



U.S. ENVIRONMENTAL PROTECTION AGENCY  
 Office of Pesticide Programs  
 Biopesticides and Pollution Prevention Division (7511P)  
 1200 Pennsylvania Ave., N.W.  
 Washington, D.C. 20460

EPA Reg. Number:

71693-2

Date of Issuance:

6/25/2015

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
 (under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

*Aspergillus flavus* AF36 Prevail

Name and Address of Registrant (include ZIP Code):

Arizona Cotton Research and Protection Council  
 3721 E. Wier Avenue  
 Phoenix, AZ 85040

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA Registration Number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA or the Act).

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency (EPA). In order to protect health and the environment, the Administrator, on his or her motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under the Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration or registration review of your product when the EPA requires all registrants of similar products to submit such data.
2. Submit storage stability data (Guideline 830.6317) as this data requirement is not satisfied. A one-year study is required to satisfy the data requirement. You have 18 months from the date of this registration to submit a study to the EPA.

Signature of Approving Official:

Shannon Borges, Team Leader  
 Microbial Pesticides Branch  
 Biopesticides and Pollution Prevention Division (7511P)  
 Office of Pesticide Programs

Date:

6/25/2015

3. Make the following labeling change before you release this product for shipment:
  - Revise the EPA Registration Number to read, “EPA Reg. No. 71693-2.”
4. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

Should you wish to add/retain a reference to your company’s website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance Assurance.

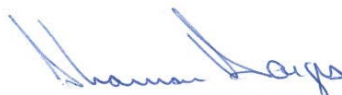
Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statement of Formula (CSF):

- Basic CSF dated 12/17/2014

Any CSFs other than the CSF listed above are superseded.

If you have any questions, please contact Michael Glikes of my team by phone at (703)305-6231 or via email at [glikes.michael@epa.gov](mailto:glikes.michael@epa.gov).

Sincerely,



Shannon Borges, Team Leader  
Microbial Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511P)  
Office of Pesticide Programs

Enclosure

# Aspergillus flavus AF36 Prevail

**COTTON:** FOR USE ONLY IN THE STATES OF ARIZONA, TEXAS AND CALIFORNIA (Imperial, Riverside and San Bernardino counties only)

**CORN:** FOR USE ONLY IN THE STATES OF ARIZONA AND TEXAS

**PISTACHIO:** FOR USE ONLY IN THE STATES OF CALIFORNIA, ARIZONA, TEXAS AND NEW MEXICO

For displacing aflatoxin-producing fungi

**Aspergillus flavus AF36** is a strain of *Aspergillus flavus* that occurs naturally. When applied to cotton just prior to first bloom, to corn from the 7 leaf stage (V7) until silking, or to pistachio from late May through early July, **Aspergillus flavus AF36** competes with strains of *Aspergillus flavus* that produce large amounts of aflatoxin and, in doing so, limits the amount of these high aflatoxin producers that become associated with the crop.

Active ingredient: <i>Aspergillus flavus</i> strain AF36*	0.0008%
Other inert ingredients:	99.9992%
Total:	100.0000%

\* Contains a minimum of 3,000 CFU/gram in the End-Use Product

KEEP OUT OF REACH OF CHILDREN

## CAUTION

First Aid	
<b>IF INHALED:</b>	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.
<b>IF ON SKIN OR CLOTHING:</b>	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.
<b>IF IN EYES:</b>	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.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

SEE PRECAUTIONARY STATEMENTS BELOW AND ON OTHER PANEL

EPA Registration No.: 71693-E  
EPA Establishment No.: 71693-AZ-001

Arizona Cotton Research and Protection Council  
3721 E. Wier Avenue  
Phoenix, Arizona 85040

**NET WEIGHT: 50 lb bags, 1000-3000 lb bulk bags or boxes**

**BATCH CODE:**

**Sell or Use Before:**

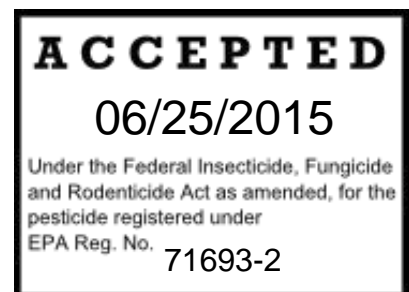
[Stamped date will be 6 months from the date of manufacturing]

**NOT FOR SALE OR USE AFTER THE DATE STAMPED ABOVE**

## PRECAUTIONARY STATEMENTS

### HAZARD TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if inhaled or absorbed through skin. Avoid breathing dust. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.



## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers/loaders, flaggers, markers, and applicators must wear a long-sleeved shirt, long pants, socks, shoes, waterproof gloves, goggles, and a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95 or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

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

### USER SAFETY RECOMMENDATIONS

Users should:

- 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, 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 washwater or rinseate.

## 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 State or Tribal agency responsible for pesticide regulation.

Read all label directions before using.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and 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 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 4 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, waterproof gloves, shoes, socks, goggles, and a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95 or P-95.

## PRODUCT INFORMATION

***Aspergillus flavus* AF36** is for application to cotton, corn and pistachio to displace aflatoxin-producing strains of *Aspergillus flavus*.

***Aspergillus flavus* AF36** is a living fungus growing on grain, which serves as both a carrier and a nutrient source. After application and once the colonized grain is exposed to sufficient moisture (this may occur at irrigation), ***Aspergillus flavus* AF36** will grow out and the grain will be covered with green spores. This growing fungus will first appear as white fuzz and later as green fuzz. The green spores will eventually be spread to the crop by wind and insects in the same manner that aflatoxin-producing fungi are spread.

## USE PRECAUTIONS

Do not apply as a tank mixture with fertilizers, insecticides, or fungicides. Apply ***Aspergillus flavus* AF36** only 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. ***Aspergillus flavus* AF36** may be applied to irrigated cotton, corn and pistachio fields.

## APPLICATION INSTRUCTIONS

### Ground Application: **COTTON**

1. Apply ***Aspergillus flavus* AF36** to the surface of the soil under the plant canopy with a tractor-mounted, granular applicator. DO NOT COVER THE AF36 COLONIZED GRAIN WITH SOIL.
2. Adjust the applicator to optimize delivery of ***Aspergillus flavus* AF36** under the canopy and to minimize delivery of ***Aspergillus flavus* AF36** to furrows.
3. ***Aspergillus flavus* AF36** has been shown to be effective when applied from late May through June, prior to first bloom. Make a single application during the last cultivation before bloom.
4. Furrow irrigating the crop with at least 2 inches of water within 3 days after application of ***Aspergillus flavus* AF36** will provide best results.
5. Use 10 lbs of ***Aspergillus flavus* AF36** per acre of cotton (per 13,000 linear feet based on 40-inch rows).

### Ground Application: **CORN**

1. Apply ***Aspergillus flavus* AF36** directly to the soil or under the plant canopy after last cultivation with a tractor-mounted, granular applicator. Make a single application from the V7 growth stage until emergence of the silks from the husk. Cultivation must be completed before Application. DO NOT COVER THE AF36 COLONIZED GRAIN WITH SOIL.
2. Adjust the applicator to optimize delivery of ***Aspergillus flavus* AF36** under the canopy and to minimize delivery of ***Aspergillus flavus* AF36** to areas without corn.
3. Rain or irrigation within 3 days of application of ***Aspergillus flavus* AF36** will improve results.
4. Use 10 lbs of ***Aspergillus flavus* AF36** per acre of corn (per 13,000 linear feet based on 40-inch rows).

### Ground Application: **PISTACHIO**

1. Apply ***Aspergillus flavus* AF36** to the surface of the soil under the plant canopy with a granular applicator. DO NOT COVER THE AF36 COLONIZED GRAIN WITH SOIL.
2. Adjust the applicator to optimize delivery of ***Aspergillus flavus* AF36** under the canopy and to minimize delivery of ***Aspergillus flavus* AF36** to areas that do not get wet.
3. ***Aspergillus flavus* AF36** has been shown to be effective when applied from late May through early July. A single application should be made each year.
4. Rain or irrigation within 3 days after application of ***Aspergillus flavus* AF36** will improve results.
5. Use 10 lbs of ***Aspergillus flavus* AF36** per acre of pistachio.

### Aerial Application: **COTTON, CORN or PISTACHIO**

1. Apply by air at the appropriate rate, timing, and frequency as described for corn, cotton and pistachio ground applications.
2. Cultivation after application may diminish efficacy.
3. Rain or irrigation within 3 days after application of ***Aspergillus flavus* AF36** will improve results.

*Aspergillus flavus* AF36 is a naturally occurring fungus that displaces aflatoxin-producing fungi within the crop environment. AF36 has been shown to reduce aflatoxin both in laboratory studies and in commercial pistachio orchards.

## STORAGE AND DISPOSAL

DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE AND DISPOSAL.

**PESTICIDE STORAGE:** Store dry. Do not expose to relative humidity greater than 80% prior to use. This product contains a living organism that must be alive to work. Do not store under extreme conditions. Do not freeze. Do not expose to temperatures above 50° C (122° F).

**PESTICIDE DISPOSAL:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

### CONTAINER HANDLING:

Paper Bags (50 lb) – Nonrefillable container. Do not reuse or refill container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Returnable/Refillable Bulk Bags and Boxes (1000-3000 lb) – Refillable container. Return empty container to point of purchase. Refill this container with *Aspergillus flavus* AF36 only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, completely empty bag (or box) into application equipment. Then offer for recycling if available or dispose of empty bag (or box) in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

## WARRANTY STATEMENT

To the extent consistent with applicable law, user assumes all risks of use, storage, and handling of this material not in strict accordance with directions provided on this label.