



Material Safety Data Sheet

1 Product and Company Identification

Product Name α -Glucosidase
 Product Code AGH-211
 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
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 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 Preparation
 Chemical Nature α -Glucosidase
 CAS# 9001-42-7
 amounts contained ca. 35%(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 Rinse off with running water for 15 minutes or longer immediately, consult a physician afterwards.
 Ingestion Swill plentiful 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.)



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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

Wear protective gear, avoiding contact on eye, skin and cloths.

Storage

Technical Measures

Keep sealed container in freezer.

Incompatible Products

None specified.

Storage Conditions

Store under -20°C .

Packaging Materials

Use the initial container of the product.

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, form and colour

Solid, powder, white

Odour

No odor

pH

Approximate pH7.0 in the case of 10 mg/ml in water.

Decomposition Temperature

No information available.

Flash Point

No information available.

Density

No information available.

Solubility

Freely soluble in water.

10 Stability and Reactivity

Stability

Stable at temperatures below -20°C . 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

Not available.

Local Effects

Not available.

Sensitization

Not available.

12 Ecological Information

Persistence/Degradability

α -Glucosidase 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

Contaminated packaging

Dispose of protein in accordance with all applicable local and national laws and regulations.

Wash with copious amounts of water and waste conforming to local regulations depending on the type of the material.

14 Transport Information

International Regulations

Specific Precautions

None specified (Not classified as hazardous material as per the UN recommendation).

Keep at temperatures below -20°C .

15 Regulatory Information

Regulations

None specified.

16 Other Information

Notice

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