

264-663

5/1/2002

4/7



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

MAY - 1 2002

Dr. Paul A. Cain  
Aventis CropScience USA LP  
2 T.W. Alexander Dr.  
Research Triangle Park, NC 27709

Dear Dr. Cain:

Subject: Remove® Herbicide  
Reg. No. 264-663  
Application and Letter Dated April 12, 2002, Request To  
Amend Registration To Add Use Site Cotton Seed  
Propagation as a Non-food Use (To Eliminate Non-  
Glufosinate-Ammonium Tolerant Cotton Plants in Seed  
Propagation)

The proposed labeling amendment to revise the use directions for the eliminations of non-glufosinate-ammonium tolerant cotton plants in seed propagation has been reviewed and found to be an acceptable amendment to the subject pesticide product registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) as amended, provided that you:

1. Follow the program for use as describe in the Section G: Reasonable Grounds in Support of the Application, which was submitted as a description of the use requested.
2. Secure the resulting glufosinate-ammonium tolerant cotton seed produced in a separate storage facility and the quantity of seed, name and place and person(s) in control of the storage facility are reported annually under Section 172.8(b) until the stored cotton seed is released for sale or other uses.
3. Will not sell or distribute the glufosinate-ammonium tolerant cotton seed prior to the registration of the use-pattern for use of glufosinate-ammonium in the culture of glufosinate-ammonium tolerant cotton. It may; however, be distributed for the purpose of increasing the supply of glufosinate-ammonium tolerant cotton seed, which also must be maintained under security as described in 2 above.

- 4. Will mechanically till into the soil of the same fields the cotton gin waste, by-products and any cotton plant materials resulting from the use of this pesticide product for the use-pattern: the use-site cotton for the propagation of the glufosinate-ammonium tolerant cotton seed as described on the proposed labeling..

This registration amendment expires four years from the date of this letter. Amended labeling must be submitted to delete the subject use in the production of glufosinate-ammonium tolerant cotton seed after that date.

Submit one (1) copy of the final printed label before you release the product for shipment under this label.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA, section 6(e). Your release for shipment of the product under this label constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Sincerely yours,

*for Eugene M. Wilson*  
 Joanne I. Miller  
 Product Manager (23)  
 Herbicide Branch  
 Registration Division (7505-C)

Enclosure

# REMOVE™ HERBICIDE

A Selective Herbicide For Use Exclusively To Eliminate Non-Glufosinate-Ammonium Tolerant Corn, Soybean and Cotton Plants In Seed Propagation.

ACTIVE INGREDIENT: glufosinate-ammonium; butanoic acid, 2-amino-4-(hydroxymethylphosphinyl)-, monoammonium salt† .....	18.19%*
INERT INGREDIENTS: .....	81.81%
*Equivalent to 1.67 pounds of active ingredient per U.S. gallon.	TOTAL 100.00%
†Protected by U.S. Patent No. 4,400,196	

EPA Reg No. 264-663

EPA Est. No. 407-IA-2

## KEEP OUT OF REACH OF CHILDREN

## WARNING – AVISO

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.)

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-888-AVENTIS (1-888-283-6847)

### FIRST AID

If swallowed	<ul style="list-style-type: none"> <li>• Rinse mouth thoroughly with plenty of water.</li> <li>• Do not induce vomiting.</li> <li>• Get medical attention immediately.</li> </ul>
If in Eyes	<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 eye.</li> <li>• Get medical attention if irritation develops or persists.</li> </ul>
If on skin or clothing	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Wash skin immediately with plenty of soap and water.</li> <li>• Get medical attention.</li> </ul>
If inhaled	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• Get medical attention if breathing difficulty develops.</li> </ul>

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

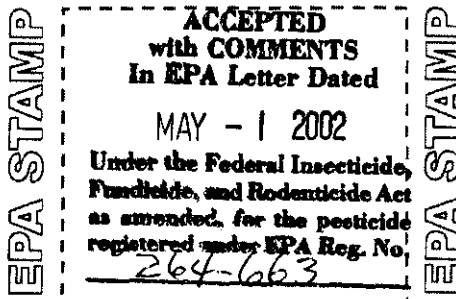
Have the product container or label with you when calling a poison control center or doctor or going for treatment.

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### WARNING

May be fatal if absorbed through skin. Causes moderate eye irritation. Harmful if swallowed. Do not get in eyes, on skin or on clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.



**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

**Applicators and other handlers must wear:**

Coveralls worn over short-sleeved shirt and short pants; chemical-resistant gloves such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils or Viton® ≥14 mils; chemical resistant footwear plus socks; protective eyewear. Wear a chemical resistant apron when mixing/loading and cleaning equipment. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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 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.
- 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 by cleaning of equipment or disposal of equipment washwaters.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal. Do not use or store near heat or open flame.

**PESTICIDE DISPOSAL:** Wastes resulting from washing of equipment or containers must be disposed of by applying it to a use-site listed on this label or at an approved waste disposal facility. Unused product must be returned to Aventis CropScience or disposed of at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Empty containers should be triple rinsed (or equivalent). Then offer for recycling or reconditioning, 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.

**SEED DISPOSAL:** To dispose of out-of-date or otherwise unmarketable seed from plants which have been treated with REMOVE™ Herbicide, broadcast and lightly incorporate seed into field soils using disc or other suitable implement. Any resulting crop may be destroyed by chemical or mechanical means. Alternatively, seed may be destroyed by deep burial, incineration or landfill disposal.

**DIRECTIONS FOR USE**

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

Do not use this product until you have read the entire label. 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 intervals. 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.

PPE required for early entry into 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 worn over short-sleeved shirt and short pants; chemical-resistant gloves such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils or Viton ≥14 mils; chemical resistant footwear plus socks; protective eyewear.

**GENERAL INFORMATION**

REMOVE™ Herbicide is a water-soluble herbicide for foliar spray application to selectively eliminate plants that do not carry a gene that imparts tolerance to glufosinate-ammonium in corn, soybean and cotton seed production fields. REMOVE™ Herbicide may be applied to remove susceptible "segregates", i.e., undesirable corn, soybean and cotton plants that do not contain a glufosinate-ammonium tolerance gene during seed propagation. Inbred lines or breeding material not possessing the glufosinate-ammonium tolerance gene will be severely injured or killed if treated with this herbicide.

## FOLIAR APPLICATION

Apply REMOVE™ Herbicide as a post-emergent foliar or directed spray to genetically modified cotton to kill susceptible "segregates", and grass and broadleaf weeds. Inbred cotton plants not possessing the glufosinate-ammonium tolerant gene will be killed or injured. Apply REMOVE™ Herbicide only for seed propagation and screening-out inbred cotton plants not possessing the glufosinate-ammonium tolerant gene.

## USE PRECAUTIONS

- Thorough spray coverage is necessary.
- For maximum effectiveness apply when cotton plants and weeds are small and actively growing.
- Herbicide effects will be visible within 2 to 4 days after application if applied when cotton plants and weeds are actively growing.
- Heavy dew, fog or mist, rain, stress due to drought, cool temperatures and extended periods of cloudiness following application may delay or reduce herbicide effects.
- Rainfall within 4 hours of application may necessitate a second application to achieve the herbicidal effect needed.
- Do not apply during windy weather which may result in drift to off-site vegetation.

## CLEANING INSTRUCTIONS

Before using REMOVE™ Herbicide, wash with a commercial cleaner and triple rinse sprayer. Make sure any rinsate or foam is removed from the spray tank and boom.

After using REMOVE™ Herbicide, triple rinse the spray equipment and clean with a commercial tank cleaner before using for crops not labeled LibertyLink® or warranted by Aventis CropScience. Make sure any rinsate or foam is thoroughly removed from spray tank and boom. Rinsate may be disposed following the pesticide disposal directions on this label.

## MIXING INSTRUCTIONS

REMOVE™ Herbicide must be applied with properly calibrated and clean equipment. REMOVE™ is specially formulated to mix readily in water. Prior to adding REMOVE™ to the spray tank, ensure that the spray tank is thoroughly clean and free of other pesticides that may injure cotton. See above *Cleaning Instructions*.

Mix REMOVE™ Herbicide with water to make a finished spray solution as follows:

1. Fill the spray tank half-full with water.
2. Start agitation.
3. If mixing with a dry flowable/wettable powder tank mix partner listed on this label, prepare a slurry of the proper amount of the in a small amount of water. Add the slurry of dry materials to the spray tank.
4. If mixing with a liquid tank mix partner listed on this label, add the proper amount of the liquid tank mix partner.
5. Complete filling the spray tank with water.
6. Add the proper amount of REMOVE™ Herbicide and continue agitation.
7. If foaming occurs, use a silicon-based anti-foam agent.

Flush out any air or water from the spray system lines before starting application to the crop. Keep bypass line on or near bottom of tank to minimize foaming.

If a tank mix partner specified on this label is added, maintain good agitation at all times until the contents of the tank is sprayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed. Keep bypass line on or near bottom of tank to minimize foaming. Screen size in nozzles or line strainers must be greater than 50 mesh.

## APPLICATION DIRECTIONS FOR CORN AND SOYBEAN SEED PROPAGATION

### APPLICATION TIMING

Applications of REMOVE™ Herbicide on corn may be made from emergence until corn is 24" tall or in the V-8 stage of growth, i.e., 8 developed collars, whichever comes first. Applications of REMOVE™ Herbicide on soybean may be made from emergence to the bloom growth stage. REMOVE™ Herbicide is a foliar-active material with no soil-residual activity. Best results are obtained when applications are made to actively growing plants. REMOVE™ Herbicide is rainfast 4 hours after application and rainfall within 4 hours may necessitate retreatment. Do not apply when wind causes drift to desirable vegetation as injury may occur.

### RATE RECOMMENDATIONS

For the detection and control of susceptible corn "segregates", REMOVE™ Herbicide may be applied at up to 40 fluid ounces (2.5 pints) per acre when corn is in the V-3 to V-4 stage of growth, i.e., 3 to 4 developed collars and may be repeated, if necessary, when the corn is in the V-6 to V-8 stage of growth or up to 24" tall.

For the detection and control of susceptible soybean "segregates", REMOVE™ Herbicide may be applied at up to 40 fluid ounces (2.5 pints) per acre when soybean is in the third trifoliolate stage and may be repeated, if necessary, up to the bloom growth stage of soybean.

### MIXING INSTRUCTIONS

REMOVE™ Herbicide must be mixed with water to make a finished spray solution as follows:

1. Fill the spray tank with the required amount of water.
2. Add the proper amount of this product and mix.

**APPLICATION METHODS**

**Ground Application:** REMOVE™ Herbicide should be applied broadcast in a minimum of 10 gallons of water per acre. Flat fan nozzles are recommended. Use a spray pressure of 30 to 40 pounds per square inch.

**NOTES FOR REMOVE™ HERBICIDE FOLIAR APPLICATIONS TO CORN OR SOYBEAN WHICH IS BEING GROWN FOR GLUFOSINATE-AMMONIUM TOLERANT SEED PROPAGATION**

1. Apply REMOVE™ Herbicide exclusively to corn or soybean seed production fields in which the desired plants are glufosinate-ammonium tolerant.
2. Seed from treated plants must only be used for breeding purposes, commercial corn hybrids or commercial soybean varieties. Seed from treated plants must be labeled as follows: "Do not use for feed, food or oil purposes".
3. **DO NOT** use treated corn grain, forage, silage or fodder for food, feed or oil purposes.
4. **DO NOT** use treated soybeans, forage, hay, straw or vines for food, feed or oil purposes.
5. **DO NOT** apply this product through any type of irrigation system.
6. Take necessary precautions such as hooded sprayers and not spraying in windy conditions to minimize drift to desirable plants that do not contain a glufosinate-ammonium tolerance gene.
7. Thoroughly triple rinse sprayer and use a commercial tank cleaner before using in other crops. Make sure any rinsate or foam is thoroughly removed from spray tank and boom. Rinsate may be disposed of in noncrop areas that do not contain desirable vegetation.
8. **DO NOT** apply more than two applications of REMOVE™ Herbicide to the corn or soybean crop. **DO NOT** exceed 80 ounces of REMOVE™ Herbicide on corn or soybean per growing season.

**APPLICATION DIRECTIONS FOR COTTON SEED PROPAGATION**

**INSTRUCTIONS FOR SEED HANDLING, STORAGE, AND USE**

Seed from treated cotton plants must be held in secured storage until used for planting purposes or destroyed. Seed from treated cotton plants must be labeled as follows: "Do Not Use for Feed or Food Purposes. Store Away from Feed and Food Stuffs." In addition, label the planting seed with the "Seed Disposal" statements found in the "Storage and Disposal" section of this label.

**RESTRICTIONS TO THE DIRECTIONS FOR USE IN COTTON SEED PROPAGATION**

1. **DO NOT** use cottonseed, gin trash or any cottonseed processed commodities obtained from plants treated with REMOVE™ Herbicide for food or feed consumption.
2. **DO NOT** apply more than 40 fluid ounces per acre of REMOVE™ Herbicide to cotton in a single application.
3. **DO NOT** apply more than 80 fluid ounces per acre of REMOVE™ Herbicide to cotton per season.
4. **DO NOT** plant rotation crops in a field treated with REMOVE™ Herbicide for 120 days or more after the last application of this product with the exception of wheat, barley, buckwheat, millet, oats, rye, sorghum, and triticale which may be planted 70 days or more after the last application of this product. Corn, soybeans, canola, or sugarbeets tolerant to glufosinate-ammonium may be planted at any time.
5. **DO NOT** apply this product through any type of irrigation system.

**APPLICATION METHODS FOR COTTON SEED PROPAGATION**

Uniform, thorough spray coverage is important to achieve consistent weed control. For best results, use flat-fan nozzles.

**Ground Application:** REMOVE™ Herbicide should be applied broadcast in a minimum of 15 gallons of water per acre. Use a spray volume of 20 to 40 gallons of water per acre under dense weed and crop populations so that thorough spray coverage will be obtained. Apply REMOVE™ Herbicide using 80-degree or 110-degree flat-fan nozzles. Select a spray pressure between 30 to 60 pounds per square inch (measured at the nozzle) that will achieve a droplet size of about 300 microns. If Turbo TeeJet® spray tips are used, a spray pressure of 60 or more pounds per square inch will be required to get thorough coverage of the weed and crop foliage. Flood-jet nozzles, raindrop nozzles, controlled droplet application equipment or air-assisted spray equipment do not provide adequate coverage and are not recommended.

Do not apply when winds are gusty or when conditions will favor movement of spray particles off the desired spray target as injury to off-site vegetation may occur. Apply REMOVE™ Herbicide with the spray boom as low as possible while maintaining a uniform spray pattern.

**Rate Recommendations and Timing for Cotton Seed Propagation**

For the selection of susceptible cotton plant "segregates", apply REMOVE™ Herbicide as an over-the-top foliar spray or as a post-directed spray from emergence up to the early bloom stage. Up to 40 fluid ounces of REMOVE™ Herbicide per acre may be used per application. Do not apply more than 80 fluid ounces per acre of REMOVE™ Herbicide per season.

**TANK MIX RECOMMENDATIONS FOR USE IN COTTON SEED PROPAGATION**

REMOVE™ Herbicide may be applied in tank mix combination with labeled rates of the herbicides listed below, provided that the herbicide is needed for weed control. The tank mix must be used in accordance with label instructions. No label dosage rates may be exceeded. REMOVE™ Herbicide cannot be mixed with any product containing a label prohibition against such mixing. Refer to the specific crop section for rate recommendations and other restrictions. The following herbicides may be mixed with REMOVE™ Herbicide to enhance weed control and provide residual control.

AIM™ Herbicide	Glyphosate	MSMA
Caparol® 4L Herbicide	Direx® 4L Herbicide	Pendimex™ 3.3 Herbicide
Cotoran® 4L Herbicide	Direx® 80DF Herbicide	Prowl® 3.3EC Herbicide
Cotoran® DF Herbicide	Karmex® DF Herbicide	Staple® Herbicide

### APPLICATION DIRECTIONS FOR CORN SEED TREATMENT

REMOVE™ Herbicide may be applied as a seed treatment for the control of susceptible corn "segregates" during the propagation of glufosinate-ammonium tolerant seed. Apply REMOVE Herbicide to seed in liquid or slurry treaters at a rate of up to 80 fluid ounces per 100 pounds of seed. REMOVE Herbicide may be applied with other registered seed treatment insecticides and fungicides.

Treated seed must not be used for or mixed with food or animal feed, or processed for oil. Federal law requires that bags containing the treated seed shall be labeled with the following statement: "This seed has been treated with glufosinate-ammonium herbicide. Do not use for feed, food or oil purposes. Store away from feed and foodstuffs". In addition, label treated corn seed with the "Seed Disposal" statements found in the "Storage and Disposal" section of this label.

### 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 Aventis CropScience. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** AVENTIS 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 Aventis CropScience is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. AVENTIS 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 AVENTIS CROPSCIENCE'S ELECTION, THE REPLACEMENT OF PRODUCT.

Aventis CropScience USA LP  
P.O. Box 12014, 2 T.W. Alexander Drive  
Research Triangle Park, North Carolina 27709

Remove is a trademark of the Aventis Group.  
Pendimex is a trademark of Dow AgroSciences.  
Karmex and Staple are registered trademarks of E.I. duPont de Nemours and Co.  
Aim is a trademark of FMC Corporation.  
Cotoran is a registered trademark of Makhteshim Agan North America.  
Direx is a registered trademark of Griffin Corporation.

Remove Herbicide (PENDING) Submitted 4/12/02, Resubmitted 4/18/02, Resubmitted 4/23/02.