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TECHNICAL DATA SHEET

TDS-ENZ233-EN · REV. 02 · 2026-11-03

Pullulanase Enzyme Liquid for Starch Hydrolysis

Liquid pullulanase for starch hydrolysis in glucose and maltose syrup production.

SKU **ENZ233** CATEGORY **PULLULANASE** CAS **9075-68-7** GRADE **FOOD GRADE** OTHER NAMES **PULLULANASE**

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

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

SPECIFICATION

IDENTITY		
Production organism	Bacillus subtilis	Typical
Physical form	Liquid	Typical
Colour	Brown	Typical
ACTIVITY		
Enzyme activity	**2000 U/g**	Spec
WORKING WINDOW		
Temperature range	40°C-65°C (optimum 50°C-60°C)	Typical
pH range	3.5~6.0 (optimum 4.0-5.0)	Typical
PHYSICAL		
Appearance	**Brown liquid**	Spec
Bulk density	≤1.20 g/ml	Typical
pH (25°C)	3.0-6.0	Typical
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
Keep sealed in a dry and cool place; avoid direct sunlight. Slight sedimentation is acceptable.

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

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

APPLICATIONS

Use with glucoamylase in glucose syrup saccharification.
Improves glucose yield with less glucoamylase.

Use with fungal alpha-amylase in high maltose syrup saccharification.
Improves maltose yield; produces syrup with 70% maltose content.

Hydrolyse α-1,6-glucosidic linkages in branched starch.
Makes complete hydrolysis of branched starch possible.

Add with glucoamylase and β-amylase during saccharification.
Speeds up saccharification and increases glucose or maltose yield.

DOSAGE

0.2-0.3L (glucose) / 1-2L (high maltose)

per ton of dry starch

Application	**Glucose syrup**
Rate	**0.2-0.3L per ton of dry starch**
Addition point	**Saccharification step, with glucoamylase**
Application	**High maltose syrup**
Rate	**1-2L per ton of dry starch**
Addition point	**Saccharification step, with fungal alpha-amylase**

Optimise the rate for each raw material, specification and process.
Begin trials with a convenient volume.

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-liquid-for-starch-hydrolysis-in-glucose-and-maltose-syrup-production

Enzyme preparations are proteins that may induce sensitization; avoid skin contact, and consult a doctor if irritation or allergic response develops. 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