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TECHNICAL DATA SHEET

TDS-ENZ079-EN · REV. 02 · 2026-11-03

Papain 1 Million U/g Biological Protease

Papain is a sulfhydryl endoprotease extracted from unripe papaya pulp, declared at 1 Million U/g.

SKU **ENZ079** CATEGORY **PAPAIN** CAS **9001-73-4** GRADE **FOOD GRADE** SOURCE **UNRIPE PAPAYA PULP**

Food grade · Not restricted for transport

DECLARED ACTIVITY
1 Million U/g
as stated on the product page

APPLICATION RATE
0.08mg/100mL
beer, during frozen storage

SPECIFICATION

IDENTITY	
Source	Unripe pulp of papaya Typical
CAS	9001-73-4 Typical
Enzyme type	Sulfhydryl-containing endoprotease with protease and esterase activities Typical
COMPOSITION	
Main components	Papain, papaya rennet A, papaya rennet B, papaya peptidase B, and other proteolytic enzymes Typical
ACTIVITY	
Declared activity	**1 Million U/g** Typical
PHYSICAL	
Odor	No odor Typical
Solubility	Good water solubility; easily soluble in water and glycerol; almost insoluble in organic solvents Typical
Solution appearance	Colorless or light yellow, sometimes milky white 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
Not stated

PACK SIZE
Not stated

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

APPLICATIONS

Meat tenderization
Hydrolyses muscle fibre and collagen to make meat tender.

Beer clarification
Hydrolyses beer proteins to improve clarity and taste.

Baking industry
Hydrolyses flour protein to reduce dough tenderness.

Feed processing
Hydrolyses meat protein scraps to reduce feed viscosity and improve taste.

DOSAGE

0.08mg/100mL
papain added to beer during the frozen storage process

Substrate	**Beer**
Addition point	**Frozen storage process**

Recommended for a better clarification effect.

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-1-million-u-g-factory-direct-sales-food-grade-biological-protease

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