

# SAFETY DATA SHEET



## ALLEGIANCE®-FL SEED TREATMENT FUNGICIDE

Version 5.0 / USA  
102000027133

1/11  
Revision Date: 01/25/2023  
Print Date: 01/27/2023

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### Product identifier

**Trade name** ALLEGIANCE®-FL SEED TREATMENT FUNGICIDE  
**Product code (UVP)** 84961019  
**SDS Number** 102000027133  
**EPA Registration No.** 264-935

#### Relevant identified uses of the substance or mixture and uses advised against

**Use** Fungicide, Seed treatment  
**Restrictions on use** See product label for restrictions.

#### Information on supplier

**Supplier** Bayer CropScience LP  
800 North Lindbergh Blvd.  
St. Louis, MO 63167  
USA  
**Responsible Department** Email: SDSINFO.BCS-NA@bayer.com

#### Emergency telephone no.

**Emergency Telephone Number (24hr/ 7 days)** 1-800-334-7577  
**Product Information Telephone Number** 1-866-99BAYER (1-866-992-2937)

### SECTION 2: HAZARDS IDENTIFICATION

#### Classification in accordance with regulation HCS 29CFR §1910.1200

Eye irritation: Category 2B  
Acute toxicity(Inhalation): Category 4

#### Labelling in accordance with regulation HCS 29CFR §1910.1200



**Signal word:** Warning

**Hazard statements**

# SAFETY DATA SHEET



## ALLEGIANCE®-FL SEED TREATMENT FUNGICIDE

Version 5.0 / USA  
102000027133

2/11  
Revision Date: 01/25/2023  
Print Date: 01/27/2023

Causes eye irritation.  
Harmful if inhaled.

### Precautionary statements

Wash thoroughly after handling.  
Avoid breathing dust, mist, spray.  
Use only outdoors or in a well-ventilated area.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/ attention.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Call a POISON CENTER/doctor/physician if you feel unwell.

### Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified.  
No health hazards not otherwise classified.

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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Metalaxyl	57837-19-1	28.35

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## SECTION 4: FIRST AID MEASURES

### Description of first aid measures

<b>General advice</b>	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<b>Inhalation</b>	Move 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 physician or poison control center immediately.
<b>Skin contact</b>	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
<b>Eye contact</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 physician or poison control center immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	To date no symptoms are known.
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# SAFETY DATA SHEET



## ALLEGIANCE®-FL SEED TREATMENT FUNGICIDE

Version 5.0 / USA  
102000027133

3/11  
Revision Date: 01/25/2023  
Print Date: 01/27/2023

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### Indication of any immediate medical attention and special treatment needed

**Treatment** Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

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## SECTION 5: FIREFIGHTING MEASURES

### Extinguishing media

**Suitable** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable** High volume water jet

**Special hazards arising from the substance or mixture** Dangerous gases are evolved in the event of a fire.

### Advice for firefighters

**Special protective equipment for firefighters** Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing. In the event of fire and/or explosion do not breathe fumes.

**Further information** Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

### Specific hazards from the substance or mixture which can increase the fire

**Flash point** No data available

**Auto-ignition temperature** No data available

**Lower explosion limit** No data available

**Upper explosion limit** No data available

**Explosivity** No data available

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# SAFETY DATA SHEET



## ALLEGIANCE®-FL SEED TREATMENT FUNGICIDE

Version 5.0 / USA  
102000027133

4/11  
Revision Date: 01/25/2023  
Print Date: 01/27/2023

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### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

**Precautions** Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

#### Methods and materials for containment and cleaning up

**Methods for cleaning up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

**Additional advice** Use personal protective equipment. If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal.

**Reference to other sections** Information regarding safe handling, see section 7.  
Information regarding personal protective equipment, see section 8.  
Information regarding waste disposal, see section 13.

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### SECTION 7: HANDLING AND STORAGE

#### Precautions for safe handling

**Advice on safe handling** Handle and open container in a manner as to prevent spillage. Use only in area provided with appropriate exhaust ventilation.

**Hygiene measures** Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.  
Remove Personal Protective Equipment (PPE) immediately after handling this product. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

#### Conditions for safe storage, including any incompatibilities

**Requirements for storage areas and containers** Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Keep away from direct sunlight. Protect from freezing.

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### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

No known occupational limit values.

#### Exposure controls

# SAFETY DATA SHEET



## ALLEGIANCE®-FL SEED TREATMENT FUNGICIDE

Version 5.0 / USA  
102000027133

5/11  
Revision Date: 01/25/2023  
Print Date: 01/27/2023

### Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

<b>Respiratory protection</b>	When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.
<b>Hand protection</b>	Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton)
<b>Eye protection</b>	Safety glasses with side-shields
<b>Skin and body protection</b>	Wear long-sleeved shirt and long pants and shoes plus socks.
<b>General protective measures</b>	Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Form</b>	Liquid
<b>Colour</b>	light brown
<b>Odour</b>	musty
<b>Odour Threshold</b>	No data available
<b>pH</b>	5.0 - 8.0 (100 %) (23 °C)
<b>Melting point/range</b>	No data available
<b>Boiling Point</b>	No data available
<b>Flash point</b>	No data available
<b>Flammability</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Thermal decomposition</b>	No data available
<b>Minimum ignition energy</b>	No data available
<b>Self-accelerating decomposition temperature (SADT)</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Lower explosion limit</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Evaporation rate</b>	No data available

# SAFETY DATA SHEET



## ALLEGIANCE®-FL SEED TREATMENT FUNGICIDE

Version 5.0 / USA  
102000027133

6/11  
Revision Date: 01/25/2023  
Print Date: 01/27/2023

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<b>Relative vapour density</b>	No data available
<b>Relative density</b>	No data available
<b>Density</b>	ca. 1.10 g/cm <sup>3</sup> (20 °C)
<b>Water solubility</b>	dispersible
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Viscosity, dynamic</b>	250 - 600 mPa.s (25 °C) 160 - 300 mPa.s (20 °C) Velocity gradient 20 /s 75 - 115 mPa.s (20 °C) Velocity gradient 100 /s
<b>Viscosity, kinematic</b>	No data available
<b>Oxidizing properties</b>	No data available
<b>Explosivity</b>	No data available
<b>Other information</b>	Further safety related physical-chemical data are not known.

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### SECTION 10: STABILITY AND REACTIVITY

<b>Reactivity</b>	Stable under normal conditions.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	No hazardous reactions when stored and handled according to prescribed instructions.
<b>Conditions to avoid</b>	Extremes of temperature and direct sunlight.
<b>Incompatible materials</b>	Strong acids, Strong bases, Oxidizing agents
<b>Hazardous decomposition products</b>	No decomposition products expected under normal conditions of use.

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### SECTION 11: TOXICOLOGICAL INFORMATION

<b>Exposure routes</b>	Skin contact, Eye contact, Ingestion, Inhalation
<b>Immediate Effects</b>	
<b>Eye</b>	May cause temporary eye irritation.

# SAFETY DATA SHEET



## ALLEGIANCE®-FL SEED TREATMENT FUNGICIDE

Version 5.0 / USA  
102000027133

7/11  
Revision Date: 01/25/2023  
Print Date: 01/27/2023

<b>  Skin</b>	May be harmful in contact with skin. Causes severe skin irritation
<b>  Ingestion</b>	May be harmful if swallowed.
<b>  Inhalation</b>	Harmful if inhaled.

### Information on toxicological effects

<b>Acute oral toxicity</b>	LD50 (Rat) > 2,900 mg/kg
<b>Acute inhalation toxicity</b>	LC50 (Rat) > 2.67 mg/l Exposure time: 4 h Determined in the form of liquid aerosol.
<b>Acute dermal toxicity</b>	LD50 (Rabbit) > 2,000 mg/kg
<b>Skin corrosion/irritation</b>	No skin irritation (Rabbit)
<b>Serious eye damage/eye irritation</b>	Moderate eye irritation. (Rabbit)
<b>Respiratory or skin sensitisation</b>	Skin: Non-sensitizing. (Guinea pig)

### Assessment STOT Specific target organ toxicity – single exposure

Metalaxyl: Based on available data, the classification criteria are not met.

### Assessment STOT Specific target organ toxicity – repeated exposure

Metalaxyl did not cause specific target organ toxicity in experimental animal studies.

### Assessment mutagenicity

Metalaxyl was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

### Assessment carcinogenicity

Metalaxyl was not carcinogenic in lifetime feeding studies in rats and mice.

### ACGIH

None.

### NTP

None.

### IARC

None.

### Assessment toxicity to reproduction

Metalaxyl did not cause reproductive toxicity in a multi-generation study in rats.

### Assessment developmental toxicity

Metalaxyl did not cause developmental toxicity in rats and rabbits.

### Aspiration hazard

Based on available data, the classification criteria are not met.

### Further information

Only acute toxicity studies have been performed on the formulated product.

# SAFETY DATA SHEET



## ALLEGIANCE®-FL SEED TREATMENT FUNGICIDE

Version 5.0 / USA  
102000027133

8/11  
Revision Date: 01/25/2023  
Print Date: 01/27/2023

The non-acute information pertains to the active ingredient(s).

### SECTION 12: ECOLOGICAL INFORMATION

<b>Toxicity to fish</b>	LC50 (Lepomis macrochirus (Bluegill sunfish)) > 100 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient metalaxyl.  LC50 (Oncorhynchus mykiss (rainbow trout)) > 100 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient metalaxyl.
<b>Toxicity to aquatic invertebrates</b>	LC50 (Daphnia (water flea)) > 28 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient metalaxyl.  EC50 (Mysidopsis bahia (mysid shrimp)) 25 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient metalaxyl.  EC50 (Oyster) 4.6 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient metalaxyl.
<b>Toxicity to aquatic plants</b>	IC50 (algae) 33 mg/l Exposure time: 5 Days The value mentioned relates to the active ingredient metalaxyl.
<b>Biodegradability</b>	Metalaxyl: Not rapidly biodegradable
<b>Koc</b>	Metalaxyl: Koc: 163
<b>Bioaccumulation</b>	Metalaxyl: Bioconcentration factor (BCF) < 7 Does not bioaccumulate.
<b>Mobility in soil</b>	Metalaxyl: Moderately mobile in soils
<b>Results of PBT and vPvB assessment</b>	
<b>PBT and vPvB assessment</b>	Metalaxyl: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
<b>Additional ecological information</b>	No further ecological information is available.
<b>Environmental precautions</b>	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 surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.



# SAFETY DATA SHEET



## ALLEGIANCE®-FL SEED TREATMENT FUNGICIDE

Version 5.0 / USA  
102000027133

9/11  
Revision Date: 01/25/2023  
Print Date: 01/27/2023

Do not apply when weather conditions favor runoff or drift.  
Apply this product as specified on the label.

### SECTION 13: DISPOSAL CONSIDERATIONS

#### Waste treatment methods

<b>Product</b>	Dispose in accordance with all local, state/provincial and federal regulations.
<b>Contaminated packaging</b>	Consult state and local regulations regarding the proper disposal of container. Follow advice on product label and/or leaflet.
<b>RCRA Information</b>	Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

### SECTION 14: TRANSPORT INFORMATION

According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.

Freight Classification: INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN POISON !!!!-KEEP FROM FREEZING-!!!!

### SECTION 15: REGULATORY INFORMATION

**EPA Registration No.** 264-935

#### US Federal Regulations

##### TSCA list

Water	7732-18-5
White mineral oil	8042-47-5
Urea	57-13-6
1,2-Propanediol	57-55-6
Kaolin	1332-58-7
Polyethylene-polypropylene copolymer	9003-11-6

#### US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

No export notification needs to be made.

#### SARA Title III - Section 302 - Notification and Information

Not applicable.

#### SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

**US States Regulatory Reporting**  
**CA Prop65**

# SAFETY DATA SHEET



## ALLEGIANCE®-FL SEED TREATMENT FUNGICIDE

Version 5.0 / USA  
102000027133

10/11  
Revision Date: 01/25/2023  
Print Date: 01/27/2023

This product does not contain any substances known to the State of California to cause cancer.

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Crystalline quartz (respirable)	14808-60-7	Carcinogenic.
Quartz (SiO <sub>2</sub> )	14808-60-7	Carcinogenic.

### US State Right-To-Know Ingredients

Urea	57-13-6	MN
1,2-Propanediol	57-55-6	MN, RI
Kaolin	1332-58-7	MN, RI

### Environmental

#### CERCLA

None.

#### Clean Water Section 307(a)(1)

None.

#### Safe Drinking Water Act Maximum Contaminant Levels

None.

### EPA/FIFRA Information:

This chemical is a pesticide product regulated by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

<b>Signal word:</b>	Warning!
<b>Hazard statements:</b>	Causes skin irritation. Harmful if swallowed or absorbed through skin. Causes moderate eye irritation.

## SECTION 16: OTHER INFORMATION

### Abbreviations and acronyms

49CFR	Code of Federal Regulations, Title 49
ACGIH	US. ACGIH Threshold Limit Values
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
N.O.S.	Not otherwise specified
NTP	US. National Toxicology Program (NTP) Report on Carcinogens

# SAFETY DATA SHEET



## ALLEGIANCE®-FL SEED TREATMENT FUNGICIDE

Version 5.0 / USA  
102000027133

11/11  
Revision Date: 01/25/2023  
Print Date: 01/27/2023

OECD	Organization for Economic Co-operation and Development
TDG	Transportation of Dangerous Goods
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

### NFPA 704 (National Fire Protection Association):

Health - 2      Flammability - 1      Instability - 0      Others - none

### HMIS (Hazardous Materials Identification System, based on the Fourth Edition Ratings Guide)

Health - 1      Flammability - 1      Physical Hazard - 0      PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard,  
\* = chronic health hazard

**Reason for Revision:** The following sections have been revised: Section 11: Toxicological Information.  
Section 15: Regulatory information. Reviewed and updated for general editorial purposes.

**Revision Date:** 01/25/2023

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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