

## Safety Data Sheet

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

<b>Product Name:</b>	Glucoamyl L-209+
<b>Chemical Name:</b>	Enzyme preparation
<b>CAS No:</b>	9032-08-0
<b>Recommended Use:</b>	Saccharification of dextrin used in production of dextrose, starch based syrups ethanol fermentation
<b>Company Identification:</b>	CTE Global, Inc. 630 Dundee Road, Suite 440 Northbrook, IL 60062
<b>Emergency telephone number:</b>	847-564-5770

### SECTION 2: Hazards identification

**Classification of the substance or Mixture GHS-US classification:** Respiratory Sensitizer, Category 1 H334

**Label elements**

**GHS-US labeling**

**Hazard pictograms (GHS-US):**



GHS07



GHS08

**Signal word (GHS-US):** Danger

**Hazard statements (GHS-US):** H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Precautionary statements (GHS-US):** P261 – Avoid breathing fume/gas/mist/vapors/spray.  
P342 + P314 – If experiencing respiratory symptoms: Get medical advice/attention if you feel unwell.

### SECTION 3: Composition/information on ingredients

**Name:** Glucoamylase

**Synonyms:** Glucan-1, 4-alpha-glucosidase

**Hazardous ingredients:** Enzyme protein (<10%)

**CAS No:** 9032-08-0

**EINECS No:** 232-877-2

**GHS-US classification:** Resp. Sens. 1, H334

### SECTION 4: First aid measures

**Skin Contact:** Wash skin with plenty of water.

**Eye Contact:** Rinse eyes with cold water for a minimum of 20 minutes. Obtain medical advice if irritation occurs.

**Ingestion:** Rinse mouth and throat thoroughly with water. Drink water. Should irritation occur, seek medical advice.

**Inhalation:** Remove from exposure. If symptoms of irritation or sensitization occur (shortness of breath, wheezing or labored coughing), seek medical advice.

## **SECTION 5: Firefighting measures**

**Protection against Fire and Explosions:** No special requirements

**Suitable Fire Extinguish Media:** Water, foam

**Non Suitable Media:** None

**Special Exposure Hazards:** None

## **SECTION 6: Accidental release measures**

Spilled preparation should be removed immediately. Flush remainder on skin or eyes carefully with plenty of water. Wash contaminated clothing.

## **SECTION 7: Handling and storage**

Provide good ventilation of the room when handling the preparation. Store container in a cool and dry, place away from direct sunlight and heat.

## **SECTION 8: Exposure controls/personal protection**

Recommended Personal Protective Equipment

**Respiratory Protection:** Use in well ventilated areas

**Hand protection:** Impermeable gloves, such as latex gloves

**Eye Protection:** Safety glasses or eye shield

**Other Protection:** Long sleeved clothing or other normal work wear

## **SECTION 9: Physical and chemical properties**

**Appearance:** Brown liquid

**Odor:** Slight odor

**pH:** 3.5 – 5.0

**Density:** 1.11– 1.16 g/mL

**Water solubility:** Active component is readily soluble in application-relevant solutions at all levels of concentration, temperature and pH which may occur in normal usage

#### **SECTION 10: Stability and reactivity**

This material is stable under normal conditions of use.

**Conditions to Avoid:** None

**Materials to Avoid:** None

**Hazardous Decomposition Products:** None

**Hazardous Polymerization:** Not occur

#### **SECTION 11: Toxicological information**

Inhalation of aerosols or dust resulting from inappropriate handling may induce sensitization and may cause allergic reactions in sensitized individuals. Skin contact may cause an irritation. The preparation is non-toxic and ingestion of small quantities is not considered a hazard, but see section 4.

#### **SECTION 12: Ecological information**

The product is believed to be safe for environment in respect of its mobility, stability, decaying ability, bioaccumulation potential, water toxicity and other parameters of ecological toxicity.

#### **SECTION 13: Disposal considerations**

No special disposal method required, except that in accordance with current local authority regulations.

#### **SECTION 14: Transport information**

**UN No:** Not applicable      **Sea:** Not applicable

**Road/Rail:** Not applicable      **Air:** Not applicable

### **SECTION 15: Regulatory information**

The preparation does not contain ingredients classified as dangerous substances.

### **SECTION 16: Other information**

**Indication of changes:** 5/01/2017

**Other information:** This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200. This information is based on our current knowledge and is intended to describe the product for purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.