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TECHNICAL DATA SHEET

TDS-ENZ281-EN · REV. 02 · 2026-11-03

Food-Grade Alkaline Protease for Protein Hydrolysis

Serine protease for hydrolysing food proteins such as soy, casein and plant proteins.

SKU **ENZ281** CATEGORY **ALKALINE PROTEASE** CAS **9014-01-1** GRADE **FOOD GRADE**

ENZYME CLASS **SERINE PROTEASE**

Food grade · Not restricted for transport

DECLARED ACTIVITY	OPTIMUM TEMPERATURE	OPTIMUM PH	FORM
200,000 U/mL	**20–60 °C**	**8.0–12.0**	**Liquid**
as stated in Usage Guidelines	optimal temperature as stated; no working range stated	optimal working pH as stated; no working range stated	light yellow to amber liquid

SPECIFICATION

IDENTITY	
Enzyme class	Serine protease Typical
CAS number	9014-01-1 Typical
ACTIVITY	
Enzyme activity	**200,000 U/mL** Typical
PHYSICAL	
Appearance	Light yellow to amber liquid Typical
WORKING WINDOW	
Optimal temperature	20–60 °C Typical
Optimal working pH	8.0–12.0 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
Cool and dry environment, protected from direct sunlight; keep packaging sealed

PACK SIZE
1 kg bottle

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

APPLICATIONS

Tenderise meat and seafood and increase juiciness
Improves tenderness and juiciness in meat and seafood

Hydrolyse egg and dairy proteins
Generates small peptides with improved solubility and flavor

Modify soy, pea and wheat proteins
Improves solubility and reduces beany notes

Extract proteins from meat and seafood
Supports protein extraction and higher extraction yields

DOSAGE

0.1–10 kg per metric ton

kg of enzyme per metric ton of raw materials

Temperature	**20–60 °C optimal**
pH	**8.0–12.0 optimal**

The appropriate rate depends on substrate type, reaction goals and processing conditions.
Reaction time, agitation and temperature control further enhance hydrolysis performance.

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

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Online: enzymes.bio/product/food-grade-alkaline-protease-for-protein-hydrolysis

As with all enzyme preparations, avoid inhaling aerosols and prevent contact with eyes or broken skin. 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