



Material Safety Data Sheet

1 Product and Company Identification

Product Name	Peroxidase
Product Code	PEO-302
Supplier	
Name	TOYOBO CO.,LTD.
Address	2-8, Dojima-Hama 2-chome, Kita-ku, Osaka 530-8230, Japan
Department	Biotechnology Overseas Sales and Marketing Department
Phone	+81-6-6348-3843
Fax	+81-6-6348-3833
Recommended use and restrictions on use	diagnostic product

2 Hazard Identification

Most Important Hazards and Effects	The product might cause allergic reactions upon inhaling or skin contact because of the protein contained.
GHS classification	Classification not possible

3 Composition/Information on Ingredients

Substance/Preparation	Substance
Chemical Nature	Peroxidase
CAS#	9003-99-0
amounts contained	100%(W/W)
Ingredients Contributing to the Hazard	No information available.

4 First Aid Measures

Inhalation	Remove to fresh air. Consult a physician when unpleasantness occurs.
Skin Contact	Wash off with plenty of water. Consult a physician when inflammation on the skin occurs.
Eye Contact	Wash off with running water for 15 minutes or longer immediately, consult a physician afterwards.
Ingestion	Swill plenty amount of water or milk for immediate vomiting, consult a physician.

5 Fire Fighting Measures

Extinguishing Media	Water spray, dry chemical powder, or carbon dioxide etc.
Protection of Firefighters	Avoid working at leeward.

6 Accidental Release Measures

Personal Precautions	Wear protective gear to avoid eye/skin contact and inhalation. Do not work at leeward.
Environmental Precautions	High concentrated waste fluid should not be directly discharged into rivers.
Methods for Cleaning up	Use cloth, paper or anything similar to soak up the solution leaking out of the container. Take up under vacuum using dust collecting filter, wash residual spill with copious amounts of water.(Waste water should be treated with activated sludge etc.)

7 Handling and Storage

Handling	
Technical Measures	Wear protective gear to avoid eye/skin contact and inhalation. Do not drop the container to prevent the content popping out.
Precautions	None specified.
Safe Handling Advice	No special technical protective measures required.
Storage	
Technical Measures	Keep sealed container in freezer.
Incompatible Products	None specified.
Storage Conditions	Store under -20 .
Packaging Materials	Use the initial container of the product.



Material Safety Data Sheet

8 Exposure Controls/Personal Protection

Engineering Measures	Set local ventilation equipment.
Personal Protective Equipment	
Respiratory Protection	Protecting mask.
Hand Protection	Protecting gloves(rubbers or plastic gloves etc.).
Eye Protection	Safety goggles.
Skin and Body Protection	Long sleeve working wear.

9 Physical and Chemical Properties

Physical State	Powder
Colour/Odour	Reddish-brown/No odour
pH	pH6.2~7.2 in the case of 10 mg/ml in water.
Decomposition Temperature	No information available.
Flash Point	No information available.
Density	No information available.
Solubility	Easily soluble in water.

10 Stability and Reactivity

Stability	Stable at temperatures below -20 . Proteins, when left for long at room temperature, might be degraded, which does not cause any hazardous reaction though.
Possible hazard reactions at specific condition	Not specified.
Conditions to avoid	Prolonged storage under higher temperature than room temperature and high humidity.
Materials to avoid	Any materials which dissolve or destroy proteins such as strong acid or alkali.
Hazardous Decomposition Products	No information available.

11 Toxicological Information

Acute Toxicity	No data available.
Skin corrosion/irritation	No data available.
Serious eye damage/eye irritation	No data available.
Respiratory or skin sensitization	However there is no toxicological information, proteins contained this product may cause allergic reactions in certain sensitive individuals.
Germ cell mutagenicity	No data available.
Carcinogenicity	No data available.
Reproductive toxicity	No data available.
Specific target organ toxicity - single exposure	No data available.
Specific target organ toxicity - repeated exposure	No data available.
Aspiration hazard	No data available.

12 Ecological Information

Persistence/Degradability	Peroxidase decomposes and does not remain on the environment for long, since it consists of protein.
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13 Disposal Considerations

Waste from Residues	Dispose of protein in accordance with all applicable local and national laws and regulations.
Contaminated packaging	Wash with copious amounts of water and waste conforming to local regulations depending on the type of the material.

14 Transport Information

International Regulations	None specified (Not classified as hazardous material as per the UN recommendation).
Specific Precautions	Keep at temperatures below -20 .

15 Regulatory Information

Regulations	None specified.
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16 Other Information

Notice	The contents specified here are made based on the documents, information or data which are currently available and subject to revision in the future. TOYOBO makes no warranty and assumes no liability whatsoever in connection with any use of this information.
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