

SAFETY DATA SHEET (SDS)

1. PRODUCT & COMPANY IDENTIFICATION

Product Name	MycoApply® EndoFuse 8/500ml
Product Code	AS10610.04.156
Identified Use	Inoculant
Supplier	Mycorrhizal Applications, LLC
Address	710 NW E Street Grants Pass, OR 97526 USA-
Telephone Number (USA)	866-476-7800 (Monday-Friday, 7:00am – 4:00pm PST)
24 Hour Medical Emergency Phone Number	877-315-9819 (PROPHARMA)

2. HAZARDS IDENTIFICATION

OSHA Regulatory Status: Hazard Communication Standard (29 CFR 1910.1200)	
2.1 Classification of the Substance or Mixture	
GHS Classification: None Signal Word: Warning Symbol/Pictogram: No Pictogram Hazard Statements: None	
2.2 GHS Label Elements	
Prevention Statements: Wash hands and face thoroughly after handling. Response Statements: 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 get medical advice/attention. Storage: Store in a dry area. Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.	
2.3 Other Hazards: None known.	

3. COMPOSITION/INFORMATION ON INGREDIENTS

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

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

4. FIRST AID MEASURES

4.1 Description of First Aid Measures	
Eye Contact	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.
Skin Contact	Remove from source of exposure. Wash with plenty of water. If skin irritation or rash occurs get medical advice/attention. If irritation persists or signs of toxicity occur, seek medical attention.
Ingestion	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.
Inhalation	Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.
4.2 Most important symptoms and effects, both acute and delayed	
Acute: Not known – treat with caution. No information on acute adverse effects. Delayed: Not known – treat with caution. No information on delayed adverse effects.	
4.3 Indication of any immediate medical attention and special treatment needed	
Treat symptomatically and supportively.	

5. FIRE FIGHTING MEASURES

5.1 Extinguishing Media and Suitable Extinguishing Media	
Suitable Extinguishing Media: Dry chemical and carbon dioxide, alcohol resistant foam, sand, water fog or fine spray. Use appropriate medium for the underlying cause of the fire. Unsuitable Extinguishing Media: High Volume Water Jet (based on major component of mixture)	
5.2 Special Hazards Arising from the Substance or Mixture	
Containers may rupture from gas generation in a fire. Keep containers cool by spraying with water if exposed to fire. Thermal decomposition products Carbon oxides, nitrogen oxides, ammonia	

5.3 Special Protective Equipment/Procedures for Firefighters

Fire fighter should wear full-face, self-contained breathing apparatus and impervious protective clothing. Fire fighters should avoid inhaling combustion products. See Section 8 (Exposure Controls / Personal Protection)

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

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.

6.2 Environmental Precautions

Avoid unnecessary release to the environment. Prevent spillage from entering drains and/or surface water.

6.3 Methods and Material for Containment and Cleaning Up

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 & STORAGE

7.1 Precautions for Safe Handling

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.

7.2 Conditions for Safe Storage, Including any Incompatibilities

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure Controls

Chemical Name	Component Exposure Levels: Information collected from supplier SDS's.			
	Component	Regulation	Type of Listing	Value
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
Engineering Controls	Provide general ventilation. Where adequate general ventilation is unavailable use process enclosure, local exhaust ventilation, or other engineering controls.			

8.2 Personal Protective Equipment

Skin Protection	Wear suitable protective clothing.
Eye Protection	Safety glasses or goggles recommended.
Respiratory Protection	For operations where the exposure limit may be exceeded, a NIOSH/MSHA approved high efficiency particulate respirator is recommended.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic Physical and Chemical Properties

Property	Value
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 & 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: (H2O = 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 & REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

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

12. ECOLOGICAL INFORMATION

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

13. DISPOSAL CONSIDERATIONS

13.1 Disposal Methods	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 & DESCRIPTIONS: There is no applicable EPA waste number. This product, if discarded, is not expected to be a characteristic or listed hazardous waste.
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14. TRANSPORT INFORMATION

14.1 Transport information				
	DOT	IMDG	IATA	TDG
UN number	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Proper shipping name	Not regulated under DOT	Not regulated.	Not regulated.	Not regulated.
Hazard class(es)	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Packing group	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Special precautions	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

15.1 US Regulations: Safety, Health and Environment Regulations/Legislation Specific for the Substance or Mixture	
US EPA Toxic Substances Control Act (TSCA)	Not Listed; Experimental Formulation
CERCLA STATUS	Not Listed; Experimental Formulation

California Proposition 65	Experimental Formulation Warning – this product contains a chemical known in the State of California to cause cancer: Propylene Oxide CAS# 75-56-9
SARA STATUS	Acute: No Chronic: No CDT: No
SARA 313	This mixture contains the following substance subject to the reporting requirements of Section 313 Title III: Ethylene Glycol CAS # 107-21-1 RCRA STATUS: Not Listed; Experimental Formulation
RCRA STATUS	Not Listed; Experimental Formulation
EINECS	NA
State Right-To-Know	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.
OSHA HAZARD COMMUNICATION STANDARD	Not defined by the OSHA Hazard Communication Standard, 29 CFR.
15.2 Pesticide Labeling: Not an EPA registered pesticide.	
15.3 International Regulations:	
EU REACH	Contact Mycorrhizal Applications for information regarding REACH status.
Japan MITI	No data available.
AICS	No data available.

16. OTHER INFORMATION

HMIS Ratings:	Health – 0*	Flammability – 0	Reactivity – 0
0 = Minimal Hazard, 1 = Slight Hazard, 2 = Moderate Hazard, 3 = Serious Hazard, 4 = Severe Hazard			
NFPA Hazard Ratings:	Health – 0*	Flammability – 0	Reactivity – 0
0 = Minimal Hazard, 1 = Slight Hazard, 2 = Moderate Hazard, 3 = Serious Hazard, 4 = Severe Hazard			
16.1 GHS Abbreviations and Phrases for Reference:			
® = 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 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 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 users' own responsibility to determine the suitability of this information for their own particular use of this product. If necessary, contact Mycorrhizal Applications 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 is set forth on the labeling and the SDS.</p>			
SDS Issued 12/10/20		Replaces SDS Dated: 12/13/18	
Revision notes: New Template		Revision # v.3	