



Safety Data Sheet

Issue Date 04-Dec-2012

Revision Date: 19-Nov-2013

Version 1.0

1. IDENTIFICATION

Product Identifier

Product Name Banner

Other Means of Identification

Product Code 071200

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Bio-enzymatic digestant. For industrial use.

Details of the Supplier of the Safety Data Sheet

Midlab, Inc.
140 Private Brand Way
Athens, TN 37303

Emergency Telephone Number

Company Phone Number Phone: 1-423-337-3180
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Contains non-pathogenic bacterial spores.

Appearance White

Physical State Liquid

Odor Fresh

Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Water	7732-18-5	60-100
Alcohols, C9-11 ethoxylated	68439-46-3	1-5
Diethylene Glycol Monobutyl Ether	112-34-5	1-5
Sodium Xylene Sulfonate	1300-72-7	1-5

Contains 1-5% non-pathogenic bacterial spores.

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.

Skin Contact If skin irritation occurs, rinse affected area with water.

Inhalation	No known hazardous effects. If symptoms occur, remove to fresh air.
Ingestion	Drink plenty of water. If any discomfort persists, obtain medical attention.

Most Important Symptoms and Effects

Symptoms	Prolonged contact may cause painful stinging or burning of eyes and lids, watering of eye, and irritation. Prolonged or repeated skin contact may cause irritation.
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Indication of any Immediate Medical Attention and Special Treatment Needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Water spray (fog). Carbon dioxide (CO₂). Dry chemical. Foam.

Unsuitable Extinguishing Media

Not determined.

Specific Hazards Arising from the Chemical

None known.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal Precautions, Protective Equipment and Emergency Procedures**

Personal Precautions	Use personal protective equipment as required.
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Environmental Precautions	Avoid release to the environment.
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Methods and Material for Containment and Cleaning Up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
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Methods for Clean-Up	Collect spillage. Collect in a clean, dry waste container for disposal. After cleaning, flush away traces with water.
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7. HANDLING AND STORAGE**Precautions for Safe Handling**

Advice on Safe Handling	Avoid contact with eyes. Observe good industrial hygiene practices.
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Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep from freezing.
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Incompatible Materials	None known.
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>Exposure Guidelines</u>	No exposure limits noted for ingredient(s)
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Appropriate Engineering Controls

Engineering Controls	Ventilation systems.
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Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection	No protective equipment is needed under normal use conditions.
Skin and Body Protection	No protective equipment is needed under normal use conditions.
Respiratory Protection	No protective equipment is needed under normal use conditions.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on Basic Physical and Chemical Properties**

Physical State	Liquid	Odor	Fresh
Appearance	Opaque	Odor Threshold	Not determined
Color	White		
Property	Values	Remarks • Method	
pH	7.0-7.5		
Melting Point/Freezing Point	~ 0 °C / ~32 °F		
Boiling Point/Boiling Range	~ 100 °C / ~212 °F		
Flash Point	Not applicable	Tag Open Cup	
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	n/a-liquid		
Upper Flammability Limits	Not determined		
Lower Flammability Limit	Not determined		
Vapor Pressure	Not determined		
Vapor Density	Not determined		
Specific Gravity	1.01		
Water Solubility	Completely soluble	@ 25 °C (77 °F)	
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Auto-ignition Temperature	Not determined		
Decomposition Temperature	Not determined		
Kinematic Viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Not determined		
Oxidizing Properties	Not determined		

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children. Keep from freezing.

Incompatible Materials

None known.

Hazardous Decomposition Products

When exposed to fire, produces normal products of combustion.

11. TOXICOLOGICAL INFORMATION**Information on Likely Routes of Exposure****Product Information**

Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Inhalation	Avoid breathing vapors or mists.
Ingestion	Do not taste or swallow.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Alcohols, C9-11 ethoxylated 68439-46-3	= 1378 mg/kg (Rat)	> 2 g/kg (Rabbit)	-
Diethylene Glycol Monobutyl Ether 112-34-5	= 3384 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	-
Sodium Xylene Sulfonate 1300-72-7	= 7200 mg/kg (Rat)	-	-

Information on Physical, Chemical and Toxicological Effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Diethylene Glycol Monobutyl Ether 112-34-5	100: 96 h Desmodesmus subspicatus mg/L EC50	1300: 96 h Lepomis macrochirus mg/L LC50 static	-	2850: 24 h Daphnia magna mg/L EC50 100: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined

Bioaccumulation

Not determined

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT Not regulated**IATA** Not regulated**IMDG** Not regulated**15. REGULATORY INFORMATION****International Inventories**

Not determined

US Federal Regulations**SARA 311/312 Hazard Categories****Acute Health Hazard** Yes**SARA 313**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Diethylene Glycol Monobutyl Ether	112-34-5	1-5	1.0

US State Regulations**U.S. State Right-to-Know Regulations**

The following ingredients appear on various state right to know lists and/or California's Proposition 65 List:

Chemical Name	State List
Diethylene Glycol Monobutyl Ether 112-34-5	NJ & PA

AZ- Arizona Ambient Air Quality Guidelines

CT- Connecticut Hazardous Air Pollutants

CA- California Director's List of Hazardous Substances

CAP65- California Prop65

FL- Florida Substances List

ID- Idaho Non-Carcinogen Toxic Air Pollutants

IL- Illinois Toxic Air Contaminate- Carcinogenic

MA- Massachusetts Right to Know List

MN- Minnesota Hazardous Substances List

NJ- New Jersey Right to Know List

PA- Pennsylvania Right to Know List

RI- Rhode Island Hazardous Substances List

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	Not determined	Not determined	Not determined	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	1	0	0	Not determined

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Keep Out of Reach of Children. For Industrial and Institutional Use Only.

*Denotes changes from last version.

End of Safety Data Sheet