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TECHNICAL DATA SHEET

TDS-ENZ061-EN · REV. 02 · 2026-11-03

Papain Enzyme For Protein Hydrolysis

Papain endopeptidase for protein hydrolysis in food processing, feed and other industrial uses.

SKU **ENZ061** CATEGORY **ENZYMES FOR PROTEIN HYDROLYSIS** CAS **9001-73-4** ENZYME TYPE **ENDOPEPTIDASE**

Not restricted for transport

DECLARED ACTIVITY	WORKING TEMPERATURE	WORKING PH	SHELF LIFE
800000U/g	**40-75 °C**	**6-7**	**12 months**
as stated on the product page	no optimum stated	no optimum stated	sealed, see storage below

SPECIFICATION

IDENTITY

Product	**Papain** Typical
CAS number	9001-73-4 Typical
Enzyme type	Endopeptidase containing hydrosulfide group (-SH) Typical

ACTIVITY

Declared activity	**800000U/g** Typical
Activity unit	Activity is expressed by TU/mg Typical

WORKING WINDOW

Reaction temperature	40-75 °C Typical
Reaction pH	6-7 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
Normal room temperature in a cool, dry environment away from light; avoid high temperature, moisture and direct sunlight

PACK SIZE
Inner packaging 1 kg / bag; outer packaging 1 kg / bag

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

APPLICATIONS

Hydrolyze animal and plant protein, including soybean, into small peptides and amino acids
Degree of hydrolysis above 55% in animal and plant proteolysis

Tenderize meat and clarify brewing liquids
Also used in soy sauce fermentation and brewing

Reduce gluten in biscuit flour dough
Improves dough plasticity; reduces sodium metabisulfite application rate by 10%-25%

Add to forage formulation or directly to forage
Promotes digestion of animals and improves feed utilization

Treat wool and degum silk in textile processing
Treated wool is more tensile and soft

DOSAGE

0.1 to 0.3%
of material weight

Concentration of material	**25 to 50%**
Temperature	**40-75 °C**
pH	**6-7**
Reaction time	**6 to 8 hours**

Temperature, pH, addition and reaction time can be adjusted for different substrates.
The optimal application rate follows the specific production circumstances.

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

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Online: enzymes.bio/product/thermostable-papain-enzyme-for-protein-hydrolysis-800000u-g

Overdose of enzyme powder or droplet may cause an allergic reaction; long-term contact irritates skin, eyes and mucous membrane tissue. 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