



# Material Safety Data Sheet

Catalog Number: 100447  
Revision date: 24-Apr-2006

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY INFORMATION

Catalog Number: 100447

Product name: alpha-AMYLASE

**Supplier:**

MP Biomedicals, LLC  
29525 Fountain Parkway  
Solon, OH 44139  
tel: 440-337-1200

Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %	ACGIH Exposure Limits:	OSHA Exposure Limits:
alpha-AMYLASE	9000-90-2	90 - 100%	None	None

## 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** Harmful by inhalation, in contact with skin and if swallowed., May cause allergic respiratory reaction.

**Category of Danger:**

Harmful , Respiratory Sensitizer

**Principle routes of exposure:** Skin

**Inhalation:** Harmful by inhalation.

May cause allergic respiratory reaction

**Ingestion:** Harmful if swallowed.

**Skin contact:** Harmful in contact with skin.

**Eye contact:** Risk of serious damage to eyes

**ANSI Classification** Sensitizer - respiratory

**Statements of hazard** HARMFUL IF SWALLOWED. MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR INHALED.

MAY CAUSE ALLERGIC RESPIRATORY REACTION.

**Statement of Spill or Leak - ANSI Label** Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment.

**Statement of First Aid** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Precautions - ANSI Label** Do not breathe vapors or spray mist Use only with adequate ventilation.

## 4. FIRST AID MEASURES

**General advice:** In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Inhalation:** Move to fresh air Oxygen or artificial respiration if needed Consult a physician

**Skin contact:** Wash off immediately with soap and plenty of water Consult a physician if necessary

**Ingestion:** Do not induce vomiting without medical advice.

**Eye contact:** In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Protection of first-aiders:** No information available

**Medical conditions aggravated by exposure:** None known

## 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media:**

Use dry chemical, CO<sub>2</sub>, water spray or "alcohol" foam

**Specific hazards:**

Burning produces irritant fumes.

**Unusual hazards:**

None known

**Special protective equipment for firefighters:**

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

**Specific methods:**

Water mist may be used to cool closed containers.

**Flash point:**

Not determined

**Autoignition temperature:**

Not determined

**NFPA rating:**

NFPA Health: 1

NFPA Flammability: 1

NFPA Reactivity: 0

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Use personal protective equipment.

**Environmental precautions:**

Do not flush into surface water or sanitary sewer system.

**Methods for cleaning up:**

Soak up with inert absorbent material.

## 7. HANDLING AND STORAGE

**Storage:**

+4°C

DESICCATE

**Handling:**

Use only in area provided with appropriate exhaust ventilation.

**Safe handling advice:**

Wear personal protective equipment.

**Technical measures/storage conditions:**

Keep containers tightly closed in a cool, well-ventilated place.

**Incompatible products:**

Oxidising and spontaneously flammable products

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures:** Ensure adequate ventilation.

### PERSONAL PROTECTIVE EQUIPMENT

**Respiratory protection:** Breathing apparatus only if aerosol or dust is formed.

**Hand protection:** Pvc or other plastic material gloves

**Skin and body protection:** Usual safety precautions while handling the product will provide adequate protection against this potential effect.

**Eye protection:** Safety glasses with side-shields

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Powder
Formula:	Not applicable
Melting point/range:	No data available at this time.
Boiling point/range:	No Data available at this time.
Density:	No data available
Vapor pressure:	No data available
Evaporation rate:	No data available
Vapor density:	No data available
Solubility (in water):	Soluble
Flash point:	Not determined
Autoignition temperature:	Not determined

## 10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Polymerization:	None under normal processing.
Hazardous decomposition products:	Thermal decomposition can lead to release of irritating gases and vapours such as carbon oxides.
Materials to avoid:	Strong oxidising agents
Conditions to avoid:	Exposure to air or moisture over prolonged periods.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

#### Acute toxicity

##### Components

alpha-AMYLASE

#### RTECS Number:

BU7432500

#### Selected LD50s and LC50s

Not Determined

Chronic toxicity:	Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.
Local effects:	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Specific effects:	May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache.
Primary irritation:	No data is available on the product itself.
Carcinogenic effects:	No data is available on the product itself.
Mutagenic effects:	No data is available on the product itself.
Reproductive toxicity:	No data is available on the product itself.

## 12. ECOLOGICAL INFORMATION

Mobility:	No data available
Bioaccumulation:	No data available
Ecotoxicity effects:	No data available
Aquatic toxicity:	May cause long-term adverse effects in the aquatic environment.

<b>Components</b>	<b>U.S. DOT - Appendix B - Marine Pollutan</b>	<b>U.S. DOT - Appendix B - Severe Marine Pollutants</b>	<b>United Kingdom - The Red List:</b>
alpha-AMYLASE	Not Listed	Not Listed	Not Listed
<b>Components</b>	<b>Germany VCI (WGK)</b>	<b>World Health Organization (WHO) - Drinking Water</b>	<b>Ecotoxicity - Fish Species Data</b>
alpha-AMYLASE	Not Listed	Not Listed	Not Listed
<b>Components</b>	<b>Ecotoxicity - Freshwater Algae Data</b>	<b>Ecotoxicity - Microtox Data</b>	<b>Ecotoxicity - Water Flea Data</b>
alpha-AMYLASE	Not Listed	Not Listed	Not Listed
<b>Components</b>	<b>EPA - ATSDR Priority List</b>	<b>EPA - HPV Challenge Program Chemical List</b>	<b>California - Priority Toxic Pollutants</b>
alpha-AMYLASE	Not Listed	Not Listed	Not Listed
<b>Components</b>	<b>California - Priority Toxic Pollutants</b>	<b>California - Priority Toxic Pollutants</b>	
alpha-AMYLASE	Not Listed	Not Listed	

### 13. DISPOSAL CONSIDERATIONS

#### Waste from residues / unused products:

Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

#### Contaminated packaging: Methods for cleaning up:

Do not re-use empty containers  
Soak up with inert absorbent material.

### 14. TRANSPORT INFORMATION

UN/Id No:

Not regulated

DOT:

Proper shipping name:

Not Regulated

**Components**  
alpha-AMYLASE

**U.S. DOT - Appendix A Table 1 - Reportable Quantities**  
Not Listed

**TDG (Canada):**

**WHMIS hazard class:**

Non-controlled

**IMDG/IMO**

**IMDG - Hazard Classifications**

Not Applicable

**Components**  
alpha-AMYLASE

**U.S. DOT - Appendix B - Marine Pollutan**  
Not Listed

**U.S. DOT - Appendix B - Severe Marine Pollutants**  
Not Listed

## IMO-labels:

<b>15. REGULATORY INFORMATION</b>
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**International Inventories****Components**

alpha-AMYLASE

**Inventory - United States TSCA - Sect. 8(b)**

Present

**Canada DSL Inventory List -**

Not Listed

**Australia (AICS):**

Present

**EU EINECS List -**

232-565-6

**Korean KECL:**

KE-01768

**Philippines PICCS:**

Present

**U.S. regulations:****Components**

alpha-AMYLASE

**California Proposition 65**

-

Not Listed

**Massachusetts Right to Know List:**

Not Listed

**New Jersey Right to Know List:**

Not Listed

**Pennsylvania Right to Know List:**

Not Listed

**Components**

alpha-AMYLASE

**Florida substance List:**

Not Listed

**Rhode Island Right to Know List:**

Not Listed

**Illinois - Toxic Air Contaminants**

Not Listed

**Connecticut - Hazardous Air Pollutants**

Not Listed

**Components**

alpha-AMYLASE

**SARA 313 Emission reporting/Toxic Release of Chemicals**

Not Listed

**CERCLA/SARA - Section 302 Extremely Haz**

Not Listed

**NTP:**

None

**IARC:**

None

**SARA 313 Notification:**

The above is your notification as to the SARA 313 listing for this product(s) pursuant to Section 313 of Title III of the Superfund Ammendments and Reauthorization Act of 1986 and 40 CFR Part 372.

If you are unsure if you are subject to the reporting requirements of Section 313, or need more information, please call the EPA Emergency Planning and Community Right-To-Know Information Hotline: (800) 535-0202 or (202) 479-2499 (in Washington, DC or Alaska).

**State Notification:**

The above information is your notice as to the Right-to-Know listings of the stated product(s). Individual states will list chemicals for a variety of reasons including, but not limited to, the compounds toxicity; carcinogenic, tumorigenic and/or reproductive hazards; and the compounds environmental impact if accidentally released.

<b>16. OTHER INFORMATION</b>
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**Prepared by:** Health & Safety

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**End of Safety Data Sheet**