

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

1.1. Product identifier

Product name: SOILGARD
EPA Registration No. 70051-3
Product Type: Microbial Fungicide
Active Ingredient: *Gliocladium virens* strain GL-21
CAS No.: None

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

Identified uses: Fungicide
Uses advised against: Any use not listed on 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) 255-3924
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: Not classified by OSHA
EPA Signal Word: Caution (see section 15)
Hazard Statements: None
Pictogram: None
Precautionary Statements: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear goggles, glasses and/or face shield. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

2.2 Other Hazards: 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 water when cleaning equipment or disposing of equipment wash waters.

SECTION 3: Composition/information on ingredients

3.1 Substances

Component	CAS#	% by weight
<i>Glucoladium virens</i> strain GL-21*	None	12%

SECTION 4: First aid measures

4.1. Description of first aid measures

Generic measures

Eye Contact: Hold eye open and rinse slowly and gently for 15-20 minutes. Remove contact lenses, if present after 5 minutes, then continue rinsing.
Call a poison control center or a doctor for treatment advice.
Have product container or label with you when calling a poison control center or doctor, or going for treatment.

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

Eye irritation

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

None specified

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media: Water mist, alcohol resistant foam, dry powder, carbon dioxide

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 specified

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: See section 8 for personal protective equipment
For emergency responders: See section 8 for personal protective equipment

6.2. Environmental precautions 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 water when cleaning equipment or disposing of equipment wash waters.

6.3. Methods and material for containment and cleaning up

Methods for Containment: When possible reclaim spilled materials.
Methods for Clean-Up: Sweep up and place into sealed containers for disposal according to federal, state, and local laws. Do not contaminate water, food, or feed by storage or disposal.
Other Information:

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

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

7.2. Conditions for safe storage, including any incompatibilities

SoilGard is packaged in an airtight, foil-lined, resealable bag designed to protect the fungus from exposure to moisture and oxygen, which can impact storage life. For best results store in a cool, dry place (preferably refrigerated). In an unopened bag, SoilGard will retain its biological activity for up to one year at room temperature (70°F). Long-term exposure to air and higher temperatures (75°F to 100°F) may accelerate loss of bioactivity. Exposure to temperatures above 100°F for extended periods can be detrimental to SoilGard. An open bag of SoilGard can be kept for up to 3 months if the bag is tightly resealed and refrigerated (40°F to 45°F). Squeeze excess air from the bag before resealing.

7.3. Specific end use(s)

Wastes resulting from the use of this product can be disposed of on site or at a waste disposal facility.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OSHA Permissible Exposure Limits (PELs): Not determined
ACGIH Threshold Limit Values: Not determined

Other Exposure Limits: Not determined

8.2. Exposure controls

Engineering Controls: None specified

Personal Protective Equipment

Eye/Face Protection: Protective eyewear

Skin Protection Long sleeved shirt and long pants

Hand Protection: None specified

Body Protection: Shoes plus socks

Respiratory Protection: None specified

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

Thermal Hazards: None

General Hygiene Considerations:

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Environmental exposure controls: 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 water when cleaning equipment or disposing of equipment wash waters.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: Brown granule
Odour: Earthy
Odour Threshold: Not determined
pH 1% dilution: 5.0-7.5
Melting Point / Freezing Point: Not applicable
Initial Boiling Point: Not applicable
Boiling Range: Not applicable

Flash Point:	Not determined
Evaporation Rate:	Not applicable
Flammability (solid, gas):	Not determined
Lower & Upper Flammability Limits:	Not determined
Vapour Pressure:	Not applicable
Vapour Density:	Not applicable
Density:	0.44-0.65 g/cc
Solubility:	Not determined
Partition Coefficient (n-octanol/water):	Not determined
Auto-ignition Temperature:	Not determined
Decomposition Temperature:	Not determined
Viscosity:	Not applicable
Explosive Properties:	None known
Oxidising Properties:	None known

9.2. Other information

Not available.

SECTION 10: Stability and reactivity

<u>10.1. Reactivity</u>	None known
<u>10.2. Chemical stability</u>	Stable when stored according to the label
<u>10.3. Possibility of hazardous reactions</u>	None known
<u>10.4. Conditions to avoid</u>	High temperatures reduce effectiveness
<u>10.5. Incompatible materials</u>	None known
<u>10.6. Hazardous decomposition products</u>	None known

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Toxicity

Toxicological information on the substance or mixture:

Gliocladium virens strain GL-21 is a naturally occurring fungus; no adverse effects are expected.

LD₅₀ (oral)	No toxicity or pathogenicity at 10 ⁸ CFU/animal
LD₅₀ (dermal)	No toxicity or pathogenicity at 10 ⁸ CFU/animal
LC₅₀ (inhalation)	No toxicity or pathogenicity at 10 ⁸ CFU/animal

Skin corrosion / irritation: No data available

Eye damage/irritation: Slightly irritating
Respiratory or skin sensitization: No data available

Other information on adverse health effects:

Carcinogenicity

NTP Listed: Not applicable
IARC Listed: Not applicable
OSHA: 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:

Environmental risks are not expected. *Gliocladium virens GL-21* occurs naturally in many kinds of soil. Its use in pesticide products is not likely to increase exposure of wildlife, fish, or other organisms.

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 cleaning equipment or disposing of equipment washwater.

12.2. Persistence and degradability The fungus does not persist in soil.

12.3. Bioaccumulative potential No bioaccumulation expected.

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

Pesticide Storage: SoilGard is packaged in an airtight, foil-lined, resealable bag designed to protect the fungus from exposure to moisture and oxygen, which can impact storage life. For best results store in a cool, dry place (preferably refrigerated). In an unopened bag, SoilGard will retain its biological activity for up to one year at room temperature (70°F). Long-term exposure to air and higher temperatures (75°F to 100°F) may accelerate loss of bioactivity. Exposure to temperatures above 100°F for extended periods can be detrimental to SoilGard. An open bag of SoilGard can be kept for up to 3 months if the bag is tightly resealed and refrigerated (40°F to 45°F). Squeeze excess air from the bag before resealing.

Pesticide Disposal: 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 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.

SECTION 14: Transportation information

14.1. UN number

Not regulated.

14.2. UN proper shipping name

Not regulated.

14.3. Transport hazard class(es)

Not regulated.

14.4. Packing group

Not regulated.

14.5. Environmental hazards

Not regulated.

14.6. Special precautions for user

Not regulated.

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

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
Causes moderate eye irritation.

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

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Reason for Revision OSHA Hazard Communication Standard 2012
SDS Prepared by: Certis U.S.A. L.L.C.