TOYOBO

Product Name: Superoxide dismutase (SOD-302)

First issue: Aug. 2. 2012 Revised: May. 31. 2022 SDS No. 665F

Safety Data Sheet

1 Chemical Product and Company Identification

Identification of the product Superoxide dismutase

Product Code SOD-302

Supplier

Name TOYOBO CO., LTD.

Address Osaka Umeda Twin Towers South,

1-13-1 Umeda Kita-ku, Osaka 530-0001, Japan

Department Biotechnology Overseas Sales and Marketing Department

Phone +81-6-6348-3846 Fax +81-6-6348-3833 Recommended use and restrictions on use diagnostic product

2 Hazard Identification

because of the protein contained.

GHS classification Classification not possible

3 Composition/Information on Ingredients

Substance/Mixture Mixture

Chemical Nature Superoxide dismutase

CAS# -

Concentration or concentration range $\,$ ca. 95 % (W/W)

Stabilizer, etc ca. 5 % (W/W)

Ingredients Contributing to the Hazard The ingredients known as hazardous are not included.

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 cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

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, protective Wear protective gear to avoid eye/skin contact and inhalation. Do not equipment and emergency procedure. Wear protective gear to avoid eye/skin contact and inhalation. Do not

Environmental Precautions High concentrated waste fluid should not be directly discharged into

rivers

Methods and materials for containment

and cleaning up.

Clean up the solution spilled with cloth, paper or anything similar to

soak up the solution leaking out of the container.

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.

Storage

Technical Measures Keep sealed container in freezer

Incompatible substances and mixtures None specified.

 $\begin{array}{lll} \mbox{Storage Conditions} & \mbox{Store under -20}^{\circ}\mbox{C to prevent deactivating.} \\ \mbox{Packaging Materials} & \mbox{Use the initial container of the product.} \end{array}$

8 Exposure Controls/Personal Protection

Engineering Measures Provide shower and eye washing apparatus nearby.

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.

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Powder

Physical and Chemical Properties

Physical State

Colour/Odour Blue green /No odour

Decomposition Temperature No information available. Flash Point No information available. Density No information available. Solubility Easily soluble in water.

10 Stability and Reactivity

Stable at temperatures below -20°C. When left for long at room temperature, proteins might be degraded, which does not cause any

ca. pH 8.0 in the case of 10 mg/ml in water.

hazardous reaction.

Possible hazard reactions at specific

condition

Not specified.

Conditions to avoid

Prolonged storage at temperatures higher than room temperature and high

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

No information available. Acute Toxicity Skin corrosion/irritation No information available. No information available. Eve damage/irritation

Might cause allergic reactions upon inhaling or skin contact because of the protein contained.

Germ cell mutagenicity No information available. Carcinogenicity No information available. Toxic to reproduction No information available. No information available. Specific target organ toxicity

(Single exposure)

Sensitization

Specific target organ systemic toxicity No information available.

(Repeated exposure)

Aspiration toxicity No information available.

12 Ecological Information

Persistence/Degradability This product is biodegradable and does not remain on the environment for

13 Disposal Considerations

Residues Dispose of in accordance with all applicable local and national laws and

regulations.

Wash with copious amounts of water and waste conforming to local Contaminated packaging

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

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

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.