# Safety Data Sheet

## 1 Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Glycerol dehydrogenase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code</td>
<td>GYD-301</td>
</tr>
</tbody>
</table>

### 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

<table>
<thead>
<tr>
<th>Substance/Mixture</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Nature</td>
<td>Glycerol dehydrogenase</td>
</tr>
<tr>
<td>CAS#</td>
<td>9028-14-2</td>
</tr>
<tr>
<td>amounts contained</td>
<td>ca. 60%(W/W)</td>
</tr>
<tr>
<td>Ingredients Contributing to the Hazard</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

## 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 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.)

## 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 clothes.

### 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.
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8 Exposure Controls/Personal Protection
- Set local ventilation equipment.
- Protecting mask.
- Protecting gloves (rubber or plastic gloves etc.).
- Safety goggles.
- Long sleeve working wear.

9 Physical and Chemical Properties
- Powder
- White/No odour
- Approximately pH 7.5 in the case of 10 mg/ml in water.
- No information available.
- No information available.
- No information available.
- Easily soluble in water.

10 Stability and Reactivity
- 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.
- Not specified.
- Prolonged storage at temperatures higher than room temperature and high humidity.
- Any materials which dissolve or destroy proteins such as strong acid or alkali.
- No information available.

11 Toxicological Information
- Not available.
- Not available.
- Not available.

12 Ecological Information
- Glycerol dehydrogenase decomposes and does not remain on the environment for long, since it consists of protein.

13 Disposal Considerations
- 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
- None specified (Not classified as hazardous material as per the UN recommendation).
- Keep at temperatures below -20°C.

15 Regulatory Information
- None specified.

16 Other Information
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