Material Safety Data Sheet

Bacterial Amylase

Revised: 12/19/2012
Replaces: 11/18/2011
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Section 1 - Product Description

Product Name: Bacterial Amylase
Size: Various
Chemical Name: alpha-1,4-glucan 4-glucanohydrolase
CAS Number: 9000-90-2
Formula: N/A
Synonyms: Various trade names (e.g. BAM 240, BAN 120L)
Distributor: Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F) Chemtrec 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 - Hazard Identification

Emergency Overview: N/A
Potential Health Effects:
- Eyes: May cause irritation.
- Skin: May cause irritation to skin.
- Ingestion: May cause gastrointestinal discomfort.
- Inhalation: May cause irritation to respiratory tract.

Section 3 - Composition / Information on Ingredients

Principal Hazardous Components: alpha Amylase concentrate
TLV units: N/A
PEL units: N/A

Section 4 - First Aid Measures

Emergency and First Aid Procedures:
- Eyes - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Skin - After contact with skin, wash immediately with plenty of water.
- Ingestion - If swallowed, rinse mouth with water (only if the person is conscious).
- Inhalation - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Section 5 - Firefighting Procedures

Flash Point (Method Used): N/A
NFPA Rating:
- Health: 1
- Fire: 1
- Reactivity: 0
Extinguisher Media: Use dry chemical, CO2 or appropriate foam.
Flammable Limits in Air % by Volume: N/A
Autoignition Temperature: N/A
Special Firefighting Procedures: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Unusual Fire and Explosion Hazards: N/A

Section 6 - Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

Section 7 - Special Precautions

Precautions to Take in Handling or Storing: Use only in well-ventilated areas. Keep container tightly closed in a cool, well-ventilated place.

Section 8 - Protection Information

Respiratory Protection (Specify Type): None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.
Ventilation:
Local Exhaust: Yes
Mechanical(General): Yes
Special: No
Other: No
Protective Gloves: Natural rubber, Neoprene, PVC or equivalent.
Eye Protection: Splash proof chemical safety goggles should be worn.
Other Protective Clothing or Equipment: Lab coat, apron, eye wash, safety shower.

Section 9 - Physical Data

Molecular Weight: Approximately 45,000 Daltons  Melting Point: N/A
Boiling Point: N/A  Vapor Pressure: N/A
Vapor Density(Air=1): >1  Specific Gravity (H2O=1): >1
Percent Volatile by Volume: N/A  Evaporation Rate (BuAc=1): N/A
Solubility in Water: Soluble  Appearance and Odor: Clear to brown liquid.

Section 10 - Reactivity Data

Stability: Stable
Conditions to Avoid: Avoid Dusting. May become explosive when dispersed in air.
Incompatibility (Materials to Avoid): N/A
Hazardous Decomposition Products: N/A
Hazardous Polymerization: Will not occur

Section 11 - Toxicity Data

Toxicity Data: orl-rat LD50 7500 mg/kg
Effects of Overexposure:
Acute: See Section 2
Chronic: To the best of our knowledge, the toxicological properties of this mixture have not been thoroughly evaluated.
Conditions Aggravated by Overexposure: Respiratory disorders
Target Organs: Respiratory system
Primary Route(s) of Entry: Inhalation and ingestion.

Section 12 - Ecological Data

EPA Waste Numbers: N/A
Section 13 - Disposal Information

**Waste Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Section 14 - Transport Information

**DOT Proper Shipping Name:** N/A

Section 15 - Regulatory Information

**EPA TSCA Status:** On TSCA Inventory

**Hazard Category for SARA Section 311/312 Reporting:** Acute

<table>
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<tr>
<th>Name List</th>
<th>Chemical Category</th>
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<tr>
<td>Alpha Amylase - No</td>
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**CERCLA Section 103 RQ(lb.):** Alpha Amylase - No  
**RCRA Section 261.33:** Alpha Amylase - No

Section 16 - Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

- **ACGIH:** American Conference of Governmental Industrial Hygienists
- **CAS Number:** Chemical Services Abstract Number
- **CERCLA:** Comprehensive Environmental Response, Compensation, and Liability Act
- **DOT:** U.S. Department of Transportation
- **IARC:** International Agency of Research on Cancer
- **N/A:** Not Available
- **NTP:** National Toxicology Program
- **OSHA:** Occupational Safety and Health Administration
- **PEL:** Permissible Exposure Limit
- **ppm:** Parts per million
- **RCRA:** Resource Conservation and Recovery Act
- **SARA:** Superfund Amendments and Reauthorization Act
- **TLV:** Threshold Limit Value
- **TSCA:** Toxic Substances Control Act