



# SAFETY DATA SHEET

Trade name: PLANT GUARDIAN TM BIOFUNGICIDE WETTABLE POWDER

Print date: 11/29/2019

---

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** PLANT GUARDIAN TM BIOFUNGICIDE WETTABLE POWDER

**Product Type:** Powder Bio-Fungicide

**EPA Reg Number:** 264-1151-56872

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

**Identified Uses:** Bio-fungicide

**Uses Advised Against:** Any use not listed on the label

**Sub Registrant:**

**Gardens Alive**  
230 Mary Ave.  
Greendale IN 47025

**Emergency Phone Numbers:** (513) 354-1483

**Emergency Phone Number (Poison Control):** 800-222-1222

## SECTION 2: HAZARDS IDENTIFICATION

*NOTE: Please refer to Section 11 for detailed toxicological information.*

**Emergency Overview** Caution! May cause mild irritation to eyes. May cause mild irritation to the skin. May cause irritation of respiratory tract. Avoid contact with skin, eyes and clothing. Avoid breathing dust or spray mist.

**Physical State** powder

**Odor** sweet earthy

**Appearance** beige to brown

**Exposure routes** Eye contact, Skin contact, Inhalation

**Immediate Effects**

**Eye** May cause mild irritation to eyes.

**Skin** May cause mild irritation to the skin.

**Inhalation** Mists may cause respiratory tract irritation.



# SAFETY DATA SHEET

Trade name: PLANT GUARDIAN™ BIOFUNGICIDE WETTABLE POWDER

Print date: 11/29/2019

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Average % by Weight
Bacillus subtilis, strain QST 713		14.60

## SECTION 4: FIRST AID MEASURES

**General** When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

**Eye** 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.

**Skin** 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.

**Ingestion** 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.

**Inhalation** 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.

### Notes to physician

**Treatment** Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

## SECTION 5: FIREFIGHTING MEASURES

**Flash point** no data available

**Autoignition temperature** no data available

**Lower Flammability Limit** no data available

**Upper Flammability Limit** no data available

**Explosiveness** no data available

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

### Fire Fighting Instructions

Use appropriate extinguishing media for material that is supplying fuel. 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. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.



# SAFETY DATA SHEET

Trade name: PLANT GUARDIAN™ BIOFUNGICIDE WETTABLE POWDER

Print date: 11/29/2019

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

**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. Do not allow to enter soil, waterways or waste water canal.

## **SECTION 7: HANDLING AND STORAGE**

**Handling procedures** Ensure adequate ventilation. Handle and open container in a manner as to prevent spillage.

**Storing Procedures** 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.

### **Work/Hygienic Procedures**

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.

## **SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**General Protection** There are no known hazards associated with this product when used according to the label directions. The following guidelines should be followed. Do not breathe dust or spray mist. Avoid contact with skin and eyes.

Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

**Eye/Face Protection** Safety glasses with side-shields

**Hand protection** Chemical-resistant gloves made of waterproof material such as neoprene, butyl rubber, barrier laminate or nitrile rubber.

**Body Protection** Wear long-sleeved shirt and long pants and shoes plus socks.

**Respiratory protection** No personal respiratory protective equipment normally required. 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.



## SAFETY DATA SHEET

Trade name: PLANT GUARDIAN™ BIOFUNGICIDE WETTABLE POWDER

Print date: 11/29/2019

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	beige to brown
Physical State	powder
Odor	sweet earthy
pH	4.7 - 7.5 (1 %)
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Bulk density	28 lb/ft <sup>3</sup>
Evaporation rate	no data available
Boiling Point	not applicable
Melting / Freezing Point	not applicable
Water solubility	dispersible
Minimum Ignition Energy	no data available
Partition coefficient: noctanol/ Water	no data available
Viscosity	not applicable

### SECTION 10: STABILITY AND REACTIVITY

**Conditions to avoid** Extremes of temperature and direct sunlight.

**Incompatibility** no data available

**Hazardous  
Decomposition Products** no data available

**Hazardous reactions** No hazardous reactions when stored and handled according to prescribed instructions.

**Chemical Stability** Stable under normal conditions.



# SAFETY DATA SHEET

Trade name: PLANT GUARDIAN TM BIOFUNGICIDE WETTABLE POWDER

Print date: 11/29/2019

## **SECTION 11: TOXICOLOGICAL INFORMATION**

Acute toxicity studies have not been performed on this formulation. Acute data provided is from a similar formulation.

<b>Acute oral toxicity</b>	rat: LD50: > 2,000 mg/kg
<b>Acute dermal toxicity</b>	rabbit: LD50: > 2,000 mg/kg
<b>Acute inhalation toxicity</b>	rat: LC50: 0.63 mg/l Determined in the form of liquid aerosol. Highest attainable concentration. No deaths
<b>Skin irritation</b>	rabbit: No skin irritation
<b>Eye irritation</b>	rabbit: No eye irritation
<b>Sensitisation</b>	guinea pig: Non-sensitizing.
<b>ACGIH</b>	None
<b>NTP</b>	None.
<b>IARC</b>	None.
<b>OSHA</b>	None.

## **SECTION 12: ECOLOGICAL INFORMATION**

### **Environmental Precautions**

Do not allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label.



# SAFETY DATA SHEET

Trade name: PLANT GUARDIAN™ BIOFUNGICIDE WETTABLE POWDER

Print date: 11/29/2019

## **SECTION 13: DISPOSAL CONSIDERATION**

### **General Disposal Guidance**

It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines. Never place unused product down any indoor or outdoor drain.

### **Container Disposal**

Consult state and local regulations regarding the proper disposal of container. Follow advice on product label and/or leaflet.

### **RCRA Information**

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.

## **SECTION 15: REGULATORY INFORMATION**

**EPA Registration No.** 264-1151

**US Federal Regulations**

**TSCA list**

None.

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

None.

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

None.

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

None.

**US States Regulatory Reporting**

**CA Prop65**

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

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

**US State Right-To-Know Ingredients**

None.

**Canadian Regulations**

**Canadian Domestic Substance List**

None.



## SAFETY DATA SHEET

Trade name: PLANT GUARDIAN™ BIOFUNGICIDE WETTABLE POWDER

Print date: 11/29/2019

**Environmental  
CERCLA**  
None.

**Clean Water Section 307 Priority Pollutants**  
None.

**Safe Drinking Water Act Maximum Contaminant Levels**  
None.

### **SECTION 16: OTHER INFORMATION**

**MANUFACTURER DISCLAIMER:** The information contained herein is, to the best of the manufacturer's knowledge and belief, accurate and reliable as of the date of the preparation of this document. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and the manufacturer shall not be liable for any loss or damage arising out of the use thereof. In addition, the manufacturer shall not be liable for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.

**NOTICE:** How this product is used is very important and beyond the control of the seller. The buyer assumes all risks for any use beyond those described on the label or for any use under abnormal conditions.