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsate. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. To the extent permitted by applicable law, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE

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

Caparol 4L should be used only in accordance with instructions on this label or in separately published Syngenta supplemental labeling recommendations for this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours for cotton and pigeon peas and 24 hours for celery. Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves, made of barrier laminate or Viton® ≥ 14 mils
- Shoes plus socks

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

GENERAL INFORMATION

Caparol 4L 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 morningglory, malva, mustard, black nightshade, pigweed (carelessweed), 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 4L also controls shallow-germinating seedlings of cocklebur, coffeeweed, and sandbur. Caparol 4L will also provide partial control of spurred anoda (cottonweed), rough blackfoot (ironweed, cluster flaveria), and prairie sunflower in NM and western TX. Caparol 4L does not control johnsongrass, bermudagrass, other established perennials, or sprangletop at selective rates.

When applied before weeds emerge, Caparol 4L 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 4L 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, and weeds controlled by this product are expected to be present along with resistant biotypes, we recommend the use of this product in registered combinations or in sequence with other registered herbicides which are not triazines. If only resistant biotypes are expected to be present, use a registered nontriazine herbicide. Consult with your State Agricultural Extension Service for specific recommendations.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop injury may result.

APPLICATION PROCEDURES

Do not apply this product in a way that will make contact with workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Ground application (All Uses): Use conventional ground sprayers equipped with nozzles that provide accurate and uniform application.

Calibrate sprayer before use and recalibrate at the start of each season and when changing carriers. Unless otherwise specified, use a minimum of 20 gals. of spray mixture per acre for all preplant incorporated, preemergence, and postemergence applications (with or without surfactant) with ground equipment.

Use a pump with capacity to: (1) maintain 35-40 psi at nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension. A centrifugal pump which provides propeller shear action is recommended for dispersing and mixing this product. The pump should provide a minimum of 20 gals./minute/100 gal. tank size circulated through a correctly positioned sparger tube or jets.

For preplant incorporated or preemergence application, use flat fan nozzle tips. For postemergence band application, use drop extraction tubes off-center nozzle tips. For postemergence broadcast application, use flat fan or off-center nozzle tips. Use flood nozzle tips only in AZ and CA for lay-by treatment in cotton at least 18 inches tall.

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:

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

Aerial application (Cotton and pigeon peas only): Use aerial application only where broadcast applications are specified. Use a minimum of 5 gals. of spray mixture 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.

To assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft. above vegetation, using low-drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply Caparol 4L by aircraft at a minimum upwind distance of 400 ft. from sensitive plants. Spray Equipment

Spray Drift Management

- Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.
- Apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.
- Apply only when the wind speed is 2-10 mph at the application site.

Additional requirements for ground boom application:

- Do not apply with a nozzle height greater than 4 feet above the crop canopy.

Additional requirements for aerial applications:

- The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy.
- When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.
- Nozzles must always point backward parallel with air stream and never be pointed downward more than 45 degrees.

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **Wind, Temperature and Humidity, and Temperature Inversions** sections).

Controlling Droplet Size

- **Volume** – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** – Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** – Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications shall not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover

and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

Seedbed Preparation

To ensure proper placement of Caparol 4L, seedbeds must be well prepared and as free as possible from trash and clods. 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 4L. Beds should be low and flat. Take care to avoid planter marks. Wide planter packing 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.

MIXING PROCEDURES

All uses: (1) Be sure sprayer is clean and not contaminated with any other materials, or crop injury or sprayer clogging may result. (2) Fill tank 1/4 full with clean water. (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 container into tank. (6) Continue filling tank until 90% full. Increase agitation if necessary to maintain surface action. (7) Add tank mix herbicide(s).

Cleaning: Wash sprayer thoroughly with clean water immediately after use. Do not use the same sprayer without thoroughly cleaning on sensitive crops, as even small residues of Caparol 4L in the tank may cause injury to these crops.

CROP USE DIRECTIONS

Carrot

Caparol 4L can be applied preemergence and or postemergence over the top to carrot. Read and follow all directions for use in carrot.

Use Precautions for Pre and Postemergence Applications in Carrot

Apply up to three applications of Caparol 4L at the rate of 2 - 4 pt/A per application.

Do not exceed one preemergence at up to 4 pt/A and two postemergence applications each at up to 2 pt/A or one postemergence application at up to 4 pt/A per crop cycle.

Do not exceed 12 pts/A of Caparol 4L per crop cycle

Make postemergence applications through the 6 leaf stage of carrot development

Do not apply within 30 days of harvest

Make uniform applications of the herbicide in a minimum of 20 gallons of water per acre.

When applying to emerged weeds add 2 qts of a nonionic surfactant (NIS) or wetting agent (approved for intended use) to 100 gals of spray mixture (0.5% v/v) or 1 gal of a non-phytotoxic crop oil concentrate (COC) containing 15-20% approved emulsifier to 100 gal of spray mixture (1% v/v).

Rotational Crops

The following crops may be seeded 5 months after applying no more than 4 pts Caparol 4L per acre on carrots: cabbage, carrots, celery, corn, cotton, dill, fennel, okra and peas. Onions and red beets may not be planted within 8 months of applying Caparol 4L. All other crops may be planted 12 months after applying Caparol 4L.

Celeriac

Transplants

Make a single broadcast application at 1.6-4 pts/A in a minimum of 20 gals of water per acre after the crop has 6-8 leaves. Application may be made over the crop. Within the rate ranges given, use the lower rate on relatively coarse-texture soils and soils low in organic matter; use the higher rate on relatively fine-textured soils and soils high in organic matter. Apply before weeds are 2 inches tall. Do not apply to the crop within 60 days of harvest.

Cilantro

Caparol 4L can be applied post planting, preemergence to cilantro. Read and follow all directions for use in cilantro.

Use Precautions for Preemergence Applications in Cilantro

Make one application of Caparol 4L at the rate of 2 – 3.4 pt/A.

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.

Do not exceed 3.4 pts/A of Caparol 4L per crop cycle

Do not apply within 30 days of harvest

Make uniform applications of the herbicide in a minimum of 20 gallons of water per acre.

Do not use on sand or loamy sand soil

Rotational Crops

The following crops may be seeded 5 months after applying no more than 3.4 pts Caparol 4L per acre on cilantro: cabbage, carrots, celery, cilantro, corn, cotton, dill, fennel, okra and peas. Onions and red beets may not be planted within 8 months of applying Caparol 4L. All other crops may be planted 12 months after applying Caparol 4L.

Cotton Caparol 4L Alone

Caparol 4L 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 4L.

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

Note: Do not feed treated forage to livestock, or graze treated areas, or illegal residues may result.

Preplant Incorporation (AZ, CA, and NM)

Apply Caparol 4L at the appropriate rate shown in Table 1 as a broadcast or band treatment. If broadcast, treat the flat soil surface prior to listing. 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, rolling cultivators in tandem, or bed conditioner.

Table 1: Preplant Incorporation

| Region | Soil Texture | Broadcast Rate Per Acre |
|----------------|--------------------------------|-------------------------|
| AZ, CA, and NM | sand, loamy sand | DO NOT USE |
| | sandy loam (AZ and CA only) | 2.4-3.2 pts. |
| | sandy loam, loams (NM only) | 3.2 pts. |
| | silt loam, clay | 4.8 pts. |

*Precautions: To avoid crop injury: (1) Do not use Caparol 4L in cut areas of newly leveled fields, in areas of excess salt, or in areas where flooding over the beds is likely to occur. (2) Do not plant cotton in tractor wheel depressions. (3) On mulch planted cotton, water back only after cotton seedlings are well established. (4) In NM, apply either preplant incorporated or preemergence (not both) – see **Preemergence** section. (5) In CA, do not incorporate with straight-tined bed mulchers/conditioners.*

Preemergence

Apply at planting or shortly after planting at the appropriate rate shown in Table 2. Caparol 4L may be used on cotton planted flat, on beds, or in furrows. To avoid concentration of Caparol 4L 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. To avoid crop injury, do not use on sand or loamy sand, on shallow soils with caliche subsoils, or in areas with caliche outcroppings.

Cotton may be replanted in soil previously treated with Caparol 4L. Do not apply a second preemergence application of Caparol 4L, or injury may occur.

Table 2: Preemergence

| Region | Soil Texture | Broadcast Rate Per Acre |
|--|------------------------|-------------------------|
| Mid-South and Southeast, other than Mississippi River Delta in MS | sandy loam | 3.2-4 pts. |
| | silt and clay loam | 4.8 pts. |
| | Sharkey clay (AR only) | 5.6 pts. |
| Mississippi River Delta in MS | sandy loam | 4-4.8 pts. |
| | silt and clay loam | 5.6 pts. |
| | Sharkey clay | DO NOT USE |
| Blacklands of OK and TX, TX Gulf Coast, and TX Coastal Bend | Loam | 2.4 pts. |
| | clay | 4.8 pts. |
| Rio Grande Valley of TX* | loam | 3.2 pts. |
| | clay | 4.8 pts. |
| High Plains, Rolling Plains, and Edwards Plateau of TX, Southwest TX, and NM** KS | sand, loamy sand | DO NOT USE |
| | sandy loam | 1.6 pts. |
| | loam, sandy clay loam | 2.4 pts. |
| | other clay soils | 3.2 pts. |
| AZ and CA | DO NOT USE | |

***Rio Grande Valley of TX – Furrow irrigation cotton –** If adequate rain does not fall soon after application, a shallow cultivation will ensure good weed control.

****NM –** Apply either preplant incorporated or preemergence (not both) – See **Preplant Incorporation** section.

Caparol Foundation Program for Planned Two-Pass Weed Control Systems

In the regions and soil textures listed in Table 2, Caparol may be applied at a reduced rate of 1-2 pt/A (sandy loams = 1 to 1.5 pt/A; loams, silts, sandy clay loams, and clay loams = 1.5 to 2.0 pt/A; and clay soils = 2.0 pt/A) to provide reduced competition from labeled weeds for a period of 30 or more days if followed by a planned post-emergence weed control treatment. Post-emergence treatments may include any product or combination of products labeled to control the specific weeds remaining in the field, broad spectrum examples include Touchdown® or other appropriately labeled glyphosate based products if Roundup Ready® cotton varieties are being grown. Follow all other directions for use, precautions, and restrictions on the Caparol label as well as those specified on the post-emergence herbicide product label. In burndown situations, i.e. where weeds are present but the cotton has not yet emerged, Caparol may be tank mixed with a burndown herbicide (e.g. Touchdown, Gramoxone Inteon™, or Roundup®) in both Roundup Ready and conventional cotton for improved control of existing weeds.

Winter Weed Control

Winter and Early Spring Weed Control in AL, AR, LA, MO, MS, and TN

For control of winter and early spring germinating annual weeds (including henbit, common chickweed, siba, and Palmer amaranth), apply 1.5-2 pt. of Caparol 4L after bedding (e.g., stale seedbed) from November 1 until 14 days before planting cotton. Use the 2.0 pt./A rate for applications made in Nov. or Dec. Use the 1.5 pt./A rate for applications made from Jan. 1 to 30 days before cotton planting. Applications may be made before or after weeds emerge. For control of emerged weeds, preferably less than 2 inches in height, add a suitable and approved crop oil concentrate or surfactant according to its label. In the event weeds exceed 2 inches in height at the time of treatment, apply Caparol 4L in tank mixture with a contact herbicide (e.g., Touchdown, Gramoxone Inteon or Roundup®). Refer to the label of the contact herbicide for rates of application, additives, and for weed height restrictions at time of application.

After applying Caparol 4L, do not mechanically till the seedbed prior to the cotton planting process, as this will encourage germination of weed seeds.

Follow with a preemergence herbicide program for cotton. In the event that a subsequent application of Caparol 4L is made, do not exceed the total rate of Caparol 4L that may be applied to a single cotton crop.

Winter Weed Control in TX

For control of winter weeds only, such as henbit (purpletop) and seedling dock on fall bedded cotton land in the TX Gulf Coast and Blacklands of TX, apply 1.2-1.6 pt. of Caparol 4L 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 4L 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.

Winter Weed Control in CA

For control of winter weeds on fall bedded cotton land, apply Caparol 4L after bedding either preemergence or postemergence to weeds less than 2 inches tall. Winter weeds controlled include:

- | | |
|---------------|--------------------|
| chickweed | pineappleweed |
| fiddleneck | redmaids |
| filarees | shepherdspurse |
| London rocket | sowthistle, annual |
| mustards | |

On sandy loam soil, apply 3.2 pts./A; on medium or fine soil, apply 4.8 pts./A. To avoid crop injury, do not use on sand or loamy sand. For postemergence weed 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. Rainfall or sprinkler irrigation is necessary to activate the preemergence activity of Caparol 4L.

After preplant-irrigation in the spring, knock off the top 1/3-1/2 of the seedbed. Then make a preplant application of Caparol 4L over the surface of the seedbed using a power-tiller, rolling cultivator, or similar implement that will provide uniform incorporation. Refer to Table 1 for preplant incorporation rates of Caparol 4L in CA. To avoid crop injury, do not cultivate treated soil back toward the cotton until after cotton emergence and just before the first irrigation.

Precaution: To avoid crop injury, do not use Caparol 4L for winter weed control in areas of excess salt or calcareous soil.

Note: To avoid illegal residues, do not use more than 10.3 pts. of Caparol 4L on sandy loam soil or 11.9 pts. of Caparol 4L on medium or fine soil per acre per year, including winter weed control, preplant incorporation, chemical hoe, and lay-by applications.

Postemergence-Directed

Be especially careful when applying Caparol 4L 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 cotton plants have exceeded the minimum recommended height shown in Tables 3 and 4. Apply to level, well prepared surfaces such as relatively clod-free beds made with bed-shapers.

To avoid crop injury, 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 4L when applied in cotton and is approved by EPA for use on food and feed crops. Examples include X-77®, Tronic, and Triton.

Chemical Hoe (Emerged Weeds only): Apply Caparol 4L 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 4L 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 |
|---|------------------------|--------------------------------|
| 3-6 inches (AR, LA, MO, MS, TN, and TX) | less than 1 inch | 1 pt. |
| 6 or more inches (all regions) | less than 2 inches | 1-1.3 pts. |

Lay-by (Emerged Weeds and Germinating Weeds): Apply Caparol 4L 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 AZ and CA). Apply before weeds are 2 inches tall.

Table 4: Lay-by (Cotton at least 12" tall)

| Region | Soil Texture | Broadcast Rate Per Acre |
|---|---------------------|-------------------------|
| Mid-South and Southeast | sandy | 2.4 pts. |
| | loam | 2.8 pts. |
| | clay | 3.2 pts. |
| Blacklands of OK and TX | loam | 1.6 pts. |
| | clay | 3.2 pts. |
| High Plains of NM and TX | sandy | 1.6 pts. |
| | loam and clay | 2.4 pts. |
| Southwest TX | loam | 2.4 pts. |
| | clay | 3.2 pts. |
| | | |
| Rio Grande Valley of TX | DO NOT USE | |
| AZ and CA (Do not use in the Coachella Valley) | sand and loamy sand | DO NOT USE |
| | sandy loam | 2.4-3.2 pts. |
| | loam | 3.2 pts. |

Rotational Crops Following Caparol 4L Applied Alone to Cotton

The following vegetable and cover crops may be planted in the fall when Caparol 4L was applied on cotton by no more than one of these methods that year: preplant incorporated, preemergence, or only one chemical hoe treatment. Where lay-by or multiple applications are made, do not plant rotational crops until the following year as indicated.

Vegetables

Cabbage, okra, peas, and sweet corn

Onions and red beets may not be planted within 8 months of applying Caparol 4L.

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 AZ and CA and spring-seeded vegetables in the Rio Grande Valley of TX should not be planted until after April 1.

Caparol 4L Combinations For Cotton

Prowl® 3.3 EC (AZ, CA, NM, and the upper and lower El Paso Valley of TX)

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 3.3 EC 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 at the appropriate rates from Table 5.

Table 5: Preplant Incorporated Tank Mixture With Prowl

| Soil Texture | Broadcast Rate Per Acre | |
|--|-------------------------|--------------|
| | Prowl 3.3 EC | Caparol 4L |
| sand, loamy sand | DO NOT USE | |
| sandy loam | 1-1.5 pts. | 2.4-3.2 pts. |
| loam | 1.5-2 pts. | 3.2 pts. |
| silt loam, silt, sandy clay loam | 1.5-2 pts. | 3.2-4.8 pts. |
| clay loam, silty clay loam, clay | 1.5-3 pts. | 3.2-4.8 pts. |

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: To avoid crop injury, (1) 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. (2) Do not plant cotton in tractor wheel depressions. (3) Do not use this tank mixture when cotton is irrigated up. (4) 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, or illegal residues may result.

24/39

Rotational Crops: If crop treated with Caparol 4L and Prowl 3.3 EC is lost, cotton may be replanted. Do not rework the soil. Refer to the Prowl label and the Cotton section of this label for rotational crop restrictions.

Treflan™ HFP Tank Mixture (AZ, CA, NM, and the upper and lower El Paso Valley of TX)

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

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

Pour Caparol 4L directly into spray tank 1/2-3/4 full of water, allow it to disperse with agitation, add Treflan HFP, and then add the rest of the water. Under conditions of very soft water and low spray volume (5-10 gals./A), compatibility of Caparol 4L + Treflan HFP may be improved by adding the Treflan HFP first, agitate, and then add the Caparol 4L. Continuous agitation in the spray tank is required to keep the material in suspension. Apply the tank mixture at the appropriate rates from Table 6.

Table 6: Tank Mixture with Treflan HFP

| Soil Texture | Broadcast Rate Per Acre | |
|------------------|-------------------------|---------------|
| | Treflan HFP | Caparol 4L |
| sand, loamy sand | DO NOT USE | |
| sandy loam | 1 pt. | 2.4-3.2 pts.* |
| medium soils | 1.5 pts. | 4 pts. |
| fine soils | 2 pts. | 4 pts. |
| muck or peat | DO NOT USE | |

*Use less than 3.2 pts./A only in AZ and CA.

Precautions: To avoid crop injury, (1) 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. (2) Do not plant cotton in tractor wheel depressions. (3) 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, or illegal residues may result.

Rotational Crops: Cabbage, celery, okra, and peas may be planted in the fall after a spring application of Treflan HFP + Caparol 4L. Onions and red beets may not be planted within 8 months of applying Caparol 4L. 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 HFP label for other directions and precautions.

Treflan HFP Split Application (AZ and CA)

Apply a preplant incorporated application of Treflan HFP as directed on that label, except use the appropriate rate from Table 6. Do not apply Treflan HFP before January 1. Follow at planting or just before planting with a preplant incorporated treatment of Caparol 4L as directed in the **Cotton** section of this label, except use the appropriate rate from Table 6.

Disodium Methanearsonate (DSMA) or Monosodium Methanearsonate (MSMA)

For faster knockdown of emerged weeds controlled by Caparol 4L alone, apply 1-1.3 pts. of Caparol 4L plus 3 lbs. active ingredient of Disodium Methanearsonate (DSMA) or 2 lbs. active ingredient of Monosodium Methanearsonate (MSMA) per acre, following the same directions, precautions, and limitations as given on this label for Caparol 4L 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 Disodium Methanearsonate (DSMA) and Monosodium Methanearsonate (MSMA) are available under various trade names for several manufacturers. Observe the directions, limitations, and precautions on the label of the product used.

Cotton with the Roundup Ready Gene

Postemergence-Directed Applications to Cotton 6" Tall Up to Lay-by (Not for Use in CA or AZ)

To control weeds listed on the Caparol 4L label, apply Caparol 4L at 1-1.3 pts./A tank mixed with the labeled rate of Touchdown or another appropriately labeled formulation of glyphosate to cotton with the Roundup Ready gene once the cotton is 6 inches tall or taller and weeds to be controlled by Caparol 4L are less than 2 inches tall. Applications must be made with a shielded or hooded sprayer to avoid contact of the spray to cotton leaves. Spray which contacts cotton leaves may cause injury. Do not apply to cotton planted in furrows. Apply during calm periods to prevent drift. Do not use on sand or loamy sand soils in CA, AZ, or in Gaines County, TX. Do not use in the Coachella Valley of CA.

Refer to the Touchdown or glyphosate tank mix product label for further restrictions, precautions, and limitations.

Postemergence-Directed Applications to Cotton at Lay-by (12" or Taller)

To control weeds listed on the Caparol 4L label, apply Caparol 4L tank mixed with Touchdown or another appropriately labeled formulation of glyphosate at the appropriate rate as shown in Table 4: Layby, to cotton with the Roundup Ready gene once the cotton is 12 inches tall or taller and weeds to be controlled by Caparol 4L are less than 2 inches tall. Applications must be made with a shielded or hooded sprayer to avoid contact of the spray to cotton leaves. Spray which contacts cotton leaves may cause injury. Apply during calm periods to prevent drift. Do not use on sand or loamy sand soils in Gaines County, TX.

Refer to the Touchdown or glyphosate tank mix product label for further restrictions, precautions, and limitations.

Leafy Petioles Crop Subgroup 4B (except rhubarb)

Seedbeds

Broadcast 1.2-1.6 pts. in a minimum of 20 gals. of water per acre after the crop has 2-5 true leaves. Application may be made over the crop. Apply only after seedbed covers have been removed from seedbeds for at least one week. Apply only once per year to seedbeds.

Direct-seeded Crop

Apply Caparol 4L 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 2.4-3.2 pts./A at planting or shortly after planting before crop emerges.

Postemergence: Broadcast 1.6-2 pts./A after crop has 2-5 true leaves. Application may be made over the crop. Apply before weeds are 2 inches tall.

To avoid injury to direct-seeded crop: (1) Make either one preemergence or one postemergence application (not both) per crop. (2) Do not use on sand or loamy sand. (3) Do not apply if crop is under water stress. (4) Do not apply postemergence treatments of Caparol 4L with other pesticides. Apply only after foliar applications of other pesticides are dry. (5) Do not apply within 2 weeks after an application of a herbicidal oil, such as "carrot" oil.

Transplants

Apply one application at the appropriate rate from Table 7 in a minimum of 20 gals. of water per acre during the 2 to 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. A single or split application may be made over the crop, at a total combined rate not to exceed the maximum in Table 7. Apply before weeds are 2 inches tall.

Table 7: Transplanted Crop

| State | Soil | Broadcast Rate Per Acre |
|--------------|-----------------------|--------------------------------|
| FL | sandy or muck | 1.6-3.2 pts. |
| CA and TX | coarse-textured | 2-3.2 pts. |
| | fine-textured | 3.2-4 pts. |
| MI and OH | fine-textured or muck | 2-4 pts. |
| WI | fine-textured | 3.2-4 pts. |

Do not apply to the crop within 40 days of harvest

Rotational Crops

The following crops may be seeded 5 months after applying no more than 4 pts. of Caparol 4L per acre on the crop: cabbage, celery, corn, cotton, dill fennel, okra, and peas. Onions and red beets may not be planted within 8 months of applying Caparol 4L. All other crops may be planted 12 months after applying.

Application through Irrigation Systems – Chemigation and Preemergence or Postemergence Application to the Crop Only

Apply this product only through sprinkler, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut down and make necessary adjustments should the need arise.

Chemigation Systems Connected to Public Water Systems: If the chemigation system is connected to a public water supply, the following conditions must also be met:

- Public water systems means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contain a functional reduced-pressure zone, backflow preventer (RPZ), or the functional equivalent in the water supply line upstream from a point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shutdown.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Upon completion of herbicide application, remove scale, pesticide residues, and other foreign matter from the supply tank and entire injector system. Flush thoroughly with clean water.

Sprinkler Chemigation: To apply a pesticide using sprinkler chemigation, the chemigation system must meet the following specifications:

- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut of the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

Application Procedures

- Mix in clean supply tank, the recommended amount of this produce for acreage to be covered and needed quantity of water.
- This product should not be tank mixed with other pesticides, surfactants, or fertilizers unless prior use has shown the combination non-injurious under your conditions of use.
- Follow precautionary statements and directions for all tank mix products.
- Provide constant mechanical agitation in supply tank to keep this product suspended throughout application operations.
- On all crops, use sufficient gallonage of water to obtain thorough and uniform coverage, but not cause runoff or excessive leaching. This will vary depending on equipment, pest problem, and stage of crop growth. Application of more or less than optimal quantity of water may result in decreased chemical performance, crop injury, or illegal residues.
- Meter this product into the irrigation water uniformly during the period of operation.
- Do not overlap application. Follow recommended label rates, application timing, and other directions and precautions for crop being treated.
- If sprinkler irrigation is intended to replace incorporation, use sufficient water to activate herbicide. The exact amount is highly dependent on moisture conditions and soil type, however ¼ to ½ acre inch may be appropriate as a starting point. Pre-irrigation may be beneficial under dry conditions. Additional irrigation may be needed following application if rainfall is scant.

Okra

Apply Caparol 4L preemergence and/or post-directed to okra. Read and follow all directions for use in okra.

Use Precautions for Pre and Post-Directed Applications in Okra

Make a single preemergence broadcast application of Caparol 4L after planting before crop emergence at the rate of 3.0 pt/A

For two applications make the first preemergence after planting, before crop emergence at the rate of 1.5 pt/A and the second post-directed when okra plants are at 7-9 leaf stage at the rate of 1.5 pt/A. Apply post-directed before weeds are 2 inches tall.

Do not apply within 14 days of harvest

Do not exceed one preemergence and one post-directed application per crop cycle

Do not exceed 3 pts/A of Caparol 4L per crop cycle

Make uniform applications of the herbicide in 20-40 gallons of water per acre.

When applying to emerged weeds add 2 qts of a nonionic surfactant (NIS) or wetting agent (approved for intended use) to 100 gals of spray mixture.

Rotational Crops

The following crops may be seeded 5 months after applying no more than 4 pts Caparol 4L per acre on okra: cabbage, carrots, celery, corn, cotton, dill, fennel, okra and peas. Onions and red beets may not be planted within 8 months of applying Caparol 4L. All other crops may be planted 12 months after applying Caparol 4L.

Parsley

In California only, make a single preemergence broadcast application of Caparol 4L after planting before crop emergence at the rate of 1.0-4.0 pts/A. If a rate higher than 1.0 pt/A is applied, then only one application is allowed.

In all states (including California), make a single preemergence broadcast application of Caparol 4L up to 14 days after planting at the rate of 1.0 pt/A. For extended weed control, a second application can be made at 1.0 pt/A up to 30

days prior to harvest. A third application at 1.0 pt/A can be made to the regrowth up to 30 days prior to the second (cutting) harvest.

Do not make more than 3 application per year at a maximum of 1 pt/A per application except in California only where a single application up to 4 pts/A is allowed. Do not apply to the crop within 30 days of harvest.

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. Make a uniform application of the herbicide in 20 gallons of water per acre.

Precautions: To avoid injury to parsley: (1) Do not use on sand or loamy sand. (2) Do not apply if parsley is under water stress.

Rotational Crops

The following crops may be seeded 5 months after applying no more than 4 pts Caparol 4L per acre on okra: cabbage, carrots, celery, corn, cotton, dill, fennel, okra, and peas. Onions and red beets may not me planted within 8 months of applying Caparol 4L. All other crops may be planted 12 months after applying Caparol 4L.

Pigeon Peas (Puerto Rico Only)

For preemergence control of annual weeds, such as horse purslane, junglerice, wild spider flower, jimsonweed, spurge, pigweed, and Florida pusley, apply 4 pts. of Caparol 4L per acre on loam soils, or 6 pts./A on clay soils. Apply at planting or immediately after planting before the crop or weeds emerge.

Precautions: To avoid crop injury, (1) Make only one application per year. (2) Do not use on sand or loamy sand soils.

Note: Do not graze or feed forage or hay to livestock, or illegal residues may result.

Rotational Crops

The following crops may be seeded 5 months after applying no more than 4 pts. of Caparol 4L per acre on pigeon peas: cabbage, celery, corn, and peas. Onions and red beets may not be planted within 8 months of applying Caparol 4L.

Rhubarb

Make a single broadcast application at the appropriate rate to established rhubarb when plants are dormant, before leaves have emerged from the crown.

Apply 2.0-3.2 pt/A on coarse-textured soils and 3.2-4.0 pt/A on fine-textured soils. Apply in a minimum of 20 gallons of water per acre.

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.

Do not apply to rhubarb within 40 days of harvest

Rotational Crops

The following crops may be seeded 5 months after applying no more than 4 pts Caparol 4L per acre on rhubarb: cabbage, carrots, celery, corn, cotton, dill, fennel, okra, and peas. Onions and red beets may not be planted within 8 months of applying Caparol 4L. All other crops may be planted 12 months after applying Caparol 4L.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage

Store in a dry place.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of federal law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Disposal

Do not reuse empty container. Triple rinse (or equivalent), puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

Container Disposal (Bulk and Mini Bulk)

When the container is empty, thoroughly clean the container before reuse, replace the cap and seal all openings that have been opened during use and return the container to the point of purchase, or to a designated location named at time of purchase of this product. If this is a Syngenta refillable container and is to be refilled, do not rinse or introduce any pesticide other than Caparol 4L. This container must only be refilled with Caparol 4L. **DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.** Return the container to an authorized Syngenta refilling facility. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting. Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, contact Syngenta at 1-800-888-8372. If not returned to the point of purchase or to a designated location, triple rinse empty container and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or by open burning if allowed by state and local authorities. If burned, keep out of smoke. Disposal of this container must be in compliance with state and local regulation.

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| <p>For non-emergency (e.g., current product information) call Syngenta Crop Protection at 1-800-334-9481.</p> |
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Manufactured for:
Syngenta Crop Protection, Inc.
P. O. Box 18300
Greensboro, North Carolina 27419-8300
www.syngenta-us.com

(Container Label)
(For 2.5, 100, 200 Gallon and Bulk)

Caparol® 4L

Herbicide

For selective weed control in carrot, celeriac, cilantro, cotton, leafy petioles crop subgroup 4B, okra, parsley, pigeon peas, and rhubarb

Active Ingredient:

| | |
|--|--------|
| Prometryn: 2,4-bis(isopropylamino)-6-(methylthio)-s-triazine | 44.4% |
| Other Ingredients: | 55.6% |
| Total: | 100.0% |

Caparol 4L contains 4 lbs. active ingredient per gallon.

Shake well before using.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use in booklet.

EPA Reg. No. 100-620

EPA Est. 070989-MO-001

EPA Est. _____ [Bulk]

2.5 gallons
Net Contents

100 gallons
Net Contents

200 gallons
Net Contents

_____ gallons [Bulk]
Net Contents

| FIRST AID | |
|--|--|
| If inhaled | <ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice. |
| If in eyes | <ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice. |
| If swallowed | <ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person. |
| If on skin or clothing | <ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice. |
| Have the product container or label with you when calling a poison control center of doctor, or going for treatment. | |
| HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372 | |

Precautionary Statements

Hazards to Humans and Domestic Animals

Harmful if absorbed through skin or inhaled. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Do not breathe vapor or spray mist. Remove contaminated clothing and wash clothing before reuse. Wash thoroughly with soap and water after handling.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water

when disposing of equipment wash water or rinsate. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas.

See directions for use in attached booklet. [2.5 gallon]

To be used in accordance with directions for use in Caparol 4L label booklet. See Caparol 4L label booklet for pesticide disposal instructions. [100, 200, Bulk]

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.**

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

Storage and Disposal

Pesticide Storage

Store in a dry place.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of federal law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Disposal

Do not reuse empty container. Triple rinse (or equivalent), puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

Container Disposal Bulk and Mini-Bulk

When the container is empty, thoroughly clean the container before reuse, replace the cap and seal all openings that have been opened during use and return the container to the point of purchase, or to a designated location named at time of purchase of this product. If this is a Syngenta refillable container and is to be refilled, do not rinse or introduce any pesticide other than Caparol 4L. This container must only be refilled with Caparol 4L. **DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.** Return the container to an authorized Syngenta refilling facility. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting. Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, contact Syngenta at 1-800-888-8372. If not returned to the point of purchase or to a designated location, triple rinse empty container and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or by open burning if allowed by state and local authorities. If burned, keep out of smoke. Disposal of this container must be in compliance with state and local regulation.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

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