America’s Best Inoculant – Sterile Liquid Peanut

Safety Data Sheet
According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 11/24/2015 Date of issue: 11/24/2015 Supersedes Date: 05/31/2007 Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier
Product Form: Mixture
Product Name: America’s Best Inoculant – Sterile Liquid Peanut
Product Code: 2021

1.2. Intended Use of the Product Seed Treatment

1.3. Name, Address, and Telephone of the Responsible Party
Company
Advanced Biological Marketing, Inc.
375 Bonnewitz Avenue
Van Wert, Ohio 45891
T 419-232-2461
www.abm1st.com

1.4. Emergency Telephone Number
Emergency Number : 419-232-2461

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture
GHS-US classification
Not classified

2.2. Label Elements
GHS-US Labeling
No labeling applicable

2.3. Other Hazards
Exposure may aggravate pre-existing eye, skin, or respiratory conditions. Contains naturally occurring, non-pathogenic, Rhizobium bacteria. See product label for specific crop information, application rates, and methods. Not for feed, food, or drug use.

2.4. Unknown Acute Toxicity (GHS-US)
No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Ingredient #1</td>
<td>(CAS No) Proprietary</td>
<td>*</td>
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</tr>
<tr>
<td>Proprietary Ingredient #2</td>
<td>(CAS No) Proprietary</td>
<td>*</td>
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</tr>
<tr>
<td>Proprietary Ingredient #3</td>
<td>(CAS No) Proprietary</td>
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<td>Comb. Dust</td>
</tr>
<tr>
<td>Proprietary Ingredient #4</td>
<td>(CAS No) Proprietary</td>
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<tr>
<td>Proprietary Ingredient #5</td>
<td>(CAS No) Proprietary</td>
<td>*</td>
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</tr>
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<td>Proprietary Ingredient #6</td>
<td>(CAS No) Proprietary</td>
<td>*</td>
<td>Not classified</td>
</tr>
<tr>
<td>Proprietary Ingredient #7</td>
<td>(CAS No) Proprietary</td>
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<tr>
<td>Proprietary Ingredient #8</td>
<td>(CAS No) Proprietary</td>
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<td>Not classified</td>
</tr>
<tr>
<td>Proprietary Ingredient #9</td>
<td>(CAS No) Proprietary</td>
<td>*</td>
<td>Eye Irrit. 2A, H319</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16
*The specific chemical identity and/or exact percentage of composition has been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures
First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.
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First-aid Measures After Skin Contact: Remove contaminated clothing and shoes. Rinse cautiously with water for several minutes. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/Injuries: Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None known.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed
If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

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

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture
Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters
Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Do not breathe fumes from fire or vapors from decomposition.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures
General Measures: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).

6.1.1. For Non-emergency Personnel
Protective Equipment: Use appropriate personal protection equipment (PPE).


6.1.2. For Emergency Responders
Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions
Prevent entry to sewers and public waters.

6.3. Methods and Material for Containment and Cleaning Up
For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. If spilled directly onto the ground, remove sufficient soil to ensure material is fully recovered. Contact competent authorities after a spill.

6.4. Reference to Other Sections
See Heading 8. Exposure controls and personal protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling
Precautions for Safe Handling: Do not handle until all safety precautions have been read and understood. Avoid breathing vapors, mist, and spray. Avoid prolonged contact with eyes, skin and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities
Technical Measures: Comply with applicable regulations.
Storage Conditions: Keep container closed when not in use. Store in a dry, cool and well-ventilated place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Do not freeze.

Incompatible Products: Strong acids, strong bases, strong oxidizers. Water reactive materials.

8.2. Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Not generally required. The use of personal protective equipment may be necessary as conditions warrant.

Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye Protection: In case of splash hazard: chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State: Liquid
Appearance: Yellow to brown
Odor: Mild
Odor Threshold: No data available
pH: No data available
Evaporation Rate: No data available
Melting Point: No data available
Freezing Point: No data available
Boiling Point: 216 °F (102.2 °C)
Flash Point: No data available
Auto-ignition Temperature: No data available
Decomposition Temperature: No data available
Flammability (solid, gas): No data available
Vapor Pressure: No data available
Relative Vapor Density at 20 °C: No data available
Relative Density: No data available
Solubility: No data available
Partition Coefficient: N-Octanol/Water: No data available
Viscosity: No data available
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9.2. Other Information  No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:  Hazardous reactions will not occur under normal conditions.
10.2. Chemical Stability:  Stable under recommended handling and storage conditions (see section 7).
10.3. Possibility of Hazardous Reactions:  Hazardous polymerization will not occur.
10.4. Conditions to Avoid:  Direct sunlight, extremely high or low temperatures, and incompatible materials.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects
Acute Toxicity:  Not classified

| Proprietary Ingredient #2 (Proprietary) | LD50 Oral Rat | 23000 mg/kg |
| Proprietary Ingredient #2 (Proprietary) | LD50 Dermal Rabbit | > 10 g/kg |
| Proprietary Ingredient #2 (Proprietary) | LC50 Inhalation Rat | > 570 mg/m³ (Exposure time: 1 h) |

| Proprietary Ingredient #3 (Proprietary) | LD50 Oral Rat | 13500 mg/kg |

| Proprietary Ingredient #5 (Proprietary) | LD50 Oral Rat | > 2000 mg/kg |

| Proprietary Ingredient #8 (Proprietary) | LD50 Oral Rat | 3 g/kg |
| Proprietary Ingredient #8 (Proprietary) | LC50 Inhalation Rat | > 42 g/m³ (Exposure time: 1 h) |

| Proprietary Ingredient #9 (Proprietary) | LD50 Oral Rat | 2301 (1455 - 2781) mg/kg |
| Proprietary Ingredient #9 (Proprietary) | LD50 Dermal Rat | 2630 mg/kg |
| Proprietary Ingredient #9 (Proprietary) | LD50 Dermal Rabbit | > 5000 mg/kg |

Skin Corrosion/Irritation:  Not classified
Serious Eye Damage/Irritation:  Not classified
Respiratory or Skin Sensitization:  Not classified
Germ Cell Mutagenicity:  Not classified
Carcinogenicity:  Not classified
Reproductive Toxicity:  Not classified
Specific Target Organ Toxicity (Single Exposure):  Not classified
Specific Target Organ Toxicity (Repeated Exposure):  Not classified
Aspiration Hazard:  Not classified
Symptoms/Injuries After Inhalation:  Prolonged exposure may cause irritation.
Symptoms/Injuries After Skin Contact:  Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact:  May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion:  Ingestion may cause adverse effects.
Chronic Symptoms:  None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity
Ecology - General:  Not classified.

| Proprietary Ingredient #2 (Proprietary) | LC50 Fish 1 | 54000 (51000 - 57000) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static]) |
| Proprietary Ingredient #8 (Proprietary) | LC50 Fish 1 | 5560 (5560 - 6080) mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through]) |

| Proprietary Ingredient #8 (Proprietary) | EC50 Daphnia 1 | 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| Proprietary Ingredient #8 (Proprietary) | LC 50 Fish 2 | 12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static]) |
| Proprietary Ingredient #8 (Proprietary) | EC50 Daphnia 2 | 340.7 (340.7 - 469.2) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) |
### Persistence and Degradability

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<table>
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<tr>
<th>Proprietary Ingredient #9 (Proprietary)</th>
<th>LC50 Fish 1</th>
<th>10650 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])</th>
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<tr>
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<td>EC50 Daphnia 1</td>
<td>2400 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
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12.2. **Bioaccumulative Potential**

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<thead>
<tr>
<th>Proprietary Ingredient #2 (Proprietary)</th>
<th>BCF fish 1</th>
<th>(no bioaccumulation)</th>
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<tbody>
<tr>
<td></td>
<td>Log Pow</td>
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<table>
<thead>
<tr>
<th>Proprietary Ingredient #8 (Proprietary)</th>
<th>BCF fish 1</th>
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<table>
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<tr>
<th>Proprietary Ingredient #9 (Proprietary)</th>
<th>BCF fish 1</th>
<th>(no bioaccumulation)</th>
</tr>
</thead>
</table>

12.3. **Mobility in Soil**

No additional information available

12.5. **Other Adverse Effects**

**Other Information:** Avoid release to the environment.

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of contents/container in accordance with local, regional, national, and international regulations.

**Ecology – Waste Materials:** Avoid release to the environment.

### SECTION 14: TRANSPORT INFORMATION

#### 14.1. In Accordance with DOT

Not regulated for transport

#### 14.2. In Accordance with IMDG

Not regulated for transport

#### 14.3. In Accordance with IATA

Not regulated for transport

### SECTION 15: REGULATORY INFORMATION

#### 15.1 US Federal Regulations

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<th>Proprietary Ingredient #1 (Proprietary)</th>
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</table>

<table>
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<th>Proprietary Ingredient #2 (Proprietary)</th>
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</table>

| **EPA TSCA Regulatory Flag** | Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule. |

<table>
<thead>
<tr>
<th>Proprietary Ingredient #3 (Proprietary)</th>
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<tr>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
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<table>
<thead>
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<th>Proprietary Ingredient #5 (Proprietary)</th>
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<table>
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</table>

#### 15.2 US State Regulations

<table>
<thead>
<tr>
<th><strong>Proprietary Ingredient #2 (Proprietary)</strong></th>
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</thead>
<tbody>
<tr>
<td>U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)</td>
</tr>
<tr>
<td>U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)</td>
</tr>
<tr>
<td>U.S. - Idaho - Occupational Exposure Limits - TWAs</td>
</tr>
</tbody>
</table>
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**RTK - U.S. - Massachusetts - Right To Know List**
U.S. - Michigan - Occupational Exposure Limits - TWAs
U.S. - Minnesota - Hazardous Substance List
U.S. - Minnesota - Permissible Exposure Limits - TWAs
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New York - Occupational Exposure Limits - TWAs
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour
U.S. - Oregon - Permissible Exposure Limits - TWAs
RTK - U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Tennessee - Occupational Exposure Limits - TWAs
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
U.S. - Vermont - Permissible Exposure Limits - TWAs
U.S. - Washington - Permissible Exposure Limits - STELs
U.S. - Washington - Permissible Exposure Limits - TWAs

**Proprietary Ingredient #5 (Proprietary)**
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

**Proprietary Ingredient #8 (Proprietary)**
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

**Proprietary Ingredient #9 (Proprietary)**
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

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**SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION**

**Revision Date** : 11/24/2015
**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

**GHS Full Text Phrases:**

<table>
<thead>
<tr>
<th>Comb. Dust</th>
<th>Combustible Dust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage/eye irritation Category 2A</td>
</tr>
<tr>
<td>Comb. Dust</td>
<td>May form combustible dust concentrations in air</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
</tbody>
</table>

*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.*

SDS US (GHS HazCom)