

Safety Data Sheet

Pepsin 1:10000

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Pepsin 1:10000

Synonyms/Generic Names: Pepsinum

SDS Number: 514.00

Product Use: For Educational Use Only

Manufacturer: Columbus Chemical Industries, Inc.

N4335 Temkin Rd. Columbus, WI. 53925

For More Information Contact: Ward's Science

5100 West Henrietta Rd. PO Box 92912-9012 Rochester, NY 14692

(800) 962-2660 (Monday-Friday 7:30-7:00 Eastern Time)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

OSHA Hazards: Skin and respiratory sensitizer, Irritant

Target Organs: None **Signal Word:** Danger

Pictograms:





GHS Classification:

Skin irritation	Category 2
Eye irritation	Category 2A
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Specific target organ toxicity-single exposure	Category 3

GHS Label Elements, including precautionary statements:

Hazard Statements:

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H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.

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Precautionary Statements:

P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.	
P280	Wear protective gloves.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact	
	lenses, if present and easy to do. Continue rinsing.	
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/	
	physician.	

Potential Health Effects

Eyes	Causes eye irritation.
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Ingestion	May be harmful if swallowed.

NFPA Ratings

Health	2
Flammability	1
Reactivity	0
Specific hazard	Not Available

HMIS Ratings

Health	2
Fire	1
Reactivity	0
Personal	E

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS#	EINECS# / ELINCS#	Formula	Molecular Weight
Pepsin	100	9001-75-6	232-629-3	Mixture of Enzymes	N/A

4. FIRST-AID MEASURES

Eyes	Immediately rinse with plenty of water for at least 15 minutes and seek medical attention.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not
	breathing, give artificial respiration. Get medical attention.
Skin	Flush with plenty of water for at least 15 minutes while removing contaminated clothing and
	wash using soap. Get medical attention.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If
	conscious, wash out mouth with water. Get medical attention.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable)	May be combustible at high temperature. Use water spray, alcohol-	
extinguishing media	resistant foam, dry chemical or carbon dioxide. Use appropriate media	
	for adjacent fire. Cool unopened containers with water.	
Special protective equipment	Wear self-contained, approved breathing apparatus and full protective	
and precautions for firefighters	clothing, including eye protection and boots.	
Specific hazards arising from	May emit toxic fumes under fire conditions. Nature of decomposition	
the chemical	products not known. (See also Stability and Reactivity section).	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment

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	may be subject to federal/national or local reporting requirements.
Methods and materials for	Sweep up and place in a suitable container for disposal. Clean surfaces
containment and cleaning up	thoroughly with water to remove residual contamination. Dispose of all
	waste and cleanup materials in accordance with regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

Personal Protection

Eyes	Wear chemical safety glasses or goggles.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an
	approved respirator.
Skin	Wear nitrile or rubber gloves, and complete body suit. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Other	Not Available

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Beige powder.	
Odor	Not Available	
Odor threshold	Not Available	
pH	Not Available	
Melting point/freezing point	Not Available	
Initial boiling point and boiling range	Not Available	
Flash point	Not Flammable	
Evaporation rate	Not Available	
Flammability (solid, gas)	Not Flammable	
Upper/lower flammability or explosive limit	Not Explosive	
Vapor pressure	Not Available	
Vapor density	Not Available	
Density	Not Available	
Solubility (ies)	Soluble in water. Not soluble in alcohol.	
Partition coefficient: n-octanol/water	Not Available	
Auto-ignition temperature	Not Available	
Decomposition temperature	Not Available	

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10. STABILITY AND REACTIVITY

Chemical Stability	Stable	
Possibility of Hazardous Reactions	Will not occur.	
Conditions to Avoid	Not Available	
Incompatible Materials	Alcohol, alkalis, tannins, heavy metal salts.	
Hazardous Decomposition Products	Nature of decomposition products not known.	

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	Not Available

Carcinogenicity

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IARC	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Skin	Irritation, redness, itchiness.	
Eyes	Irritation, redness, watering eyes, itchiness.	
Respiratory	Irritation of mucous membranes, coughing, wheezing, shortness of breath.	
Ingestion	Irritation, nausea, vomiting, diarrhea.	

Chronic Toxicity	Not Available
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	May cause respiratory irritation.
Reproductive Toxicity	Not Available
Respiratory/Skin Sensitization	May cause allergic respiratory and skin reactions.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Vertebrate	Not Available
Aquatic Invertebrate	Not Available
Terrestrial	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

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13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or
	local regulations and consult with appropriate regulatory agencies if necessary before
	disposing of waste product or residues.
Product	Users should review their operations in terms of the applicable federal/national or
Containers	local regulations and consult with appropriate regulatory agencies if necessary
	before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/ICAO	Not Dangerous Goods

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Pepsin
SARA 312	Pepsin
SARA 313	Not Listed
WHMIS Canada	Class D-2B: Material causing other toxic effects (TOXIC).

16. OTHER INFORMATION

Revision	Date
Revision 1	01/11/2013

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