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TECHNICAL DATA SHEET

TDS-ENZ141-EN · REV. 02 · 2026-11-03

Thermostable Alpha-amylase Enzyme 150,000 u/ml

Halal-certified thermostable alpha-amylase liquid for starch processing and syrup manufacturing.

SKU **ENZ141** CATEGORY **ALPHA-AMYLASE** CAS **9000-92-4** APPEARANCE **LIQUID** COLOUR **LIGHT YELLOW**

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

DECLARED ACTIVITY	OPTIMUM TEMPERATURE	OPTIMUM PH	SHELF LIFE
150,000 U/ml	**90-100 °C**	**5.0-6.5**	**12 months**
as stated on the product page	working range 60-110 °C	working range pH 4.0-7.5	sealed, see storage below

SPECIFICATION

ACTIVITY	
Declared activity	**150,000 U/ml** Typical
IDENTITY	
CAS	9000-92-4 Typical
Appearance	Liquid Typical
Colour	Light Yellow Typical
PHYSICAL	
Bulk density	1.10-1.25 g/ml Typical
pH (25°C)	5.8-6.8 Typical
WORKING WINDOW	
Activity temperature	60°C-110°C Typical
Optimum temperature	90°C-100°C Typical
Activity pH	4.0-7.5 Typical
Optimum pH	5.0-6.5 Typical
PURITY AND HYGIENE	
Lead	≤5.0 mg/kg Typical
Arsenic	≤3.0 mg/kg Typical
Total viable count	≤50000 CFU/mL Typical
Salmonella (25mL)	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
Keep sealed in a dry and cool place; avoid direct sunlight. Slight sedimentation does not affect performance.

PACK SIZE
1 kg per bag

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

APPLICATIONS

Liquefy starch in starch sugar and syrup manufacturing
Reduces viscosity during gelatinization; yields dextrin and oligosaccharides.

Hydrolyse starch in alcohol and ethanol production
Not stated

Add at mashing-in in brewing
Not stated

Use in rice wine, vinegar, antibiotic and citric acid processing
Increases yield and reduces fermentation time.

DOSAGE

0.5-1.0 L per ton

per ton of dry starch in the starch sugar industry

Substrate	**Dry starch**
Application rate	**0.5-1.0 L per ton**

Alcohol and ethanol: 0.6-1.2 L per ton of total raw materials; brewing: 0.4-0.8 L per ton of total raw materials, added at mashing-in.
Optimise the rate for each application through trials.

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

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Online: enzymes.bio/product/halal-certified-thermostable-alpha-amylase-enzyme-150000u-ml-cas-9000-92-4

Enzyme preparations are proteins that 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