enzymes.bio

Add enzymes. Add value.

TECHNICAL DATA SHEET

TDS-ENZ340-EN · REV. 02 · 2026-11-03

Food Grade Glucose Oxidase for Gluconate Production

Liquid glucose oxidase preparation for gluconate salt production, declared at 12,000 u/ml.

SKU **ENZ340** CATEGORY **GLUCOSE OXIDASE** GRADE **FOOD GRADE** CAS **9015-68-3**

FORM **LIQUID ENZYME PREPARATION**

Food grade · Not restricted for transport

DECLARED ACTIVITY	WORKING TEMPERATURE	WORKING PH	SHELF LIFE
12,000 u/ml	**20°C–60°C**	**4.0–7.0**	**12 months**
as stated on the product page	operating range; no optimum stated	operating range; no optimum stated	sealed, see storage below

SPECIFICATION

IDENTITY		
Product type	Liquid enzyme preparation	Typical
Appearance	Light yellow-brown liquid	Typical
Ingredients	Glucose Oxidase, carrier: glycerol	Typical

ACTIVITY		
Enzyme activity	**12,000 u/ml**	Typical

PHYSICAL		
pH (25°C)	3.5–5.5	Typical

PURITY AND HYGIENE		
Lead	≤ 5.0 mg/kg	Typical
Total arsenic (as As)	≤ 3.0 mg/kg	Typical
Total plate count	≤ 50,000 CFU/mL	Typical
Coliforms	≤ 30 CFU/mL	Typical

MICROBIOLOGY		
Escherichia coli	< 10 CFU/mL / ≤ 3.0 MPN/mL	Typical
Salmonella (25 mL)	Not detected	Typical

Spec = release limit, confirmed on every lot's Certificate of Analysis. **Typical** = normal product behaviour, not a release limit.

STORAGE & PACKAGING

SHELF LIFE
12 months

STORAGE
Not stated

PACK SIZE
1 kg bottle

ORDERING
Online or by e-mail; current price on the product page

APPLICATIONS

Make sodium gluconate by enzymatic conversion of glucose
Oxidises glucose to gluconic acid lactone, which hydrolyses to gluconic acid

Make zinc gluconate in the same enzymatic process
Used in the manufacture of zinc gluconate

Make calcium gluconate in the same enzymatic process
Used in the manufacture of calcium gluconate

Run the dual-enzyme reaction with catalase
Catalase decomposes hydrogen peroxide to maintain reaction stability

DOSAGE

2–15 kg per metric ton

per metric ton of glucose

Sodium gluconate	**0.2–0.5%; 2–5 kg enzyme per ton of glucose**
Zinc gluconate	**0.5–1.0%; 5–10 kg enzyme per ton of glucose**
Calcium gluconate	**0.5–1.5%; 5–15 kg enzyme per ton of glucose**
Temperature	**20°C–60°C**
pH	**4.0–7.0**

Reference additions are given per ton of glucose for each salt. Neutralisation agent in the example process is sodium hydroxide.

Each lot is released against its specification; the lot Certificate of Analysis reports the measured values.

enzymes.bio · Level 1, 6 Johnsonville Road, Wellington 6037, New Zealand · **Tel (USA) +1 (507) 428-6057** · wholesale@enzymes.bio

Online: enzymes.bio/product/food-grade-glucose-oxidase-for-gluconate-production

Enzyme preparations are proteins and may sensitise; avoid skin, eye and inhalation contact. This technical data sheet gives the product specification and typical values; it is not a batch certificate. A Certificate of Analysis for the supplied lot accompanies each shipment. Safety Data Sheet on request.

SCAN TO ORDER