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TECHNICAL DATA SHEET

TDS-ENZ161-EN · REV. 02 · 2026-11-03

Papain Enzyme Powder

Papaya-derived protease powder that hydrolyzes large proteins into small peptides and amino acids.

SKU **ENZ161** CATEGORY **PAPAIN** CAS **9001-73-4** GRADE **FOOD GRADE** SOURCE **JUICE OF YOUNG PAPAYA FRUIT**

Food grade · Not restricted for transport

OPTIMUM TEMPERATURE	OPTIMUM PH	SHELF LIFE	FORM
40–55 °C	**6.0–8.0**	**12 months**	**Powder**
working range 10–60 °C	working range pH 5.0–11.0	sealed, see storage below	freeze-dried, light yellow, 1 kg per bag

SPECIFICATION

IDENTITY	
Appearance	Light yellow powder Typical
Odour	Normal microbial fermentation odour Typical
PHYSICAL	
Fineness (40 mesh standard sieve pass rate)	≥80 % Typical
Loss on drying	≤8.0 % Typical
WORKING WINDOW	
Optimum temperature	**40–55 °C** Typical
Working temperature range	10–60 °C Typical
Optimum pH	**6.0–8.0** Typical
Working pH range	5.0–11.0 Typical
PURITY AND HYGIENE	
Lead	≤5.0 mg/kg Typical
Arsenic	≤3.0 mg/kg Typical
Total viable count	≤50000 CFU/g Typical
Coliform bacteria	≤30 CFU/g 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

PACK SIZE
1 kg per bag

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

APPLICATIONS

Tenderize meat and hydrolyse food proteins
Hydrolyses protein into easily absorbable peptides and amino acids.

Add to cosmetic products containing protein, oils or fats
Targets dark spot removal, skin whitening, skin metabolism and rejuvenation.

Incorporate into soap, detergent or washing powder
Helps remove stains and microorganisms more efficiently.

Add to feed as an additive or processing aid
Improves digestibility and biological value of feed protein sources.

Depilate animal pelt in leather processing
Removes hair from animal skin.

DOSAGE

0.01–0.5 kg/tDS

kg per tDS

Optimize the rate for each application, raw material specification, product expectations and processing parameters.
Begin the test with a convenient volume.

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

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Online: enzymes.bio/product/papain-enzyme-powder

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