

# Part of Thermo Fisher Scientific

# SAFETY DATA SHEET

Creation Date 20-Jul-2009 Revision Date 21-Apr-2014 Revision Number 1

### 1. Identification

Product Name Pepsin

Cat No.: P53100; P53500

Synonyms Pepsin Fortior; Pepsin A; Lactated Pepsin

Recommended Use Laboratory chemicals.

Uses advised against No Information available

Details of the supplier of the safety data sheet

Company Emergency Telephone Number

Fisher Scientific CHEMTREC®, Inside the USA: 800-424-9300
One Reagent Lane CHEMTREC®, Outside the USA: 001-703-527-3887

Fair Lawn, NJ 07410 Tel: (201) 796-7100

## 2. Hazard(s) identification

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/irritation Category 2
Serious Eye Damage/Eye Irritation Category 2
Respiratory Sensitization Category 1
Specific target organ toxicity (single exposure) Category 3

Target Organs - Respiratory system.

### Label Elements

### Signal Word

Danger

### **Hazard Statements**

Causes skin irritation

Causes serious eye irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause respiratory irritation

**Pepsin** 

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### **Precautionary Statements**

#### Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray

In case of inadequate ventilation wear respiratory protection Use only outdoors or in a well-ventilated area

#### Inhalation

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

#### Skin

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

#### **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

#### Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

### **Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

None identified

# 3. Composition / information on ingredients

Component	CAS-No	Weight %		
Pepsin A	9001-75-6	100		

## 4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Obtain medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

**Inhalation** Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If

not breathing, give artificial respiration. Obtain medical attention.

**Ingestion** Do not induce vomiting. Obtain medical attention.

allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands

and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Notes to Physician Treat symptomatically

## 5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO 2). Dry chemical. chemical foam.

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available No information available Method -

**Autoignition Temperature** 

**Explosion Limits** 

Upper No data available Lower No data available Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

### **Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition.

#### **Hazardous Combustion Products**

Carbon monoxide (CO) Carbon dioxide (CO2)

### **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.

NFPA

Health Flammability Instability Physical hazards 2 1 0 N/A

## 6. Accidental release measures

Use personal protective equipment. Ensure adequate ventilation. Avoid contact with the **Personal Precautions** 

skin and the eyes. Avoid dust formation.

Should not be released into the environment. **Environmental Precautions** 

Methods for Containment and Clean Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for

Up disposal. Do not let this chemical enter the environment.

7. Handling and storage

Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. Use only in area Handling

provided with appropriate exhaust ventilation. Ensure adequate ventilation. Wear personal

protective equipment.

Keep in a dry place. Keep container tightly closed. Keep refrigerated. Storage

8. Exposure controls / personal protection

This product does not contain any hazardous materials with occupational exposure limits **Exposure Guidelines** 

established by the region specific regulatory bodies.

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations **Engineering Measures** 

and safety showers are close to the workstation location.

**Personal Protective Equipment** 

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

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

## 9. Physical and chemical properties

Powder Solid **Physical State** Yellow **Appearance** Strong Odor

**Odor Threshold** No information available рΗ No information available

**Melting Point/Range** No data available **Boiling Point/Range** No information available **Flash Point** No information available **Evaporation Rate** Not applicable

Flammability (solid,gas) No information available

Flammability or explosive limits

No data available Upper Lower No data available **Vapor Pressure** No information available **Vapor Density** Not applicable

**Relative Density** No information available

Solubility soluble

Partition coefficient; n-octanol/water No data available

**Autoignition Temperature Decomposition Temperature** > 50°C **Viscosity** Not applicable

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

Stable under normal conditions. Stability

**Conditions to Avoid** Avoid dust formation. Incompatible products.

Strong oxidizing agents, Alcohols, Powdered metal salts **Incompatible Materials** 

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity** 

**Product Information** No acute toxicity information is available for this product

**Component Information Toxicologically Synergistic** No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Irritating to eyes, respiratory system and skin

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

### **Pepsin**

Component	CAS-No IARC		NTP	ACGIH	OSHA	Mexico	
Pepsin A	9001-75-6	Not listed					

**Mutagenic Effects** Mutagenic effects have occurred in experimental animals.

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

No information available. **Teratogenicity** 

STOT - single exposure Respiratory system STOT - repeated exposure None known

**Aspiration hazard** No information available

delayed

Symptoms / effects, both acute and Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

**Endocrine Disruptor Information** No information available

Other Adverse Effects See actual entry in RTECS for complete information.

# 12. Ecological information

#### **Ecotoxicity**

Do not empty into drains.

Persistence and Degradability **Bioaccumulation/ Accumulation**  Soluble in water Persistence is unlikely based on information available.

No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

	13. Disposal considerations
Waste Disposal Methods	Chemical waste generators must determine whether a discarded chemical is classified

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information DOT Not regulated Not regulated **TDG** Not regulated <u>IATA</u> IMDG/IMO Not regulated

# 15. Regulatory information

#### International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Pepsin A	Х	Χ	Х	232-629-3	-		Χ	-	Χ	Χ	Χ

#### Legend:

- X Listed
- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

**Pepsin** 

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Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

### U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

SARA 311/312 Hazardous Categorization

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act

Not applicable

Not applicable

**OSHA** Occupational Safety and Health Administration

Not applicable

**CERCLA**Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

State Right-to-Know Not applicable

### **U.S. Department of Transportation**

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

## **U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

## Other International Regulations

Mexico - Grade No information available

## Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class

D2A Very toxic materials

D2B Toxic materials



# 16. Other information

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**Pepsin** 

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS)

#### Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**End of SDS**