

SAFETY DATA SHEET

Section 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PureAg Biologic Nematost™
MANUFACTURER: PureAg®, LLC
 4045 South West Temple
 Salt Lake City, Utah 84107
 www.pureagproducts.com
 801-651-3201

DATE PREPARED: 09/30

Section 2 HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE
 Non-hazardous

Moderate but temporary eye irritant
 Potential Allergen
 Potential Skin sensitization
 Potential Airway sensitization

Substance contributing to the classification: Purpureocillium Lilacinum strain

Section 3 COMPOSITION INFORMATION

Micro Organism: Paecilomyces Lilacinus
Ingredients:
 Fungal spores/mycelia and fermentation solids - 1 - 2 %
 Carrier powder - 83 - 89 %
 Moisture - 10 - 15 %

Section 4 FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

- General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show label if possible).
- Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
- Skin Contact:** Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.
- Eye:** Hold 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. Obtain medical attention if persists.
- Swallowed:** Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by poison control or doctor. Call poison control for treatment advice.

Section 5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE/MIXTURE

Fire Hazard: Product is non-flammable under normal conditions of storage, manipulation and use.
Explosion Hazard: None

Section 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing dust.

FOR NON-EMERGENCY PERSONNEL

Protective Equipment: Use appropriate personal protection equipment

FOR EMERGENCY RESPONDERS

Protective Equipment: Equip cleanup crew with proper protection.

Section 7 HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Precautions for Safe Handling: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container hermetically sealed preventing humidity penetration. Keep separate from food and animal feed. Keep away from direct sunlight and heat.

Technical Recommendations to Prevent Economic and Toxicological Risks: Wash hands before eating, drinking, chewing gum, using tobacco or using toilet. Remove clothing immediately if product gets inside, then clean thoroughly and put on clean clothing. Keep out of reach of children.

Technical Recommendations to Prevent Environmental Risks: Biologic Nematost is considered safe for the environment.

DO NOT apply this product to fresh water habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

EXPOSURE CONTROLS

Appropriate Engineering Controls: Provide adequate ventilation to minimize dust concentrations. Ensure all national/local regulations are observed. Proper grounding procedures to avoid static electricity should be followed. Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal Protective Equipment: Protective goggles, gloves, protective clothing, dust mask.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH/OSHA approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL & CHEMICAL PROPERTIES

Physical State:	Solid
Appearance:	Fine White Powder
Odor:	Fungal Odor
Odor Threshold:	No Data Available
pH:	6.0 - 8.5
Relative Evaporation Rate (butyl acetate=1):	No Data Available
Melting Point:	No Data Available
Freezing Point:	No Data Available
Boiling Point:	No Data Available
Flash Point:	Non combustible
Auto-Ignition Temperature:	Non flammable
Decomposition Temperature:	No Data Available
Flammability (solid, gas):	No Data Available
Vapor Pressure:	No Data Available
Relative Vapor Density at 20°C:	1.33 cc/g
Relative Density:	No Data Available
Specific Gravity:	No Data Available
Solubility:	No Data Available
Partition Coefficient: n-octanol/water:	No Data Available
Relative Density:	No Data Available

OTHER INFORMATION

No additional information available.

Section 10 STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.
Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
Unusual Fire Hazards: None
Unusual Explosion Hazards: None
Incompatible Materials: Strong acids. Strong bases.
Condition to Avoid: High Temperature
Material to Avoid: No Data Available
Hazardous Decomposition Products: None

Section 11 TOXICOLOGICAL INFORMATION

Likely routes of exposure: Oral, dermal, inhalation, skin.
Symptoms related to physical, chemical and/or toxicological characteristics: Prolonged or frequently repeated skin contact to the undiluted product may cause allergic reactions in some individuals.

ACUTE TOXICITY

Test	Results	US EPA Toxicity Category
Acute oral LD50	ATE*(rat) > 2,000 mg/kg	III
Acute dermal LD50	ATE*(rat) > 2,000 mg/kg	III
Acute inhalation LC50	ATE*(rat) > 5 mg/L (4-hr exposure)	IV
Eye irritation	No eye irritation (rabbit)	IV
Skin irritation	No skin irritation (rabbit)	IV
Respiratory	Non-sensitizing (guinea pig)	Not applicable
Skin sensitization	Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization	

OTHER INFORMATION ON ADVERSE HEALTH EFFECTS

Specific Target Organ: No specific target organ toxicity observed in experimental animals studies.
Toxicity (STOT) - Repeated Exposure: Developmental and reproductive toxicity testing not required for micro-organisms.
Mutagenicity: Not mutagenic or genotoxic in a battery of in vitro and in vivo tests.
Carcinogenicity: Testing not required for micro-organisms.
NTP: Not listed | **IARC:** Not listed | **OSHA:** Not listed

Section 12 ECOLOGICAL INFORMATION

Plants, Fruits and Vegetables: No phytotoxicity.
Avian: Not toxic when used in accordance with label directions and good agricultural practices.
Landfill: Not toxic.
Results of Persistent, Bioaccumulative and Toxic and/or very Persistent and very Bioaccumulative: Not applicable due to the nature of the product.
Persistence and Degradability: Not Available.
Bio accumulation Potential: Not applicable due to nature of the product.
Mobility in Soil: Minimal.
Other Adverse Effects: No Data Available.

Section 13 DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations. Not recommended to disposal large amount down the drain. Do not reuse as a container: Non-toxic landfill, then triple rinse and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by local authorities.

Section 14 TRANSPORT INFORMATION

In Accordance with DOT: Not regulated for transport.
In Accordance with IMDG: Not regulated for transport.
In Accordance with IATA: Not regulated for transport.

Section 15 REGULATORY INFORMATION

Not Classified as Dangerous for Supply Use. Not classified as Dangerous for the Environment (Aquatic).

Section 16 OTHER INFORMATION

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910-1200.

References

1. US EPA: (United States Environmental Protection Agency), 2013. Beauveria Bassiana strain ANT-03, Petition to establish an exemption from the requirement of a tolerance. EPA Bio-pesticides and Pollution Prevention Division, company notice of filing for pesticide petitions published in the federal register, Posted December 30, 2019, 7p.