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TECHNICAL DATA SHEET

TDS-ENZ091-EN · REV. 02 · 2026-11-03

Papain

Papain is a proteolytic enzyme preparation supplied as a white to light yellow powder with glucose.

SKU **ENZ091** CATEGORY **PAPAIN** CAS **9001-73-4** GRADE **FOOD GRADE**

Food grade Not restricted for transport

DECLARED ACTIVITY	SHELF LIFE	FORM	BEER DOSAGE
100,000-2 million U/g	**12 months**	**Powder**	**0.08mg/100mL**
customizable	sealed, see storage below	white to light yellow	papain in beer during frozen storage

SPECIFICATION

IDENTITY	
Product name	Papain Typical
Main components	Papain, glucose Typical
CAS	9001-73-4 Typical
ACTIVITY	
Specified activity	**100,000-2 million U/g (customizable)** Typical
Enzyme type	Sulfhydryl-containing endoprotease with protease and esterase activities Typical
PHYSICAL	
Appearance	White to light yellow powder Typical
Odor	No odor Typical
Solubility	Easily soluble in water and glycerol; almost insoluble in organic solvents Typical
Aqueous solution	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
Room temperature, dry, and protected from light

PACK SIZE
Not stated

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

APPLICATIONS

Meat tenderization
Hydrolyze muscle fiber and collagen into peptides or amino acids to tenderize meat.

Beer clarification
Hydrolyze beer proteins into peptides or amino acids for clearer beer and improved taste.

Baking
Hydrolyze flour protein to reduce dough tenderness and enhance flavor of baked goods.

Spice production
Hydrolyze animal and plant proteins for condiments such as soy sauce and chicken essence.

Feed processing
Hydrolyze meat protein scraps to improve nutritional value and taste of feed and pet food.

DOSAGE

0.08mg/100mL
papain in beer during frozen storage

Substrate	**Beer**
Addition point	**During frozen storage**

Recommended application rate for better clarification.

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-2-million-u-g-food-grade-biological-enzyme-preparation-cas-9001-73-4

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