



# Material Safety Data Sheet

## Recombinant *Clostridium thermocellum* $\beta$ -mannanase 5A2

**Cat. No.:** X23-08-YM044

**Synonym:** CtMan5A; Mannan *endo*-1,4- $\beta$ -mannosidase; *Endo*- $\beta$ -1,4-mannase;  $\beta$ -D-Mannanase

**This product is for research use only and is not intended for diagnostic use.**

### 1. Identification of the Substance/Preparation and the Company/Undertaking

**Identification of the Product:** Recombinant *Clostridium thermocellum*  $\beta$ -mannanase 5A2  
**Manufacturer/Supplier** CD BioGlyco  
**Identification:** SUITE 201, 17 Ramsey Road, Shirley, NY 11967, USA  
Tel: 1-631-637-6119  
Email: info@bioglyco.com  
Web: <https://www.bioglyco.com>

### 2. Composition/Information on Ingredients

**Substance:** Recombinant *Clostridium thermocellum*  $\beta$ -mannanase 5A2  
**Enzyme Commission Number:** 3.2.1.78

### 3. Hazard Identification

There is at present no information or indication of human health or physical/chemical hazardous properties. Exposure to eyes or skin or by inhalation or ingestion should be minimal under normal conditions of use. The usual precautions taken when handling chemicals should be observed.

### 4. First Aid Measures

**Eye Contact:** Immediately flush with continuously running water.  
**In Case of Accidental Swallowing:** Rinse the mouth with fresh water, provided the person is conscious. Contact a physician.  
**Ingestion:** Rinse mouth with water. Induce vomiting. Immediately seek medical attention and call poison control center.  
**Inhalation:** Move to a well-ventilated area and seek medical attention if necessary.

### 5. Fire-Fighting Measures

**Suitable Extinguishing Media:** Water spray, carbon dioxide, dry chemical powder, or appropriate foam.  
**Special Protective Equipment for** If necessary use self-contained breathing apparatus.

**Fire-Fighting:**

## 6. Accidental Release Measures

**Methods for Cleaning Spills:** Wear chemical-resistant gloves and safety-goggles. Wipe up spilled product using tissue-towels. Place waste in closed containers for disposal.

## 7. Handling and Storage

**Handling:** Avoid contact with eyes, skin, mucous membranes, and clothing.

**Storage:** Store at -20°C.

## 8. Personal Protection and Exposure Control Information

**Eye Protection:** Safety glasses or goggles  
**Protective Gloves:** Chemical-resistant gloves  
**Respiratory:** Protection Not required  
**Ventilation:** Not required  
**Other Protection Equipment:** Safety shower and eye bath

## 9. Physical and Chemical Properties

**Form:** Liquid  
**pH:** N/A  
**Flash Point:** N/A  
**Flammability:** N/A  
**Oxidizing Properties:** N/A  
**Explosive Properties:** N/A  
**Vapor Pressure:** N/A

## 10. Chemical Stability and Reactivity

Product is stable. Hazardous polymerization will not occur.

## 11. Toxicological Data

To the best of our knowledge, the chemical, physical, toxicological properties have not been thoroughly investigated. May cause skin irritation. May be harmful if absorbed through the skin. May cause eye irritation. May be harmful if inhaled swallowed. Material may be irritating to mucous membranes upper respiratory tract.

## 12. Classification and Regulatory Information



In accordance to current EC-Regulations this product is exempt from specific labelling requirements.

### 13. Toxicological Information

Quantitative data on the toxicity of this product is not available. No toxic effects are to be expected when the product is handled appropriately.

### 14. Other Information

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.