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TECHNICAL DATA SHEET

TDS-ENZ182-EN · REV. 02 · 2026-11-03

Thermostable Alpha Amylase For Industrial Ethanol

Thermostable alpha-amylase enzyme for industrial ethanol production, supplied as a brown liquid.

SKU **ENZ182** CATEGORY **ETHANOL PRODUCTION** CAS **9000-90-2** OTHER NAMES **THERMOSTABLE AMYLASE**

APPEARANCE **LIQUID**

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

DECLARED ACTIVITY	OPTIMUM TEMPERATURE	OPTIMUM PH	SHELF LIFE
30000 u/g	**80°C-95°C**	**5.0-6.0**	**12 months**
as stated on the product page	working range 60°C-105°C	working range pH 4.5~7.5	sealed, see storage below

SPECIFICATION

IDENTITY	
Physical form	Liquid Typical
Colour	Brown Typical
Odour	Normal microbial fermentation odour Typical

ACTIVITY	
Enzyme activity	**≥ 30000 U/g** Spec
Antibacterial activity	**Not detected** Spec

WORKING WINDOW	
Temperature range	60°C-105°C Typical
Optimum temperature	80°C-95°C Typical
pH range	4.5~7.5 Typical
Optimum pH	5.0-6.0 Typical

PHYSICAL	
Loss on drying	≤ 8.0 % Spec

PURITY AND HYGIENE	
Total arsenic (as As)	≤ 3.0 mg/kg Spec
Lead (Pb)	≤ 5.0 mg/kg 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 damp

PACK SIZE
1 kg / bag

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

APPLICATIONS

Alcohol and ethanol industry
Saccharifies starch at the start of saccharification, after pH adjustment.

Beer industry
Adds at mashing-in, per ton of total raw materials.

Starch sugar industry
Saccharifies dry starch at 60-63°C and pH 4.3-4.5 for glucose, maltose and dextrin.

DOSAGE

0.6-1.2L per ton

per ton of total raw materials

Process	**Alcohol and ethanol industry**
Addition point	**Beginning of saccharification after pH adjustment**
Temperature	**60°C**
pH	**4.0-4.5**
Time	**30-60 minutes**

Beer industry: 0.4-0.8L per ton of total raw materials.

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

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Online: enzymes.bio/product/thermostable-alpha-amylase-enzyme-for-industrial-ethanol-production

Enzyme preparations are proteins that may cause sensitisation; avoid skin, eye and nasal contact and consult a doctor if irritation 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