

MATERIAL SAFETY DATA SHEET

Product Name: *Aspergillus flavus* AF36 Prevail

Trade names/synonyms: None.
EPA Registration Number: 71693-2.
Primary Hazards: None known.

Contacts:

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United States Department of Agriculture
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University of Arizona
Desk: 520-626-5049
Secretary: 520-626-6775
Lab: 520-626-5704

Mailing Address:

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School of Plant Sciences
University of Arizona
Forbes Building, Room 303
1140 East South Campus Drive
Tucson, Arizona 85721

Arizona Cotton Research and Protection Council
3721 E Wier Avenue
Phoenix, AZ 85040
(O) 602-438-0059
(F) 602-438-0407

Read attached pesticide label for this product.

SECTION 1: MATERIAL IDENTIFICATION

Cleaned 100% roasted grain seeds (sorghum or wheat) coated with an atoxigenic (does not produce aflatoxins) strain of *Aspergillus flavus* called AF36 mixed with a polymer for adhesion of spore containing inoculum plus a colorant for ease of identification (see attached SDS info). *Aspergillus flavus* AF36 is a strain of *Aspergillus flavus* that occurs naturally on the cotton crop. *Aspergillus flavus* AF36 reduces the quantity of aflatoxin contaminating the crop.

Common Name: *Aspergillus flavus* AF36 Prevail
Chemical Name: Not applicable
Molecular Formula: Not applicable
CAS Number: Not applicable

OTHER INGREDIENTS: None

SECTION 2: PHYSICAL DATA

Physical Properties of this Product are Consistent with those of Whole-Grain Wheat

Boiling Point:	Not applicable
Melting Point:	Not applicable
Density:	45 lb/ft ³
Solubility in Water:	Not soluble in water.
Appearance:	Whole grains of Sorghum or Wheat.
Color:	Dark Blue.
Odor:	None.

SECTION 3: FIRE AND EXPLOSION DATA

Flash Point:	Not applicable.
Extinguishing Media:	Class A Fire Extinguisher. Use extinguishing media appropriate for whole-grain seed.
Special Fire Fighting Procedures:	None.
Unusual Fire & Explosion Hazards:	Product consists of cleaned, roasted (sterilized) grain seed that contains very low dust levels (grain dust LEL (Lower Explosion Limit) 55 g/m ³).

SECTION 4: REACTIVITY

Stability:	Stable (the same reactivity as whole-grain seed).
Hazardous polymerization:	Will not occur.
Incompatibility:	None known.
Hazardous decomposition products:	None known.
Conditions to avoid:	None known.

SECTION 5: HEALTH HAZARDS

Primary Route of Entry:	Oral, Inhalation, and Eye.
Exposure Limit:	Not Established.
Corrosive:	Not Corrosive.
Skin/Eye Irritation:	May be irritating to skin and eyes for some individuals.
Inhalation:	Product has a very low dust content. However, avoid breathing any dust associated with product. Dust may be irritating to respiratory tract for some individuals. The OSHA PEL (Permissible Exposure Limit) for grain dust is 10 mg/m ³ (total dust) and the ACGIH TLV (Threshold Limit Value) is 4 mg/m ³

	(respirable dust).
Effects of Overexposure:	If product comes in contact with eyes or skin, irritation may occur.
Toxicity:	None known.
Acute Oral LD ₅₀ (Rat):	No toxicity detected. Not toxic at 5000 mg/kg
Carcinogenicity:	None Known. Not listed in NTP and IARC.

Some strains of *Aspergillus flavus* are known to cause adventitious infections of compromised hosts. However, in animal (rat and quail) tests, strain AF36 of *Aspergillus flavus* was found to be not infective.

If this product is exposed to moisture and favorable temperatures, the fungus (*Aspergillus flavus* AF36 Prevail) will grow on the grain seeds and produce spores. When the fungus produces spores, the grain seed appears green, the color of the spores. Spores of the fungus, *Aspergillus flavus*, are known to be allergens.

SECTION 6: FIRST AID

The same as for handling grain.

If in eyes:	Flush eyes with plenty of water. Call a physician if irritation persists.
If on skin:	Wash with soap and water. Get medical attention if irritation persists. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
If inhaled:	Inhalation toxicity has not been detected. If exposed, remove victim to fresh air. If not breathing, give artificial respiration. Get medical attention.
If swallowed:	Material was not toxic in animal tests. However, material should not be consumed. If swallowed, call a poison control center or physician. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting.

SECTION 7: SPILL LEAK AND DISPOSAL PROCEDURES

Steps to be taken in case material is released or spilled:

Wear suitable protective clothing such as long-sleeved shirt, pants, waterproof gloves and shoes with socks. Carefully sweep up spill and place in a closed container for disposal. Dispose of in accordance with all applicable federal, state, and local environmental regulations.

If the product gets wet and temperatures are favorable, the fungus will grow on the grain seeds

and produce spores. These spores can be wet down and washed away with soapy water.

SECTION 8: SPECIAL HANDLING

Respiratory: Use dust/mist filtering respirator with MSHA/NIOSH approval number prefix N-95, P-95, or R-95 or TC-21C or HE filter.

Protective gloves: Gloves made of latex or other impervious material.

Eye protection: Safety goggles or safety glasses with side shields recommended.

Other protective clothes: Clothing to prevent prolonged skin contact as needed such as long-sleeved shirt, long pants and shoes with socks.

SECTION 9: SPECIAL PRECAUTIONS

Store in a dry area inaccessible to children. Store in original containers only. Keep container closed when not in use.

Send empty container to: Dr. Peter J. Cotty or Leighton Liesner
c/o, Arizona Cotton Research and Protection Council
3721 East Wier Ave.
Phoenix, Arizona 85040-2933

Wash any contamination from skin or eyes immediately. Wash hands and exposed skin after work and before eating, drinking, using tobacco, chewing gum, or using the toilet.

SECTION 10: SHIPPING REGULATIONS

Proper shipping name: None
DOT Label (s) Required: None
Freight Classification: Insecticides, Fungicides N.O.I., Other than Poisons. NMFC 102120 Class 60

SARA Title III Status: None.

National Fire Protection Association Rating:
Health: 0
Flammability: 1
Reactivity: 0

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