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TECHNICAL DATA SHEET

TDS-ENZ297-EN · REV. 02 · 2026-11-03

# Acid Protease (Food Grade, 100,000 U/g)

Acid protease preparation for soy sauce and vinegar fermentation, declared at 100,000 U/g.

SKU **ENZ297** CATEGORY **ACID PROTEASE** CAS **9014-01-1** GRADE **FOOD GRADE**

PRODUCTION **SUBMERGED FERMENTATION OF ASPERGILLUS NIGER**

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

| DECLARED ACTIVITY | WORKING TEMPERATURE | WORKING PH | SHELF LIFE |
|---|---|---|---|
| **100,000 U/g** | **20–60 °C** | **2.5–6.0** | **12 months** |
| Food Grade, as stated on the product page | effective range; no optimum stated | effective range; no optimum stated | sealed, see storage below |

## SPECIFICATION

| ACTIVITY | | |
|---|---|---|
| Enzyme activity | **≥ 100000 U/g** Spec |
| Antimicrobial activity | **Not detected** Spec |
| **PHYSICAL** | |
| Loss on drying | ≤ 8.0 % Spec |
| Form | Light yellow to pale brown powder Typical |
| Solubility | Easily soluble in water Typical |
| Odor | Slight fermentation odor, characteristic of enzyme preparations Typical |
| **WORKING WINDOW** | |
| Temperature | 20–60 °C Typical |
| pH | 2.5–6.0 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
**Cool, dry place away from direct sunlight and moisture; reseal packaging after each use**

PACK SIZE
**1 kg/bag**

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

## APPLICATIONS

**Soy sauce fermentation**
Raises amino nitrogen and improves aroma and umami.

**Vinegar fermentation**
Improves acid yield and flavor balance.

**Alcoholic beverages**
Aids protein degradation and clarifies fermentation liquids.

**Food processing**
Applies controlled protein hydrolysis where required.

## DOSAGE

**50–250 g per ton**

per ton of raw materials

| | |
|---|---|
| Substrate | **Raw materials for soy sauce and vinegar production** |
| Addition point | **Initial fermentation stage, added to the mash** |
| Temperature | **20–60 °C** |
| pH | **2.5–6.0** |

The exact application rate should be determined through pilot testing.
Mix evenly with the raw materials for optimal contact.

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-100000-u-g-specialized-enzyme-for-soy-sauce-and-vinegar-fermentation

Enzyme preparations are proteins and may sensitise; avoid skin, eye and inhalation 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