

Safety Data Sheet

Pepsin

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Pepsin
Recommended Use: Science education applications
Synonyms: Pepsin
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;

DANGER



Causes skin irritation. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

GHS Classification:

Respiratory Sensitisation Category 1, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2A, Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3

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| Acute Toxicity Oral Contains | 100 % of the mixture consists of ingredient(s) of unknown toxicity |
| Acute Toxicity Dermal Contains | 100 % of the mixture consists of ingredient(s) of unknown toxicity |
| Acute Toxicity Inhalation Gas Contains | 100 % of the mixture consists of ingredient(s) of unknown toxicity |
| Acute Toxicity Inhalation Vapor Contains | 100 % of the mixture consists of ingredient(s) of unknown toxicity |
| Acute Toxicity Inhalation Dust/Mist Contains | 100 % of the mixture consists of ingredient(s) of unknown toxicity |

Section 3 Composition / Information on Ingredients

| <u>Chemical Name</u> | <u>CAS #</u> | <u>%</u> |
|----------------------|--------------|----------|
| Pepsin | 9001-75-6 | 100 |

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact: IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Firefighting Procedures

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| Extinguishing Media: | Use dry chemical, CO2 or appropriate foam. |
| Fire Fighting Methods and Protection: | Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus. |
| Fire and/or Explosion Hazards: | Fire or excessive heat may produce hazardous decomposition products. |
| Hazardous Combustion Products: | Carbon dioxide, Carbon monoxide, Nitrogen containing gases |

Section 6 Spill or Leak Procedures

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| Steps to Take in Case Material Is Released or Spilled: | Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Avoid the generation of dusts during clean-up. 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. |
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Section 7 Handling and Storage

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| Handling: | Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection. Readily absorbs moisture from air. Avoid contact with skin and eyes. |
| Storage: | Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep container tightly closed in a cool, well-ventilated place. Keep Refrigerated. |
| Storage Code: | Green - general chemical storage |

Section 8 Protection Information

| <u>Chemical Name</u> | <u>ACGIH</u> | <u>OSHA PEL</u> | | |
|----------------------|--------------|-----------------|--------------|---------------|
| | <u>(TWA)</u> | <u>(STEL)</u> | <u>(TWA)</u> | <u>(STEL)</u> |
| Pepsin | N/A | N/A | N/A | N/A |

Control Parameters

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| Engineering Measures: | No exposure limits exist for the constituents of this product. Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort. |
| Personal Protective Equipment (PPE): | Lab coat, apron, eye wash, safety shower. |
| Respiratory Protection: | Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. |
| Respirator Type(s): | NIOSH approved air purifying respirator with HEPA filter. |
| 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: | No information available |

Section 9 Physical Data

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| Formula: Pepsin 1 X NF | Vapor Pressure: No data available |
| Molecular Weight: No data available | Evaporation Rate (BuAc=1): No data available |
| Appearance: Beige Powder | Vapor Density (Air=1): No data available |
| Odor: Mild Characteristic | Specific Gravity: No data available |
| Odor Threshold: No data available | Solubility in Water: Soluble |
| pH: No data available | Log Pow (calculated): No data available |
| Melting Point: No data available | Autoignition Temperature: No data available |
| Boiling Point: No data available | Decomposition Temperature: No data available |
| Flash Point: No data available | Viscosity: No data available |
| Flammable Limits in Air: No data available | Percent Volatile by Volume: No data available |

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Section 10

Reactivity Data

Reactivity: Not generally reactive under normal conditions.
Chemical Stability: Stable under normal conditions.
Conditions to Avoid: Elevated temperatures Basic pH conditions.
Incompatible Materials: Alcohols, Caustics (bases), Metal Salts, Strong oxidizing agents, Tannins
Hazardous Decomposition Products: Nitrogen containing gases, Carbon dioxide, Carbon monoxide
Hazardous Polymerization: Will not occur

Section 11

Toxicity Data

Routes of Entry: Inhalation.
Symptoms (Acute): No data available, Respiratory Irritation, Dermatitis, Respiratory Sensitization
Delayed Effects: Respiratory Sensitization

Acute Toxicity:

| Chemical Name | CAS Number | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------|------------|----------------|----------------|-----------------|
| Pepsin | 9001-75-6 | Not determined | Not determined | Not determined |

Carcinogenicity:

| Chemical Name | CAS Number | IARC | NTP | OSHA |
|---------------|------------|------------|------------|------------|
| Pepsin | 9001-75-6 | Not listed | Not listed | Not listed |

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: Evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: Respiratory system
Chronic: Respiratory system

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

| Chemical Name | CAS Number | Eco Toxicity |
|---------------|------------|--------------|
| Pepsin | 9001-75-6 | |

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.

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| Chemical Name | CAS Number | § 313 Name | § 304 RQ | CERCLA RQ | § 302 TPQ | CAA 112(2) TQ |
|---------------|------------|------------|----------|-----------|-----------|---------------|
| Pepsin | 9001-75-6 | No | No | No | No | No |

Section 16

Additional Information

Revised: 10/26/2015

Replaces: 10/15/2015

Printed: 10-29-2015

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.

Glossary

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