

264-821

03/06/2006

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Ms. Danielle A. Larochelle  
Registration Product Manager  
Bayer CropScience  
P.O. Box 12014, 2 T.W. Alexander Drive  
Research Triangle Park, NC 27709

MAR 6 2006

Dear Ms. Larochelle:


SUBJECT: Ginstar® 4.5 SC Cotton Defoliant  
EPA Registration No. 264-821  
Ginstar® EC Cotton Defoliant  
EPA Registration No. 264-634  
Application and Letter Dated May 28, 2004, Request  
To Amend Registrations To Allow a One Month Plantback  
Interval (Application Submitted Under EPA Registration  
No. 264-634) and Referenced in Correspondence in  
Agency's Files for EPA Registration Nos.: 264-661 and  
264-821; and Your Letter Dated February 3, 2006

The applications to amend registrations of the subject  
pesticide products have been reviewed and found to be acceptable  
under the Federal Insecticide, Fungicide and Rodenticide Act, as  
amended (FIFRA), provided that you:

- o Submit one (1) copy of the final printed label for each  
product prior to your shipment under the enclosed revised  
labels.

If this condition is not complied with, these registrations  
will be subject to cancellation in accordance with FIFRA, section  
6 (e). Your release for shipment under this labeling constitutes  
acceptance of this condition. A stamped copy of each of the  
three labels is enclosed for your records.

Sincerely yours,

  
Joanne I. Miller  
Product Manager (23)  
Herbicide Branch  
Registration Division (7505C)

Enclosure (2 Stamped Labels)

# Ginstar® 4.5 SC COTTON DEFOLIANT

## For Agricultural Use Only

ACTIVE INGREDIENTS: Thidiazuron: N-phenyl-N'-1,2,3-thidiazol-5-ylurea*	30.3%
Diuron: 3-(3,4-dichlorophenyl)-1,1-dimethylurea*	15.1%
INERT INGREDIENTS:	54.6%
Contains 3.0 lbs. Thidiazuron per gallon and 1.5 lb. Diuron per gallon.	TOTAL 100%

EPA Reg No. 264-821

EPA Est. No.

## KEEP OUT OF REACH OF CHILDREN CAUTION

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577  
 For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

### FIRST AID

<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor for treatment advice.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>

For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, inhaled, or absorbed through the skin. Avoid breathing spray mist. Avoid contact with skin, eyes and clothing. Do not contaminate food or feedstuffs.

#### PERSONAL PROTECTIVE EQUIPMENT

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-resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.
- Shoes plus socks

**ACCEPTED**  
 with **COMMENTS**  
 In EPA Letter Dated:

MAR - 6 2006

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

264-821

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 CONTROLS STATEMENT**

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.

**ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or 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 washwaters. Do not apply when weather conditions favor drift from the target area.

**STORAGE AND DISPOSAL**

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

**STORAGE:** Store in original container and keep closed. Store in a cool, dry place. Do not use or store near heat or open flame. Do not contaminate food or foodstuffs.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent); then offer for recycling or reconditioning, or puncture and dispose of in sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**GENERAL INFORMATION**

Ginstar® 4.5 SC is a defoliant to be used as a pre-harvest aid for cotton. Ginstar® 4.5 SC Cotton Defoliant has performed well under both cool and warm weather conditions.

**USE PRECAUTIONS**

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

Rainfall within 12 hours after application can reduce the effectiveness of Ginstar® 4.5 SC Cotton Defoliant.

Do not feed foliage from treated cotton plants or gin trash to livestock.

**Do not plant** the following crops **earlier than** the specified periods after application of Ginstar® 4.5 SC:

small grains, sorghum or corn.....	one (1) month
root crops (except carrots, onions).....	two (2) months
legumes (including alfalfa) or leafy vegetables (except lettuce) .....	two (2) months
cole crops, garlic, safflower, tomatoes, and watermelon .....	two (2) months
carrots .....	three (3) months
onions .....	four (4) months
cantaloupe, honeydew melon/ casaba melon, muskmelon, or peppers .....	five (5) months
lettuce.....	two (2) months
	with deep-plowing of soil (12-15 inches);
	or nine (9) months when soil is <b>only disced</b> (4-6 inches).

**Cover Crops:** Small grains and/or legumes intercropped within the cotton crop to which Ginstar® 4.5 SC Cotton Defoliant will be applied may **only** be used as cover crops and may not be harvested for food or feed. Small grains and/or legumes planted earlier than two (2) months following Ginstar® 4.5 SC application may **only** be used as cover crops and may not be harvested for food or feed.

Do not plant any other rotational crops (*except* those specified above) within one year of application of Ginstar® 4.5 SC.

Do not use immature crops for food or feed.

**Do not allow spray drift to contact trees or crops other than the target crop of mature cotton, or cotton you desire to defoliate, as this product may injure or defoliate other crops.**

Particular care should be taken when applying Ginstar® 4.5 SC adjacent to lettuce, citrus, or cantaloupe.

**PRACTICES TO LOWER THE POTENTIAL FOR DRIFT ONTO NONTARGET CROPS**

During applications, particularly under windy conditions, Ginstar® 4.5 SC Cotton Defoliant may drift to nontarget crops. To help reduce the drift potential, use the following practices:

- Do not apply Ginstar® 4.5 SC by ground or air when wind speeds exceed ten (10) miles per hour at the time of application. Follow local recommendations if wind speeds of less than ten (10) miles per hour are specified in those recommendations
- Use of low nozzle pressure (20–30 psi) is recommended.
- Do not apply Ginstar® 4.5 SC when a temperature inversion is present or when conditions favor an inversion prior to completing application(s).
- Additionally, do not apply Ginstar® 4.5 SC by air within one-half (1/2) mile of lettuce. Do not apply Ginstar® 4.5 SC by ground equipment within 100 feet of lettuce.

**PRACTICES TO LOWER DRIFT POTENTIAL ONTO NONTARGET CROPS IN THE RIO GRANDE VALLEY OF TEXAS**

To help reduce the drift potential, use the following practices:

- Do not apply Ginstar® 4.5 SC Cotton Defoliant by ground or air when wind speeds exceed ten (10) miles per hour at the time of application. Follow local recommendations if wind speeds of less than ten (10) miles per hour are specified in those recommendations.
- Use of low nozzle pressure (20–30 psi) is recommended.
- Do not apply Ginstar® 4.5 SC when a temperature inversion is present or when conditions favor an inversion prior to completing application(s).
- Use the largest nozzle orifice possible which permits proper deposition and coverage of product.
- In addition, for citrus crops, do not apply Ginstar® 4.5 SC by air when citrus in flush is within five (5) miles downwind of the point of application. Do not apply Ginstar® 4.5 SC by ground when citrus in flush is within one-half (1/2) mile downwind of the point of application.

**DIRECTIONS FOR USE**

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

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 24 hours.

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 any waterproof material.
- Shoes plus socks

**TIME OF APPLICATION**

Apply Ginstar® 4.5 SC Cotton Defoliant only to mature cotton plants when the last boll you expect to harvest is mature. A boll can be described as "mature" when it is too hard to be dented when squeezed between thumb and fingers, is difficult to slice with a sharp knife, and/or when seeds cut in cross sections have fully developed cotyledons, as evidenced by an absence of jelly within the seed.

Use of Ginstar® 4.5 SC Cotton Defoliant under extremely cool or adverse conditions can result in less than desirable defoliation and/or growth inhibition.

Apply Ginstar® 4.5 SC at least 5 days prior to anticipated harvest.

**USE OF ADJUVANTS**

The use of adjuvants has been shown to improve performance of Ginstar® 4.5 SC. Refer to specific adjuvant labels for rate recommendations. **PRECAUTION: The addition of adjuvants can cause desiccation and/or leaf freezing during periods of high temperature. The use of compounds that desiccate leaf tissue is not recommended.**

**APPLICATION**

Ginstar® 4.5 SC Cotton Defoliant may be applied by air or ground equipment. Apply specified dosages in 10-25 gallons of spray per acre with ground equipment or 2-10 gallons per acre by aircraft.

**DOSAGE**

Apply Ginstar® 4.5 SC Cotton Defoliant at a rate of 2.1 to 5.3 ounces of formulated product per acre prior to harvest (see *Application Rate Table*). At some locations, following the initial Ginstar® 4.5 SC application, it may be necessary to make a second application of Ginstar® 4.5 SC (**DO NOT** exceed 5.3 ounces /acre per season), or an application of a standard defoliant.

**MIXING INSTRUCTIONS**

Fill the spray tank with one-half of the required amount of water. Add the proper amount of Ginstar® 4.5 SC Cotton Defoliant and start the spray tank agitator. Finish filling the tank with the balance of water needed. Maintain sufficient agitation during both mixing and application to ensure uniformity of the spray mixture.

**PRECONDITIONING**

Ginstar® 4.5 SC Cotton Defoliant may be used as a preconditioner to enhance the activity of a defoliant application. Apply Ginstar® 4.5 SC at 1.3 - 2.1 ounces formulated product per acre. Apply in 10-25 gallons of water per acre by ground or 2-10 gallons of water per acre by aerial application. Timing of application is recommended 7-10 days prior to a defoliation application of Ginstar® 4.5 SC (see *Application Rate Table*) or the use of another defoliant. Refer to the second product label prior to use for complete recommendations.

**GINSTAR® 4.5 SC COTTON DEFOLIANT APPLICATION RATE TABLE**

To Achieve an Application Rate of:	Use This Amount of Ginstar® 4.5 SC	At the Indicated Rate, One Gallon of Ginstar® 4.5 SC Will Treat:
0.075 lbs. ai/Acre	2.1 oz./A	60 Acres
0.10 lbs. ai/Acre	2.9 oz./A	44 Acres
0.15 lbs. ai/Acre	4.3 oz./A	30 Acres
0.1875 lbs. ai/Acre	5.3 oz./A	24 Acres

**DO NOT APPLY MORE THAN 5.3 OUNCES OF GINSTAR® 4.5 SC PER ACRE PER SEASON.**

**CLEANOUT INSTRUCTIONS**

Do not allow the spray solution to dry in the application equipment. Immediately following application, clean all equipment (mix tanks, pumps, transfer lines, application tanks, sumps, booms, nozzles, and all related equipment) thoroughly with cleaner and water. Refer to Bayer CropScience technical information bulletins for tank cleaners which may be helpful in removing fresh residues.

Should small quantities of Ginstar® 4.5 SC Cotton Defoliant remain in inadequately cleaned equipment, they may be released during subsequent applications and may cause damage to crops. Bayer CropScience accepts no liability for damage to crops due to inadequately cleaned equipment.

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**IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and should be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** BAYER CROPSCIENCE MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. BAYER CROPSCIENCE DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

**LIMITATIONS OF LIABILITY:** THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE'S ELECTION, THE REPLACEMENT OF PRODUCT.

**NET CONTENTS: 2.5 GALLONS**



**Bayer CropScience**

**Bayer CropScience LP  
P.O. Box 12014, 2 T.W. Alexander Drive  
Research Triangle Park, North Carolina 27709  
1-866-99BAYER (1-866-992-2937)**

Ginstar 4.5 SC Cotton Defoliant (PENDING) Submitted 09/09/04.