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TECHNICAL DATA SHEET

TDS-ENZ100-EN · REV. 02 · 2026-11-03

Alpha Amylase Enzyme Powder 3000u/g

Low-temperature α-amylase from Bacillus subtilis fermentation that catalyzes starch hydrolysis.

SKU **ENZ100** CATEGORY **FOOD GRADE ENZYMES** CAS **9000-90-2** GRADE **FOOD GRADE**

PRODUCTION ORGANISM **BACILLUS SUBTILIS**

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

DECLARED ACTIVITY	OPTIMUM TEMPERATURE	OPTIMUM PH	SHELF LIFE
3000 u/g	**70°C-75°C**	**5.0-6.0**	**12 months**
as stated on the product page	working range 60°C-85°C	working range pH 5.0~7.0	sealed, see storage below

SPECIFICATION

IDENTITY	
Physical form	Powder Typical
Colour	Yellowish Typical
ACTIVITY	
Enzymatic activity	**≥ 3,000 U/g** Spec
WORKING WINDOW	
Optimum temperature	70°C-75°C Typical
Working temperature	60°C-85°C Typical
Optimum pH	5.0-6.0 Typical
PURITY AND HYGIENE	
Lead	5 mg/kg Typical
Arsenic	3 mg/kg Typical
MICROBIAL SAFETY	
Escherichia coli	10 CFU/g, 3 MPN/g Typical
Salmonella	Not Detected/25g Typical
PHYSICAL	
Appearance	**Powder** Spec
Loss on drying	≤ 8.0 % 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 in a sealed container; avoid insolation, high temperature and dampness

PACK SIZE
1 kg/bag, 25kg/bags

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

APPLICATIONS

Liquefy starch in fruit juice processing
Improves juice transmittance and prevents turbidity.

Liquefy starch in glucose and cerealose production
Catalyzes starch hydrolysis efficiently.

Liquefy starch in beer, alcohol and distillate spirits production
Catalyzes starch hydrolysis efficiently.

DOSAGE

6-8 u/1 g of material

enzyme activity units per 1 g of material, by application

Maltose, monosodium glutamate	**6-8 u/1 g of material**
Beer	**3 u/1 g of material**
Textile desizing	**about 0.1%**
Other industries	**3-4 of enzyme activity units/1 g of starch; calcium ion concentration 150 ppm**
Fruit juice	**about 0.02-0.1 L/T juice pulp**

Increase application rate after shelf life.

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

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Online: enzymes.bio/product/alpha-amylase-enzyme-3000ug-cas9000902

Enzyme preparations are proteins which may induce sensitization; avoid direct 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