Section 1  Product Description

Product Name: Alpha Amylase
Recommended Use: Science education applications
Synonyms: N/A
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150

Chemical Information:
800-227-1150 (8am-5pm (ET) M-F)
Chemtrec:
800-424-9300 (Transportation Spill Response 24 hours)

Section 2  Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;
Not a dangerous substance according to GHS classification criteria. No known OSHA hazards.

GHS Classification:

Other Safety Precautions:
May cause eye irritation.
May cause gastrointestinal discomfort.
May cause irritation to respiratory tract.
May cause irritation to skin.

Section 3  Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fungal alpha amylase</td>
<td>9013-01-8</td>
<td>100</td>
</tr>
</tbody>
</table>

Refrigerate upon arrival. (EMSFORM_03SDS_COMP_NOTE)

Section 4  First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: After contact with skin, wash immediately with plenty of water.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5  Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: N/A
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Section 6  Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:
No adverse health affects expected from the clean-up of spilled material. Ventilate the contaminated area.
Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Avoid dusting. Contain the discharged material.
Section 7  Handling and Storage

Handling: Avoid creating and inhaling dust.
Storage: Keep container tightly closed in a cool, well-ventilated place.
Storage Code: Green - general chemical storage

Section 8  Protection Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH (TWA)</th>
<th>ACGIH (STEL)</th>
<th>OSHA PEL (TWA)</th>
<th>OSHA PEL (STEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Control Parameters
- Engineering Measures: No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.
- Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.
- Respiratory Protection: No respiratory protection required under normal conditions of use.
- Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station available.
- Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.
- Gloves: Nitrile

Section 9  Physical Data

- Formula: N/A
- Molecular Weight: N/A
- Appearance: Off-white to tan Solid
- Odor: No data available
- Odor Threshold: No data available
- pH: No data available
- Melting Point: No data available
- Boiling Point: No data available
- Flash Point: No data available
- Flammable Limits in Air: N/A
- Vapor Pressure: N/A
- Evaporation Rate (BuAc=1): N/A
- Vapor Density (Air=1): >1
- Specific Gravity: >1
- Solubility in Water: Soluble
- Log Pow (calculated): No data available
- Autoignition Temperature: No data available
- Decomposition Temperature: No data available
- Viscosity: No data available
- Percent Volatile by Volume: N/A

Section 10  Reactivity Data

- Reactivity: No data available
- Chemical Stability: Stable under normal conditions.
- Conditions to Avoid: None known.
- Hazardous Polymerization: Will not occur

Section 11  Toxicity Data

- Routes of Entry: Inhalation and skin contact.
- Symptoms (Acute): Allergies
- Delayed Effects: No data available

Acute Toxicity:
- Chemical Name: No data available
- CAS Number: 9013-01-8
- Oral LD50: Not determined
- Dermal LD50: Not determined
- Inhalation LC50: Not determined

Carcinogenicity:
- Chemical Name: No data available
- CAS Number: 9013-01-8
- IARC: Not listed
- NTP: Not listed
- OSHA: Not listed
Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.

Target Organ Effects:
Acute: See Section 2
Chronic: N/A

Section 12 Ecological Data

Overview: This material is not expected to be harmful to the ecology.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Eco Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>9013-01-8</td>
<td></td>
</tr>
</tbody>
</table>

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name: Not regulated for transport by US DOT.
Air - IATA Proper Shipping Name: Not regulated for air transport by IATA.

Section 15 Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>§ 313 Name</th>
<th>§ 304 RQ</th>
<th>CERCLA RQ</th>
<th>§ 302 TPQ</th>
<th>CAA 112(2) TQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available</td>
<td>9013-01-8</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

California Prop 65: No California Proposition 65 ingredients

Section 16 Additional Information
Glossary

- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstract Service Number
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
- DOT: U.S. Department of Transportation
- IARC: International Agency for 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
- IDLH: Immediately dangerous to life and health

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.