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TECHNICAL DATA SHEET

TDS-ENZ102-EN · REV. 02 · 2026-11-03

Pullulanase Enzyme for Beer Brewing

Debranching enzyme that increases wort fermentability to reduce brewing time and adjunct usage.

SKU **ENZ102** CATEGORY **BEER BREWING ENZYMES** CAS **9075-68-7** APPEARANCE **LIQUID** COLOUR **BROWN**

Food grade · Produced by submerged fermentation · Not restricted for transport

DECLARED ACTIVITY	OPTIMUM TEMPERATURE	OPTIMUM PH	SHELF LIFE
2000 u/ml	**50–60 °C**	**4.0–5.0**	**12 months**
as stated on the product page	working range 40–65 °C	working range pH 3.5–6.0	sealed, see storage below

SPECIFICATION

IDENTITY

Colour	Brown Typical
Odour	Normal microbial fermentation odour Typical

ACTIVITY

Enzyme activity	**2000 U/g** Spec

WORKING WINDOW

Temperature range	40–65 °C Typical
Optimum temperature	50–60 °C Typical
pH range	3.5–6.0 Typical
Optimum pH	4.0–5.0 Typical

PHYSICAL

Appearance	**Brown liquid** Spec

PURITY AND HYGIENE

Heavy metals	< 30.0 mg/kg Spec
Heavy metals (as Pb)	≤ 5.0 mg/kg Spec
Heavy metals (as As)	≤ 3.0 mg/kg Spec
Total plate count	≤ 50,000 CFU/mL Spec

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
Cool and dry place, sealed container, avoid insolation, high temperature and damp

PACK SIZE
1 kg bag; 25 L drum; 1,125 L drum

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

APPLICATIONS

Beer manufacture
Reduce amylopectin content to produce dry beer.

Glucose manufacture
Improve glucose yield and reduce glucoamylase usage.

Maltose manufacture
Improve maltose yield and produce maltose syrup with 70% maltose.

Starch debranching
Hydrolyse α-1,6-glucosidic linkages in branched chain starch.

DOSAGE

0.4–0.8 L/t

enzyme preparation per ton of total raw materials (beer manufacture)

Substrate	**Total raw materials**
Use	**Beer manufacture; reduces amylopectin to produce dry beer**

Glucose manufacture: 0.35–0.6 L per ton of dry starch.
Maltose manufacture: 1–2 L per ton of dry starch.

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

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Online: enzymes.bio/product/pullulanase-enzyme-for-cost-effective-beer-brewing

Enzyme preparations are proteins, which may induce sensitization and cause allergic-type reactions in sensitized individuals. 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