

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

**Product name:** LifeGard WG  
**EPA Registration No:** 70051-119  
**Product Type:** Wettable Granule  
**Active Ingredient:** *Bacillus mycooides* isolate J  
**CAS No.:** Not applicable

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

**Identified uses:** Biological Plant Activator  
**Uses advised against:** Any use not specified by the label

**1.3. Details of the supplier of the safety data sheet**

**Name:** Certis U.S.A., LLC  
**Address:** 9145 Guilford Road, Suite 175  
Columbia, Maryland 21046  
U.S.A.  
**Phone Number:** +01 (800) 847-5620  
**Website:** <http://www.certisusa.com>

**1.4. Emergency telephone number**

**Emergency number:** +1 800 255-3924

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Hazard Classification:** Eye Irritation 2B  
**Signal Word:** WARNING (EPA Signal Word: Caution, see section 15)  
**Hazard Statements:** Causes eye irritation  
**Pictogram:** None  
**Precautionary Statements:** Harmful if inhaled. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear protective eyewear. Wash thoroughly with soap and water after handling and before eating, drinking chewing gum, using tobacco and using the toilet. Remove and wash contaminated clothing before reuse.

**2.2 Other Hazards:** For Terrestrial Uses: Do not apply directly to water or to areas where surface water is present, or to intertidal areas below mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

**SECTION 3: Composition/information on ingredients**

**3.1. Substances**

Active Ingredient	CAS No.	Wt. %
<i>B. mycoides</i> isolate J	Not applicable	40

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**Generic measures**

- If in eyes:** Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses if present after the first five minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- If inhaled:** 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.

**4.2. Most important symptoms and effects, both acute and delayed**

Not available.

**4.3. Indication of any immediate medical attention and special treatment needed**

Not available.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

- Suitable Extinguishing Media:** All methods
- Unsuitable Extinguishing Media:** None known

**5.2. Special hazards arising from the substance or mixture**

- Hazardous combustion products:** None known

**5.3. Advice for firefighters**

- Protection of Firefighters:** None known

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

- For non-emergency personnel:** To avoid exposure wear long sleeved shirt, long pants, socks, shoes, chemical-resistant gloves, protective eyewear.
- Applicators and other handlers must use a NIOSH approved

particulate respirator with any N, R, or P filter with NIOSH approval number prefix TC-84A; or a NIOSH approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C.

**For emergency responders:** Same as above

### **6.2. Environmental precautions:**

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 wash waters or rinsate. Do not apply when conditions favor drift or runoff from treated areas.

### **6.3. Methods and material for containment and cleaning up**

**Methods for Containment:** None specified.

**Methods for Clean-Up:** None specified.

**Other Information:** If a significant spill occurs, contact CHEM-TEL (800) 255 3924.

### **6.4. Reference to other sections**

See Section 8 for occupational exposure limits and risk management measures. Refer to Section 13 for disposal considerations.

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

See Section 8 for occupational exposure limits, risk management measures and personal protection equipment. Refer to Section 13 for disposal considerations.

### **7.2. Conditions for safe storage, including any incompatibilities**

Store in a dry area inaccessible to children. Store in original containers only. Keep container closed when not in use. Store at temperatures below 77°F (25°C). The product should be used within six months from the date of manufacture.

### **7.3. Specific end use(s)**

Use as a biological pesticide only according to label.

## **SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

**OSHA Permissible Exposure Limits (PELs):** None determined

**ACGIH Threshold Limit Values:** None determined

**Other Exposure Limits:** None determined

**8.2. Exposure controls**

<b>Engineering Controls:</b>	When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agriculture pesticides (40 CFR 170.240(d)(4-6)), the PPE requirements may be reduced or modified as specified in the WPS.
<b>Personal Protective Equipment</b>	
<b>Eye/Face Protection:</b>	Protective eyewear
<b>Skin Protection:</b>	Long-sleeved shirt and long pants Shoes and socks
<b>Hand Protection:</b>	Chemical resistant gloves
<b>Body Protection:</b>	Long-sleeved shirt and long pants
<b>Respiratory Protection:</b>	Applicators and other handlers must use a NIOSH approved particulate respirator with any N, R, or P filter with NIOSH approval number prefix TC-84A; or a NIOSH approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

<b>Appearance:</b>	Brown granules
<b>Odour:</b>	Yeast like
<b>Odour Threshold:</b>	Not available
<b>pH 1% dilution:</b>	5.5-7.5
<b>Melting Point / Freezing Point:</b>	Not applicable
<b>Initial Boiling Point:</b>	Not applicable
<b>Boiling Range:</b>	Not applicable
<b>Flash Point:</b>	Not available
<b>Evaporation Rate:</b>	Not applicable
<b>Flammability (solid, gas):</b>	Not available
<b>Lower &amp; Upper Flammability Limits:</b>	Not available
<b>Vapour Pressure:</b>	Not available
<b>Vapour Density:</b>	Not available
<b>Density:</b>	0.65-0.75 g/cc (CIPAC MT 186)
<b>Solubility:</b>	Not applicable
<b>Partition Coefficient (n-octanol/water):</b>	Not available
<b>Auto-ignition Temperature:</b>	Not determined
<b>Decomposition Temperature:</b>	Not available

Viscosity: Not applicable  
Other relevant properties: None

**9.2. Other information**

Not available.

**SECTION 10: Stability and reactivity**

<b>10.1. Reactivity</b>	No known hazardous reactions when handled and stored according to stated provisions.
<b>10.2. Chemical stability</b>	Stable when handled and stored according to stated provisions.
<b>10.3. Possibility of hazardous reactions</b>	No known hazardous reactions.
<b>10.4. Conditions to avoid</b>	No known conditions to avoid when handled and stored according to stated provisions.
<b>10.5. Incompatible materials</b>	No known incompatible materials.
<b>10.6. Hazardous decomposition products</b>	No known hazardous decomposition products

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute Toxicity**

**Toxicological information on the substance or mixture:**

<b>LD<sub>50</sub> (oral)</b>	> 5000 mg/kg
<b>LD<sub>50</sub> (dermal)</b>	> 5050 mg/kg
<b>LC<sub>50</sub> (inhalation)</b>	No toxicity expected.

<b>Skin corrosion / irritation:</b>	Non-irritating
-------------------------------------	----------------

<b>Eye irritation:</b>	Severely irritating, with all positive effects cleared by 72 hours, EPA Toxicity Category III
------------------------	---

<b>Respiratory or skin sensitization:</b>	Not required.
---	---------------

**Other information on adverse health effects:**

**Carcinogenicity**

<b>NTP Listed:</b>	Not applicable.
<b>IARC Listed:</b>	Not applicable.
<b>OSHA:</b>	Not applicable.

**11.2 Reference to other sections**

See Section 4 for symptoms and acute and delayed effects.

**SECTION 12: Ecological information**

**12.1. Toxicity**

Test species	Test method	Test substance	LC <sub>50</sub>
Northern Bobwhite	Acute Oral	BmJ TGAI	LD <sub>50</sub> > 2250 mg/kg
<i>Oncorhynchus mykiss</i>	96-hour Acute	BmJ TGAI	96-hour LC <sub>50</sub> > 6.22 x 10 <sup>6</sup> CFU/mL
<i>Daphnia magna</i>	48-hour Acute	BmJ TGAI	48-hour LC <sub>50</sub> > 6.22 x 10 <sup>6</sup> CFU/mL
<i>Apis mellifera</i> L.	Acute Oral	BmJ TGAI	LD <sub>50</sub> = 0.24 g/L

**12.2. Persistence and degradability** No data available

**12.3. Bioaccumulative potential** No data available

**12.4. Mobility in soil** No data available

**12.5. Other adverse effects** No data available

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal Instructions:** Do not contaminate water, food, or feed by storage and disposal. Do not contaminate water by cleaning equipment or disposal of waste.

*Pesticide Storage:* Store in a dry area inaccessible to children. Store in original container only. Keep container closed when not in use. Store at temperatures below 77°F (25°C). The product should be used within six months from the date of manufacture.

*Pesticide Disposal:* To avoid wastes, use all material in this container by application according to label directions. Wastes resulting from the use of this product may be disposed of onsite or at an approved waste disposal facility.

*Container Handling:* Non-refillable container. Do not reuse or refill this container. Completely empty container into applicator equipment. Then offer container for recycling if available, or dispose of empty container in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**SECTION 14: Transportation information**

**14.1. UN number**

Not regulated.

**14.3. Transport hazard class(es)**

Not regulated.

**14.5. Environmental hazards**

Not regulated.

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not regulated.

**14.2. UN proper shipping name**

Not regulated.

**14.4. Packing group**

Not regulated.

**14.6. Special precautions for user**

Not regulated.

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EPA:** This product is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticidal chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION, KEEP OUT OF REACH OF CHILDREN  
Harmful if inhaled. Causes moderate eye irritation.

<b>OSHA:</b>	N/A
<b>TSCA Status:</b>	Exempt
<b>CERCLA Reportable Quantity:</b>	N/A
<b>SARA Title III:</b>	
Section 302:	N/A
Section 311/312:	N/A
Section 313:	N/A
<b>RCRA Status:</b>	N/A

**SECTION 16: Other information**

**Disclaimer:**

To the best of our knowledge, the information contained herein is accurate. However, neither Certis USA nor any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All material may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

**SDS Authoring Information:**

<b>Revision date:</b>	October 12, 2016
<b>Date of Previous version:</b>	August 31, 2015
<b>Reason for Revision:</b>	New Product
<b>SDS Prepared by:</b>	Certis U.S.A. L.L.C.