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TECHNICAL DATA SHEET

TDS-ENZ128-EN · REV. 02 · 2026-11-03

Acid Protease Enzyme For Effective Ethanol Fermentation

Acid protease that hydrolyzes grain proteins to release peptides and amino acids for yeast growth in ethanol fermentation.

SKU **ENZ128** CATEGORY **ACID PROTEASE** CAS **9025-49-4** EINECS **232-642-4** TYPE **ENZYME PREPARATIONS**

Produced by submerged fermentation

Not restricted for transport

DECLARED ACTIVITY	OPTIMUM TEMPERATURE	OPTIMUM PH	SHELF LIFE
100000 u/g	**40°C-50°C**	**2.5-3.5**	**12 months**
as stated on the product page	working range 30°C-60°C	working range pH 2.5~6.0	sealed, see storage below

SPECIFICATION

IDENTITY

Production organism	Aspergillus niger Typical
Physical form	Liquid Typical

ACTIVITY

Enzyme activity	**≥ 100000 U/g** Spec
Antimicrobial activity	**Not detected** Spec

PHYSICAL

Loss on drying	≤ 8.0 % Spec
Bulk density	1.05-1.20 g/ml Typical
pH (25°C)	3.5–5.5 Typical

WORKING WINDOW

Optimum temperature	40°C-50°C Typical
Working temperature range	30°C-60°C Typical
Optimum pH	2.5-3.5 Typical
Working pH range	2.5~6.0 Typical

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, dry place in a sealed container; avoid insolation, high temperature and damp; 0-15°C at customer's warehouse

PACK SIZE
1 kg / bag

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

APPLICATIONS

Hydrolyze grain proteins under acid conditions
Releases short peptides and amino acids needed for yeast growth

Add to raw materials in alcohol fermentation
Increases ethanol yield and amino nitrogen release

Use as a yeast nutrient source from raw material protein
Reduces the cost of yeast nutrient ingredients

DOSAGE

0.05-3 kg per ton

enzyme preparation per ton of total raw materials

Substrate **total raw materials**

Optimal rate depends on application criteria, processing parameters and desired hydrolysate attributes.

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

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Online: enzymes.bio/product/acid-protease-enzyme-for-effective-ethanol-fermentation

Enzyme preparations are proteins which may induce sensitization; avoid prolonged skin, eye and nasal contact. 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