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TECHNICAL DATA SHEET

TDS-ENZ272-EN · REV. 02 · 2026-11-03

Acid Protease - Food Grade

Liquid acid protease produced by submerged fermentation, active under low pH for protein hydrolysis.

SKU **ENZ272** CATEGORY **ACID PROTEASE** GRADE **FOOD GRADE** SOURCE ORGANISM **ASPERGILLUS NIGER** FORMULATION **LIQUID**

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

DECLARED ACTIVITY	OPTIMUM TEMPERATURE	WORKING PH	SHELF LIFE
100,000 U/ml	**30–70°C**	**2.0–5.0**	**12 months**
as stated on the product page	stated as optimal temperature	no optimum stated	sealed, see storage below

SPECIFICATION

IDENTITY		
Appearance	Dark brown liquid	Typical
Formulation	Liquid	Typical
ACTIVITY		
Enzyme activity	**≥ 100000 U/g**	Spec
Antimicrobial activity	**Not detected**	Spec
PHYSICAL		
Loss on drying	≤ 8.0 %	Spec
Density	1.05–1.20 g/ml	Typical
pH (25°C)	3.0–5.0	Typical
WORKING WINDOW		
Working pH	2.0–5.0	Typical
Optimal temperature	30–70°C	Typical
PURITY AND HYGIENE		
Total arsenic (as As)	≤ 3.0 mg/kg	Spec
Lead (Pb)	≤ 5.0 mg/kg	Spec
Total plate count	≤ 5.0×10⁴ CFU/g	Spec
Coliforms	≤ 30 CFU/g	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
Store cool, dry and protected from sunlight; reseal tightly after opening

PACK SIZE
1 kg bottle

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

APPLICATIONS

Hydrolyse proteins in brewing
Reduces viscosity and protein haze; improves fermentation efficiency

Hydrolyse proteins in vinegar production
Boosts nitrogen availability and flavor-active compounds

Hydrolyse proteins in soy sauce brewing
Enhances umami through higher amino acid and peptide release

Treat tobacco during processing
Improves aroma release and flavor smoothness

Process leather during soaking and bating
Aids softening and non-collagen protein removal

DOSAGE

0.01–1 kg/ton
per ton of raw material

Addition point **Early in the process**

Adjust based on substrate, temperature and pH.
Avoid oxidizers and heavy metal ions.

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-food-grade

Prolonged exposure to aerosols or mist may cause sensitization; handle with protective equipment and avoid inhalation or eye 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