



## SAFETY DATA SHEET (SDS)

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Symvado ST
Product Code / SKU	AS10121.04.307
Identified Use	Inoculant
Distributor Information	Valent BioSciences LLC
Address	1910 Innovation Way, Suite 100
City, State Zip Code Country	Libertyville, IL 60048 USA
Manufacturer Information	Mycorrhizal Applications, LLC
Address	710 NW "E" Street
City, State Zip Code Country	Grants Pass, OR 97526 USA
USA Phone Number	(877) 696-4204
24 Hour Medical Emergency Phone Number	(877) 315-9819 (PROPHARMA)

### 2. HAZARDS IDENTIFICATION

<b>OSHA Regulatory Status:</b> Hazard Communication Standard (29 CFR 1910.1200)
<b>2.1 Classification of the Substance or Mixture</b>
<b>GHS Classification:</b> None. <b>Signal Word:</b> Warning. <b>Symbol/Pictogram:</b> No Pictogram. <b>Hazard Statements:</b> None.
<b>2.2 GHS Label Elements</b>
<b>Prevention Statements:</b> Wash hands and face thoroughly after handling. <b>Response Statements:</b> IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs seek medical advice/attention. <b>Storage:</b> Store in a dry area. <b>Disposal:</b> Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>2.3 Other Hazards</b>
None known.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical/Substance Name</u>	<u>Classification</u>	<u>CAS No.</u>	<u>Concentration (w/w %)</u>
Other Ingredients – Non-Hazardous	Not classified	None	91.27%*
Active/Trade Secret – Non-Hazardous	Not classified	None	8.73*

\*Exact percentages vary based on batch-to-batch variability. Ingredients not identified are proprietary or non-hazardous.

### 4. FIRST AID MEASURES

<b>4.1 Description of First Aid Measures</b>	
<b>Eye Contact</b>	Remove from source of exposure. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists or signs of toxicity occur, seek medical attention.
<b>Skin Contact</b>	Remove from source of exposure. Wash with plenty of water. If skin irritation or rash occurs seek medical advice/attention. If irritation persists or signs of toxicity occur, seek medical attention.
<b>Ingestion</b>	Remove from source of exposure. Move person to fresh air. Do NOT induce vomiting. Give large quantities of water. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.
<b>Inhalation</b>	Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.
<b>4.2 Most Important Symptoms and Effects, Both Acute and Delayed</b>	
<b>Acute:</b> Not known – treat with caution. No information on acute adverse effects.	
<b>Delayed:</b> Not known – treat with caution. No information on delayed adverse effects.	
<b>4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed</b>	
Treat symptomatically and supportively.	

### 5. FIRE FIGHTING MEASURES

<b>5.1 Extinguishing Media and Suitable Extinguishing Media</b>
<b>Suitable Extinguishing Media:</b> Dry chemical and carbon dioxide, alcohol resistant foam, sand, water fog or fine spray. Use appropriate medium for the underlying cause of the fire.



<b>Unsuitable Extinguishing Media:</b> High Volume Water Jet (based on major component of mixture).
<b>5.2 Special Hazards Arising from the Substance or Mixture</b>
Containers may rupture from gas generation in a fire. Keep containers cool by spraying with water if exposed to fire. <b>Thermal Decomposition Products:</b> Carbon oxides, nitrogen oxides, ammonia.
<b>5.3 Special Protective Equipment / Procedures for Firefighters</b>
<b>Protective Equipment and Precautions for Firefighters:</b> Fire fighter should wear full-face, self-contained breathing apparatus (SCBA) and impervious protective clothing. Fire fighters should avoid inhaling combustion products. See Section 8 (Exposure Controls / Personal Protection).

## 6. ACCIDENTAL RELEASE MEASURES

<b>6.1 Personal Precautions, Protective Equipment and Emergency Procedures</b>
Use in a well-ventilated area. Respiratory protection is not needed during normal product use. Wear eye protection appropriate to handling activities. Wear impervious gloves. Wear appropriate body coverings if contact may occur. Where exposure level is not known, wear respirator protection suitable for expected level of exposure, in addition to the personal protection as recommended in Section 8.
<b>6.2 Environmental Precautions</b>
Avoid unnecessary release to the environment. Prevent spillage from entering drains and/or surface water.
<b>6.3 Methods and Material for Containment and Cleaning Up</b>
Ventilate area. Wear appropriate personal protective equipment. Recover product with inert material (earth, sand, vermiculite), place into appropriate container for disposal. Do not flush to sewer.
<b>6.4 Containment and Cleaning Up</b>
Ventilate area. Wear appropriate personal protective equipment. Recover product with inert material (earth, sand, vermiculite), place into appropriate container for disposal. Do not flush to sewer.

## 7. HANDLING AND STORAGE

<b>7.1 Precautions for Safe Handling</b>
Avoid breathing mist or vapor. Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling. Do not eat drink or smoke while working with product, obey reasonable safety precautions and practice good housekeeping. For filling operations respiratory protection may be recommended particularly in enclosed areas.
<b>7.2 Conditions for Safe Storage, Including any Incompatibilities</b>
Protect against physical damage. Close containers of unused material. Store in a dry, cool, ventilated place. Keep away from source of ignition. Store separately from reactive or combustible materials and out of direct sunlight. No incompatibilities known.
<b>7.3 Incompatibilities</b>
None known.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>8.1 Exposure Controls</b>				
<b>Chemical Name</b>	<b>Component Exposure Levels (Information collected from supplier Safety Data Sheets)</b>			
	<b>Component</b>	<b>Regulation</b>	<b>Type of Listing</b>	<b>Value</b>
	Polyethylene glycol	US WEEL	TWA aerosol	10 mg/m3
	Diethylene glycol	US WEEL	TWA	10 mg/m3
	Ethylene glycol	Dow IHG	TWA	50 mg/m3
	Dow IHG	STEL	100 mg/m3	
	ACGIH	C Aerosol only	100 mg/m3	
<b>Engineering Controls</b>	Provide general ventilation. Where adequate general ventilation is unavailable use process enclosure, local exhaust ventilation, or other engineering controls.			
<b>8.2 Personal Protective Equipment</b>				
<b>Skin Protection</b>	Wear suitable protective clothing.			
<b>Eye Protection</b>	Safety glasses or goggles recommended.			
<b>Respiratory Protection</b>	For operations where the exposure limit may be exceeded, a NIOSH/MSHA approved high efficiency particulate respirator is recommended.			

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>9.1 Information on Basic Physical and Chemical Properties</b>	
<b>Property</b>	<b>Value</b>
State	Liquid
Appearance	Pale yellow with Gray Shade
Odor	Not determined
Odor Threshold	Not determined
pH	Not determined
Melting Point / Freezing Point	Not determined



Initial Boiling Point and Range	Not determined
Flashpoint	Not determined
Evaporation Rate (Butyl acetate=1)	Not determined
Flammability (solid, gas)	Not determined
Bulk Density	1.02 – 1.11 g/ml
Vapor Pressure	Not determined
Vapor Density (air=1)	Not determined
Specific Gravity (H <sub>2</sub> O = 1)	Not determined
Solubility in Water	Not determined
Partition Coefficient (n-octanol/water)	Not determined
Autoignition Temperature	Not determined
Decomposition Temperature	Not determined
Viscosity	Not determined
Flammability Class	Not determined
Upper / Lower Flammability Limits	Not determined

## 10. STABILITY AND REACTIVITY

<b>10.1 Reactivity</b>	Material does not pose a significant reactivity hazard.
<b>10.2 Chemical Stability</b>	Stable under ordinary conditions of use and storage. Spontaneous reaction not possible.
<b>10.3 Possibility of Hazardous Reactions</b>	Does not undergo hazardous polymerization.
<b>10.4 Conditions to Avoid</b>	Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems.
<b>10.5 Incompatible Material</b>	Avoid contact with strong acids, strong bases, and strong oxidizers.
<b>10.6 Hazardous Decomposition Products</b>	Can include but not limited to: carbon oxides, aldehydes, alcohols, ethers, carboxylic acids, polymer fragments.

## 11. TOXICOLOGICAL INFORMATION

<b>11.1 Information on Toxicological Effects</b>	
<b>Likely Routes of Exposure</b>	
<b>Ingestion</b>	Not likely.
<b>Inhalation</b>	Yes.
<b>Eye Contact</b>	Yes.
<b>Skin Contact</b>	No known hazard.
<b>Chronic Effects</b>	Yes.
<b>Carcinogenicity Listing</b>	None.
<b>Formulation Toxicology</b>	Toxicity not evaluated. Treat as if it were hazardous.

## 12. ECOLOGICAL INFORMATION

<b>12.1 Ecotoxicity</b>	This product has not been tested for eco-toxicological effects. Treat with extreme caution and do not allow into waterways or lakes.
<b>12.2 Persistence and Degradability</b>	Environmental persistence and fate not evaluated.
<b>12.3 Bio-accumulative Potential</b>	No data available.
<b>12.4 Mobility in Soil</b>	No data available.
<b>12.5 Results of PBT and vPvB Assessment</b>	PBT: Assessments not performed. vPvB: Assessments not performed.
<b>12.6 Other Adverse Effects</b>	None known.

## 13. DISPOSAL CONSIDERATIONS

<b>13.1 Disposal Methods</b>
Dispose of product in accordance with federal, state, provincial, and local regulations. Prevent contamination of environment by wastes. All disposal practices must be in compliance with all Federal, State/Provincial, and local laws and regulations. US EPA WASTE NUMBER AND DESCRIPTIONS: There is no applicable EPA waste number. This product, if discarded, is not expected to be a characteristic, or listed hazardous waste.

## 14. TRANSPORT INFORMATION

<b>14.1 Transport Information</b>				
	<b>DOT</b>	<b>IMDG</b>	<b>IATA</b>	<b>TDG</b>
<b>UN Number</b>	Not applicable	Not applicable	Not applicable	Not applicable
<b>Proper Shipping Name</b>	Not regulated	Not regulated	Not regulated	Not regulated
<b>Hazard Class(es)</b>	Not applicable	Not applicable	Not applicable	Not applicable
<b>Packing Group</b>	Not applicable	Not applicable	Not applicable	Not applicable



<b>Special Precautions</b>	Consult IMO regulations before transporting ocean bulk. Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code.
----------------------------	---

### 15. REGULATORY INFORMATION

<b>15.1 US Regulations: Safety, Health and Environment Regulations / Legislation Specific for the Substance or Mixture</b>	
<b>US EPA Toxic Substances Control Act (TSCA)</b>	Not Listed.
<b>CERCLA STATUS</b>	Not Listed.
<b>SARA STATUS</b>	Acute: No. Chronic: No. CDT: No.
<b>SARA 313</b>	This mixture contains the following substance subject to the reporting requirements of Section 313 Title III: Ethylene Glycol CAS # 107-21-1.
<b>RCRA STATUS</b>	Not Listed.
<b>EINECS</b>	Not applicable.
<b>State Right-To-Know</b>	PA Worker and Community Right-To-Know Act: The following substance is listed because of the Additional requirements of Pennsylvania law: Diethylene glycol CAS# 111-46-6.  Consult applicable national, state provincial or local laws to determine regulations, laws or ordinances which may be applicable.
<b>OSHA HAZARD COMMUNICATION STANDARD</b>	Not defined by the OSHA Hazard Communication Standard, 29 CFR.
<b>15.2 Pesticide Labeling</b>	
Not an EPA registered pesticide.	
<b>15.3 International Regulations</b>	
<b>EU REACH</b>	Contact Mycorrhizal Applications, LLC for information regarding REACH status.
<b>Japan MITI</b>	No data available.
<b>AICS</b>	No data available.

### 16. OTHER INFORMATION

<b>HMIS Ratings:</b>	Health – 0*	Flammability – 0	Reactivity – 0
0 = Minimal Hazard, 1 = Slight Hazard, 2 = Moderate Hazard, 3 = Serious Hazard, 4 = Severe Hazard			
<b>NFPA Hazard Ratings:</b>	Health – 0*	Flammability – 0	Reactivity – 0
0 = Minimal Hazard, 1 = Slight Hazard, 2 = Moderate Hazard, 3 = Serious Hazard, 4 = Severe Hazard			
<b>16.1 GHS Abbreviations and Phrases for Reference</b>			
® = Registered Trademark ™ = Registered Trademark L = Listed S = Short-term N/A = Not Applicable N/L = Not Listed N/D = Not Determined C = Ceiling			
<p>Disclaimer: The information provided in this Safety Data Sheet (SDS) is provided in good faith and believed to be accurate at the time of preparation of the SDS. However, Mycorrhizal Applications, LLC and its subsidiaries or affiliates extend no warranties, make no representations, and assume no responsibility as to the accuracy, suitability, or completeness of such information. Additionally, neither Mycorrhizal Applications, LLC nor any of its subsidiaries or affiliates represents or guarantees that this information or product may be used without infringing the intellectual property rights of others. It is the user's own responsibility to determine the suitability of this information for their own particular use of this product. If necessary, contact Mycorrhizal Applications, LLC to confirm that you have the most current product label and SDS.</p> <p>This Safety Data Sheet (SDS) may provide more information than the product label but does not replace or modify the product labeling (attached to and accompanying the product container). The product SDS and the product label both provide consistent and important health, safety, and environmental information as required by the Occupational Health and Safety Act (29 CFR 1910.1200, "Hazcom"). This requirement covers employers, employees, emergency responders, users and others handling the product. All necessary hazard classification and appropriate precautionary, use, storage, and disposal information are set forth on the labeling and the SDS.</p>			
<b>Revision History:</b>			
10/04/2022: New SDS.			
02/01/2023: Audits and revisions.			
<b>SDS Issue Date:</b> 02/24/2023		<b>Version:</b> v.2	