

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

August 5, 2015

Cherilyn Moore Regulatory Product Manager Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, NC 27419-8300

Subject: Notification per PRN 98-10 – Add MOA information, update company name

> Product Name: Suprend Herbicide EPA Registration Number: 100-1163 Application Date: July 24, 2015

Decision Number: 507629

Dear Ms. Moore:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, you may contact Mindy Ondish at 703-605-0723 or via email at ondish.mindy@epa.gov.

Sincerely,
Mindy Ondish for

Reuben Baris

**Product Manager 25** Herbicide Branch

Registration Division (7505P) Office of Pesticide Programs

GROUP 2 5 HERBICIDES

## Suprend® Herbicide

A herbicide for control of certain broadleaf, sedge, and grass weeds in cotton

| Active Ingredients:   |         |
|---|---------|
| Prometryn (CAS No. 7287-19-6)                                 | 79.30%  |
| 2-pyridinesulfonamide,N-[[(4,6-dimethoxy-2-pyrimidinyl)amino] |         |
| carbonyl]-3-(2,2,2-trifluoroethoxy)-,monosodium salt,         |         |
| monohydrate; Trifloxysulfuron-sodium (CAS No. 199119-58-9)    | 0.70%   |
| Other Ingredients:  | 20.00%  |
| Total:  | 100.00% |

Suprend Herbicide is formulated as a wettable granule (WG).

Contains 0.793 lb prometryn and 0.007 lb trifloxysulfuron-sodium per lb product.

### KEEP OUT OF REACH OF CHILDREN.

# **CAUTION - PRECAUCIÓN**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1163

EPA Est.

## NOTIFICATION

100-1163

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

08/05/2015

20 pounds \_\_\_\_ pounds Net Weight

| FIRST AID  |  |  |  |  |
|--|--|--|--|--|
| If in eyes   | 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   | 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 my mouth to an unconscious person.  |  |  |  |
| If on skin or  | Take off contaminated clothing.  |  |  |  |
| clothing   | Rinse skin immediately with plenty of water for 15-20 minutes.   |  |  |  |
|  | Call a poison control center or doctor for treatment advice.   |  |  |  |
| If inhaled   | 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 treatment advice.   |  |  |  |
| •  | ct container or label with you when calling a poison control center or   |  |  |  |
| 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**

Causes moderate eye irritation. Harmful if swallowed. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

## **Personal Protective Equipment (PPE)**

Some of the materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA Chemical Resistant Chart.

## **Applicators and other handlers must wear:**

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

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions 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 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 cleaning equipment or disposing of equipment wash water or rinsates. 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.

This pesticide is toxic to vascular plants and should be used strictly in accordance with the drift precautions on this label in order to minimize off-site exposures.

## 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 should 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.LLC or Seller. All such risks shall be assumed by Buyer and User, and 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. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. 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.

Suprend should be used only in accordance with recommendations on this label or in separately published 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 the 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. 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, such as barrier laminate or Viton
- Shoes plus socks

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

#### **GENERAL INFORMATION**

Suprend is a herbicide for postemergence control of certain broadleaf, sedge, and grass weeds in cotton. Use post-directed application methods to provide coverage of weed foliage while adjusting nozzles to minimize contact of cotton foliage with spray or drift. Over-the-top application of Suprend in cotton will result in cotton injury and may cause yield reduction.

For a list of weeds controlled, refer to Table 1 in the **Target Weeds** section of this label. The level of control resulting from application of Suprend is primarily dependent upon application rate, weed species, weed size at application, coverage of the weed (including terminal), environmental conditions and growing conditions. For best results, apply Suprend when target weeds are less than 6 inches in height. Weed control is enhanced when emerged weeds have ample soil moisture and weeds are actively growing. Growth of susceptible weeds is inhibited soon after application of Suprend. Complete plant death occurs within a few days after application, depending upon weed species and growing conditions.

### HERBICIDE RESISTANCE

Suprend is a mixture of a photosynthetic inhibitor (prometryn) and an acetolactate synthase (ALS) inhibitor (trifloxysulfuron-sodium).

Suprend controls weeds by inhibiting (stopping) a biochemical process that produces certain essential amino acids necessary for plant growth and by inhibition of photosynthesis.

Certain weeds species have naturally occurring biotypes within the population that are resistant to ALS inhibiting herbicides or photosystem II inhibitors. Multiple applications of the same herbicide class in the same areas(s) applied continuously over a number of years, can lead to an increased presence of the resistant biotypes in weed populations. This may reduce the utility of herbicides for controlling specific target weeds in the population. To prevent or delay the build-up of resistant weed species biotypes, weed management programs should include the use of appropriately registered herbicides within the same or sequential years that: (1) have a different mode of action (MOA), and (2) control of the target weed. Mechanical control by tillage, cultivation, etc., or hand weeding before weeds set seed may also be helpful in reducing the build-up and spread of herbicide-resistant weed biotypes.

## RESISTANT WEED MANAGEMENT

## GROUP 2 5 HERBICIDES

Suprend herbicide contains the active ingredients prometryn which is a photosynthetic inhibitor (Site of Action Group 5) and trifloxysulfuron-sodium which inhibits the enzyme acetolactate synthase (ALS; Site of Action Group 2). Some naturally occurring weed populations have been identified as resistant to Group 2 and 5 herbicides. Selection of resistant biotypes, through repeated use of these herbicides or lower than recommended use rates in the same field, may result in weed control failures. A resistant biotype may be present where poor performance cannot be attributed to adverse environmental conditions or improper application methods. If resistance is suspected, contact your local Syngenta representative and/or agricultural advisor for assistance.

## General principles of herbicide resistant weed management:

- Employ integrated weed management practices. Use multiple herbicide sites-ofaction with overlapping weed spectrums in rotation, sequences, or mixtures.
- Use the full recommended herbicide rate and proper application timing for the hardest to control weed species present in the field.
- Scout fields after herbicide application to ensure control has been achieved. Avoid allowing weeds to reproduce by seed or to proliferate vegetatively.
- Monitor site and clean equipment between sites.
- Start with a clean field and control weeds early by using a burndown treatment or tillage in combination with a preemergence residual herbicide as appropriate.
- Use cultural practices such as cultivation and crop rotation, where appropriate.
- Use good agronomic principles that enhance crop competitiveness.

#### GENERAL USE PRECAUTIONS OR RESTRICTIONS

- Do not spray over-the-top of cotton or crop injury may result.
- Apply Suprend post-directed using properly adjusted and calibrated precision applicators (e.g., hooded sprayer).
- Do not exceed a total of 2.7 lb/A of Suprend per season from all applications. Suprend is made of two herbicidally active components, Envoke™ (trifloxysulfuronsodium) and Caparol® (prometryn). Do not exceed a total of 0.0188 lb active

ingredient of trifloxysulfuron-sodium per acre per season resulting from all applications of Suprend or Envoke. Each pound of Suprend contains 0.007 lb active ingredient of trifloxysulfuron-sodium and is equivalent to 0.15 oz of Envoke. Each pound of Suprend contains 0.79 lb active ingredient prometryn. Do not exceed 5.15 lb active ingredient of prometryn per acre per season resulting from all applications of Suprend or Caparol 4L, or other prometryn containing products.

- Due to reduced crop tolerance, do not apply Suprend post-directed on stripper-type cotton varieties.
- Degradation of Suprend in the soil is enhanced by soil with pH <7 and moist conditions. Application of Suprend to soils with pH >7.5 may increase the potential for rotational crop injury and may reduce rotational crop yield. Alkaline soils increase the potential for injury to rotational crops. If severe drought conditions develop (less than 12 inches of rainfall/irrigation within the first five months following application of Suprend and/or less than 1 inch of rainfall/irrigation within the first month after application) rotational crop injury may occur. In areas where soil pH is >7.5 and/or drought occur, a field bioassay prior to planting of the rotational crop is recommended. See Table 2 for recommended crop rotation intervals following normal harvest.
- Do not tank mix Suprend with malathion, profenofos (Curacron®) or emamectinbenzoate containing insecticides (Denim™), acephate, Bidrin®, Capture®, Karate® or unacceptable cotton injury may occur.
- ALS resistant plants or photosystem II resistant plants may not be controlled by Suprend.
- Do not feed treated forage to livestock or graze treated areas.
- To avoid crop injury, do not apply to furrow-planted cotton until furrows are leveled (plowed-in).
- Do not treat cotton under stress caused by adverse environmental conditions, insect or disease damage, chemical or mechanical injury, or nutrient deficiency.
- Do not apply Suprend using liquid fertilizer as the carrier.
- Do not use in the Rio Grande Valley of TX, the Coachella Valley of AZ and CA, nor on sand and loamy sand in AZ and CA.
- Do not apply Suprend within 60 days of cotton harvest.
- Sequential applications of Suprend should be made at least 14 days apart.

#### MIXING PROCEDURES

#### MIXING INSTRUCTIONS

- 1. Clean the spray tank before using. If it is contaminated with other materials, mixing problems and/or clogging may occur which could cause injury to the crop or reduced performance. Prepare no more spray mixture than is required for the immediate application.
- 2. Fill the spray tank ¼-½ full with clean water and begin agitation. Make certain that the agitation system is working properly and creates a rippling or rolling action on the water surface. Maintain agitation throughout the mixing and spraying process.
- 3. Add any products packaged in water-soluble film to the tank first. Allow the packets to completely dissolve and the contents of the packets to fully disperse into the mix water. Important: Water-soluble packets must always be the first material put into the spray tank after water. For products packaged in water-soluble packaging, do not tank mix with products containing boron or mix in equipment previously used to apply a product mixture containing boron unless the tank and spray equipment has been thoroughly cleaned (see Instructions for Cleaning Spray Equipment After Application).
- 4. Add the required amount of Suprend to the spray tank while maintaining agitation. Allow the product to wet and thoroughly disperse into the mix water.
- 5. While maintaining agitation, continue filling the spray tank. When the tank is ¾ full, add any tank mix partners. Add any water-dispersible granule or other dry formulation first, and allow that material to fully and uniformly disperse. Then add any emulsifiable liquid formulation.
- 6. Maintain agitation while adding a good nonionic surfactant with a minimum of 80% of the constituents effective as a spray adjuvant, at a rate not greater than 1 qt/100 gal spray mixture (0.25% v/v).
- 7. Maintain agitation while adding a nonphytotoxic COC containing 15-20% approved emulsifier at 0.5-1.0% v/v of finished spray solution.
- 8. Complete filling the tank maintaining sufficient agitation at all times to ensure surface action until the spray tank mixture is uniform.
- 9. An anti-foaming agent may be added to reduce excessive foaming, if it occurs.
- 10. **Do not leave spray in the spray tank without continuous agitation**. Always maintain agitation to maintain a uniform mixture in the spray tank.

11. Make only sufficient spray mixture that can be used the day in which it was mixed.

#### APPLICATION PROCEDURES

#### **GROUND APPLICATION EQUIPMENT**

Apply Suprend post-directed to prevent contact of the spray with cotton leaves, or crop injury may occur. Use precision application equipment so the spray is directed to the base of the cotton plant and still thoroughly covers the soil and weeds beneath the cotton plant. Apply during calm periods to avoid drift. Use leaf lifters or shields if leaf contact cannot be avoided merely by directing the spray.

For best results, apply to level, well prepared surfaces, such as relatively clod-free beds made with bed-shapers.

To help ensure accuracy, calibrate sprayer at the beginning of the season before use and recalibrate frequently. For ground application, use a minimum of 10 gallons water per acre. Higher volumes (i.e., at least 20 gal/A on a broadcast basis) should be used for severe weed infestations to ensure adequate spray coverage. Always include a nonionic surfactant spray adjuvant, approved for application to growing crops, in the spray mixture (see the **Mixing Procedures** section).

Use a pump with capacity to: (1) maintain at least 25-40 psi pressure at nozzles, and (2) provide sufficient agitation within the tank to keep product in suspension. Lower pressures may be used with extended range or drift reduction flat fan nozzles. A centrifugal pump that provides shear action for dispersing and mixing the product is recommended. The pump should provide a minimum of 20 gallons/minute/100 gallons tank size circulated through a correctly positioned sparger tube or jet agitators. If jet agitators are used, at least two agitators should be aligned on the bottom of the tank pointing toward each end. Agitation during both mixing and application is essential. Screens or strainers placed on the suction side of the pump should be 16-mesh or coarser. Use 50-mesh or coarser screens between the pump and boom, and when required, at the nozzles. Check nozzle manufacturer's recommendations.

Good weed coverage with the spray mixture is essential for optimum weed control. Observe sprayer nozzles frequently during the spraying operation to ensure that the spray pattern is uniform. Avoid spray overlaps that result in excessive rates in the overlap areas. Also, avoid application under conditions when uniform coverage cannot be obtained or when spray drift may occur (see section titled **Instructions to Avoid Spray Drift**).

Avoid all direct or indirect contact (such as spray drift) of this product with crops other than those recommended for treatment on this label, since injury may occur. Always follow the **Instructions to Avoid Spray Drift** and the **Instructions for Cleaning Spray Equipment after Application** sections of this label.

Rainfastness: Suprend is rainfast within 3 hours after application.

**Aerial Application Prohibition:** Do not apply Suprend aerially.

**Chemigation:** Do not apply this product through any type of irrigation system.

#### INSTRUCTIONS TO AVOID SPRAY DRIFT

Do not apply under circumstances where possible drift to unprotected persons, or to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use, or consumption can occur. Even small amounts may injure sensitive plants. When drift may be a problem, take steps to reduce spray drift, such as the following.

- Make applications when the wind velocity favors on-target product deposition. Do
  not spray if wind speed is 10 mph or greater or if winds are gusty. Wind speed must
  be measured adjacent to the application site on the upwind side immediately prior to
  application.
- Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased drift. Avoid spraying during conditions of low humidity and/or high temperatures.
- If sensitive crops or other non-target plants are downwind, extreme caution must be used under all conditions. Drift from applications of this herbicide is likely to result in damage to sensitive non-target plants adjacent to the treatment site. This damage can occur at extremely low concentrations.
- Allow adequate distance between target area and non-target areas (e.g., other crops, neighboring plants, or surface water) to prevent drift onto non-target areas.
- Do not apply when a temperature inversion exists. If an inversion condition is suspected, consult with local weather services before making an application.
- Further reductions in drift can be obtained by:
  - Using nozzles that provide a uniform droplet size. Use nozzles that produce medium or coarse droplets (250-400 microns VMD) that are less prone to result in spray drift.
  - Use of precision application equipment with fenders or shields can reduce herbicide contact with cotton foliage.
  - Recalibrate sprayer by reducing spray pressures and by increasing spray volumes to produce larger droplets when conditions favor drift.

 Applying as close to target plants as practical, i.e., a nozzle height that allows a good spray pattern for adequate coverage according to the manufacturer's recommendations, but minimizes drift potential.

#### **SPRAY EQUIPMENT**

#### INSTRUCTIONS FOR CLEANING SPRAY EQUIPMENT AFTER APPLICATION

Because some crops are extremely sensitive to low rates of Suprend, special attention must be given to cleaning equipment before spraying a crop other than those listed on this label. Mix only as much spray solution as needed. Immediately after spraying, clean equipment thoroughly using the following procedure.

- 1. Flush tank, sump, hoses, boom, and nozzles with clean water.
- 2. Prepare a tank cleaning solution of 1 gal of household ammonia per 50 gal of water. **Do not** use chlorine-based cleaners, such as Clorox®. Many commercial spray tank cleaners may be used. Refer to the publication "Clean It Up! A Guide to Cleaning Sprayers" from Syngenta for additional information. The guide may be obtained from your local Syngenta Sales Representative.
- 3. When available, use a pressure washer to clean the inside of the spray tank with this solution. Take care to wash all internal parts of the tank, including the inside top surface. Completely fill the sprayer with the ammonia cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
- 4. Flush hoses, spray lines, and nozzles for at least 15 minutes with the cleaning solution.
- 5. Dispose of rinsate from steps 1-4 in an appropriate manner. Spray the cleaning solution on an untreated crop on which Suprend is registered, or return to a rinsate tank for later use as make-up water for spraying crops on which Suprend is registered, or use other approved disposal.
- 6. Repeat steps 2-5.
- 7. Remove nozzles, screens, and strainers and clean separately in the ammonia cleaning solution after completing the above procedures.
- 8. Rinse the complete spraying system with clean water.

**Note:** If the tank is equipped with the proper number of correctly mounted 360° tank washing nozzles that are attached to a dedicated rinsing system, less cleaning solution than a full tank may be used. Use sufficient cleaning solution to thoroughly rinse all surfaces. Start the sprayer agitation and recirculate the cleaning solution for at least 15 minutes. Flush the spray boom with the cleaning solution. Repeat the rinsing procedure 1-2 times.

#### **CROP USE DIRECTIONS**

## COTTON (PICKER AND PIMA VARIETIES ONLY)

Apply Suprend as a directed spray to provide good coverage of weed canopy including weed terminals while minimizing contact of cotton leaves with spray or drift. Directed applications are generally best achieved when cotton is at least 6 inches tall. **DO NOT SPRAY OVER THE TOP OF COTTON OR CROP INJURY WILL RESULT**.

Suprend can be used post-directed on picker and pima cotton varieties in AL, AR, AZ, CA, FL, GA, KS, KY, LA, MS, NM (certain counties), NC, SC, TN, VA, the boot heel area of MO, and portions of OK and TX (east of I-35).

Suprend can be used with all cotton tillage systems.

#### TARGET WEEDS

For best results, apply when target weeds are less than 6 inches in height. Apply to actively growing weeds listed below.

Table 1: Weeds Controlled or Partially Controlled With Suprend

|                                 |                           |                    | Suprend     |               |
|---------------------------------|---------------------------|--------------------|-------------|---------------|
|                                 |                           |                    | 1.0-1.25    |               |
|                                 |                           |                    | Lb/A        | 1.5 Lb/A      |
|                                 |                           | Control            | Weed Size I |               |
| Weeds Controlled <sup>1,2</sup> | Latin Name                | Level <sup>3</sup> | Optimum Cor | trol (Inches) |
| Barnyardgrass                   | Echinochloa crus-galli    | PC                 | 0.25-1      | 0.25-1        |
| Bristly starbur                 | Acanthospermum hispidum   | С                  | 1-4         | 1-6           |
| Broadleaf signalgrass           | Brachiaria platyphylla    | PC                 | 0.25-1      | 0.25-1        |
| Carpetweed                      | Mollugo verticillata      | С                  | 0.5-2       | 0.5-3         |
| Coffee senna                    | Cassia occidentalis       | С                  | 1-5         | 1-6           |
| Common cocklebur                | Xanthium strumarium       | С                  | 1-5         | 1-6           |
| Corn, volunteer (non-IR or IT)  | Zea mays                  | С                  | 1-5         | 1-6           |
| Copperleaf hophornbeam          | Acalypha ostryifolia      | PC                 | 1-3         | 1-3           |
| Crabgrass, large                | Digitaria sanguinalis     | PC/C               | 1-5         | 1-5           |
| Crabgrass, Southern             | Digitaria cilaris         | PC                 | 1-5         | 1-5           |
| Florida beggarweed              | Desmodium tortuosum       | С                  | 1-4         | 1-5           |
| Hemp sesbania                   | Sesbania exaltata         | С                  | 1-4         | 1-5           |
| Horse purslane                  | Trianthema portulacastrum | PC                 | 0.5-1       | 0.5-2         |
| Horseweed                       | Conyza canadensis         | PC                 | 1-3         | 1-4           |
| Johnsongrass (seedling)         | Sorghum halepense         | С                  | 1-4         | 1-6           |

|                                 |  |                    | Suprend              |                |  |
|---------------------------------|--|--------------------|----------------------|----------------|--|
|                                 |  |                    | 1.0-1.25             |                |  |
|                                 |  |                    | Lb/A                 | 1.5 Lb/A       |  |
|                                 |  | Control            | Weed Size Ranges for |                |  |
| Weeds Controlled <sup>1,2</sup> | Latin Name                             | Level <sup>3</sup> | Optimum Cor          | ntrol (Inches) |  |
| Lambsquarters, common           | Chenopodium album                      | С                  | 0.5-2                | 0.5-3          |  |
| Morningglory:                   |  |                    |                      |                |  |
| entireleaf                      | Ipomoea hederacea var. C integriuscula |                    | 1-4                  | 1-5            |  |
| ivyleaf                         | Ipomoea hederacea                      | С                  | 1-5                  | 1-6            |  |
| pitted                          | Ipomoea lacunosa                       | С                  | 1-5                  | 1-6            |  |
| red/scarlet                     | Ipomoea coccinea                       | С                  | 1-4                  | 1-5            |  |
| tall morningglory               | Ipomoea purpurea                       | С                  | 1-3                  | 1-4            |  |
| Nutsedge:                       |  |                    |                      |                |  |
| purple                          | Cyperus rotundus                       | PC                 | 2-4                  | 2-4            |  |
| yellow                          | Cyperus esculentus                     | С                  | 2-6                  | 2-6            |  |
| Peanut, volunteer               | Arachis hypogeoa                       | PC                 | 1-2                  | 1-3            |  |
| Pigweed:                        |  |                    |                      |                |  |
| Palmer amaranth                 | Amaranthus palmeri                     | PC                 | 1-2                  | 1-2            |  |
| redroot pigweed                 | Amaranthus retroflexus                 | С                  | 1-4                  | 1-6            |  |
| smooth pigweed                  | Amaranthus hybridus                    | С                  | 1-4                  | 1-5            |  |
| waterhemp, tall                 | Amaranthus tuberculatus                | С                  | 1-2                  | 1-2            |  |
| Poinsettia, wild                | Euphorbia heterophylla                 | С                  | 0.5-2                | 0.5-3          |  |
| Prickly sida                    | Sida spinosa                           | PC                 | 1-4                  | 1-4            |  |
| Ragweed, common                 | Ambrosia artemisiifolia                | С                  | 1-4                  | 1-6            |  |
| Redweed                         | Melochia corchorifolia                 | С                  | 0.5-2                | 0.5-3          |  |
| Soybean, volunteer (Non-STS)    | Glycine max                            | С                  | 1-3                  | 1-4            |  |
| Sicklepod                       | Cassia obtusifolia                     | С                  | 1-4                  | 1-6            |  |
| Sunflower, common               | Helianthus annuus                      | С                  | 1-4                  | 1-5            |  |
| Velvetleaf                      | Abutilon theophrasti                   | С                  | 1-4                  | 1-4            |  |

<sup>&</sup>lt;sup>1</sup>ALS resistant plants or photosystem II resistant plants may be controlled by Suprend. <sup>2</sup>For improved control of grass weeds tank mix with MSMA or glyphosate.

#### TANK MIXES WITH OTHER HERBICIDES

Suprend can be tank mixed with Dual Magnum®, MSMA, Aim™, diuron, linuron, Cobra®, and Caparol for post-directed applications where use of these products is also registered for use in cotton. Suprend can also be tank mixed with Buctril® for postdirected applications in BXN cotton varieties. Suprend can be tank mixed with Touchdown® (glyphosate) for post-directed use in Roundup Ready® Cotton varieties.

Suprend can be tank mixed with Touchdown (glyphosate) for use in conventional cotton varieties if applied with hooded sprayers that completely enclose the spray pattern for weed control between the rows. Adjust the hooded sprayer in raised seedbeds to ensure the rear flaps touch the ground to completely enclose the spray solution. Keep the spray and drift off cotton leaves and stems. Spray contacting cotton leaves and stems may cause cotton injury.

<sup>&</sup>lt;sup>3</sup>C = Control (85-100%) of weeds present at the time of application. C = may require use of higher rates or repeated applications to achieve control. PC = Partial control; partial control means significant activity but not always at a level generally acceptable for commercial weed control.

For all tank mixtures of Suprend refer to individual product labels for precautionary statements, restrictions, rates, and a list of weeds controlled. Spray contacting cotton leaves may cause cotton injury with many of these tank mixtures.

## REPLANTING AFTER COTTON CROP FAILURE

If a cotton crop is lost (e.g., due to hail), and adequate growing season remains, and not more than 1.0 lb/A of Suprend has been applied, cotton may be replanted 30 or more days after the Suprend application, or 14 or more days after the first significant rainfall event (≥0.5 inches) following the Suprend application. If Suprend has been applied at >1.0 lb/A, cotton may be replanted 30 days after the first significant rainfall event (≥0.5 inches) following the Suprend application.

#### ROTATIONAL CROP RESTRICTIONS FOLLOWING COTTON

The crops listed below may be planted at, or after, the time interval specified from the last application of Suprend. Table 3 shows the amount of trifloxysulfuron-sodium from various application rates of Suprend and Envoke herbicides. Do not exceed a cumulative total of 0.0188 lb ai/A of trifloxysulfuron-sodium per season resulting from all applications of Suprend and Envoke.

Suprend contains Caparol, with the active ingredient prometryn. Do not exceed a total of 5.15 lb ai/A prometryn per season resulting from all applications of Suprend or prometryn-containing products.

If another herbicide with a longer rotational interval was used, follow the longer rotational limitation.

**Table 2. Rotational Crop Restrictions** 

| Rotational Crop            | Months |
|----------------------------|--------|
| Bell pepper (transplanted) | 12*    |
| Cotton                     | 7      |
| Corn, field                | 7      |
| Corn, sweet                | 7      |
| Grain sorghum              | 7      |
| Parsley                    | 12*    |
| Peanut                     | 7      |
| Potato, Irish              | 12*    |
| Radish                     | 12*    |
| Rice                       | 7      |
| Soybean                    | 7      |
| Sugarcane                  | 1      |
| Tobacco (transplanted)     | 7      |
| Tomato (transplanted)      | 3      |

| Rotational Crop | Months |
|-----------------|--------|
| Wheat, winter   | 3      |
| All other crops | 18*    |

<sup>\*</sup>Field bioassay.

Table 3: Envoke/trifloxysulfuron and Caparol/prometryn Dose Conversion

| Suprend<br>Lb Product/A | Envoke<br>Oz Product/A | Trifloxysulfuron<br>Lb ai/A | Caparol 4L<br>Pt/A | Prometryn<br>Lb ai/A |
|-------------------------|------------------------|-----------------------------|--------------------|----------------------|
| 1.00                    | 0.15                   | 0.007                       | 1.58               | 0.79                 |
| 1.25                    | 0.19                   | 0.00875                     | 1.97               | 0.98                 |
| 1.50                    | 0.23                   | 0.0105                      | 2.37               | 1.18                 |
| 2.01                    | 0.30                   | 0.0141                      | 3.18               | 1.59                 |
| 2.69                    | 0.40                   | 0.0188                      | 4.25               | 2.12                 |

#### STORAGE AND DISPOSAL

#### **Pesticide Storage**

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

## **Pesticide Disposal**

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by the use according to label instructions, contact you State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

## **Container Handling**

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay 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.

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For non-emergency, (e.g. current product information), call Syngenta Crop Protection at 1-800-334-9481

Manufactured for:
Syngenta Crop Protection, Inc.LLC
P.O. Box 18300
Greensboro, North Carolina 27419-8300

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