1 Chemical Product and Company Identification
Identification of the product
Product Code
Supplier
Name
Address
Department
Phone
Fax
Recommended use and restrictions on use

2 Hazard Identification
Most Important Hazards and Effects
GHS classification

3 Composition/Information on Ingredients
Substance/Mixture
Chemical Nature
CAS#
Concentration or concentration range
Stabilizer, etc
Ingredients Contributing to the Hazard

4 First Aid Measures
Inhalation
Skin Contact
Eye Contact
Ingestion

5 Fire Fighting Measures
Extinguishing Media
Protection of Firefighters

6 Accidental Release Measures
Personal Precautions, protective equipment and emergency procedure.
Environmental Precautions
Methods and materials for containment and cleaning up.

7 Handling and Storage
Handling
Technical Measures
Precautions
Storage
Technical Measures
Incompatible substances and mixtures
Storage Conditions
Packaging Materials

8 Exposure Controls/Personal Protection
Engineering Measures
Personal Protective Equipment
Respiratory Protection
Hand Protection
Eye Protection
Skin and Body Protection
## 9 Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid, Powder</td>
</tr>
<tr>
<td>Colour/Odour</td>
<td>White /No odour</td>
</tr>
<tr>
<td>pH</td>
<td>ca. pH 7.5 in the case of 10mg/ml in water.</td>
</tr>
<tr>
<td>Decomposition</td>
<td>No information available.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No information available.</td>
</tr>
<tr>
<td>Density</td>
<td>No information available.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Easily soluble in water.</td>
</tr>
</tbody>
</table>

## 10 Stability and Reactivity

**Stability**
- Stable at temperatures below -20℃. When left for long at room temperature, proteins might be degraded, which does not cause any hazardous reaction.

**Conditions to avoid**
- Prolonged storage at temperatures higher 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity</td>
<td>No information available.</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>No information available.</td>
</tr>
<tr>
<td>Eye damage/irritation</td>
<td>No information available.</td>
</tr>
<tr>
<td>Sensitization</td>
<td>Might cause allergic reactions upon inhaling or skin contact because of the protein contained.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>No information available.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>No information available.</td>
</tr>
<tr>
<td>Toxic to reproduction</td>
<td>No information available.</td>
</tr>
<tr>
<td>Specific target organ toxicity</td>
<td>No information available.</td>
</tr>
<tr>
<td>(Single exposure)</td>
<td></td>
</tr>
<tr>
<td>Specific target organ systemic toxicity (Repeated exposure)</td>
<td>No information available.</td>
</tr>
<tr>
<td>Aspiration toxicity</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

## 12 Ecological Information

**Persistence/Degradability**
- This product is biodegradable and does not remain on the environment for long.

## 13 Disposal Considerations

**Residues**
- Dispose of 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**
- Not applicable.

**Domestic Regulations**
- Not applicable.

**Specific Precautions**
- Keep at temperatures below -20℃.

## 15 Regulatory Information

**Regulations**
- Follow all of the laws and regulations in your country.

## 16 Other Information

**Notice**
- The information shall not be taken as being all inclusive and is to be used only a guide. All materials and mixtures may be present unknown hazards and should be used with caution. The SDS is subject to revision as new information becomes available. The information in this SDS, to the best of our knowledge, is accurate and correct. However, TOYOBO makes no warranty and assumes no liability whatsoever in connection with any use of this information.