enzymes.bio

Add enzymes. Add value.

TECHNICAL DATA SHEET

TDS-ENZ177-EN · REV. 02 · 2026-11-03

Acid Protease for Breaking Down Tobacco Leaf Protein

Acid protease for tobacco leaf protein degradation, made by Aspergillus niger liquid deep fermentation.

SKU **ENZ177** CATEGORY **ACID PROTEASE** CAS **9025-49-4** EINECS **232-642-4** TYPE **ENZYME PREPARATIONS**

Produced by submerged fermentation

Not restricted for transport

OPTIMUM TEMPERATURE	OPTIMUM PH	FORM	SHELF LIFE
40°C-50°C	**2.5-4.0**	**Powder**	**12 months**
working range 20°C-60°C	working range pH 2.5~6.0	snuff colour	sealed, see storage below

SPECIFICATION

IDENTITY	
Production organism	Aspergillus Niger Typical
PHYSICAL	
Physical form	Powder Typical
Colour	Snuff color Typical
Odour	Normal microbial fermentation odour Typical
WORKING WINDOW	
Temperature (optimum 40°C-50°C)	**20°C-60°C** Typical
pH (optimum 2.5-4.0)	**2.5~6.0** Typical
PURITY AND HYGIENE	
Lead	5 mg/kg Typical
Arsenic	3 mg/kg Typical
Total viable count	50,000 CFU/g Typical
MICROBIAL SAFETY	
Coliform bacteria	30 CFU/g Typical
Escherichia coli	10 CFU/g 3 MPN/g Typical
Salmonella	Not Detected/25g 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 and avoid direct sunlight

PACK SIZE
1 kg / bag

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

APPLICATIONS

Hydrolyse protein in tobacco leaves
Breaks protein into small peptides and amino acids.

Treat tobacco leaves before smoking
Reduces pungency, irritant and bitter taste.

Enrich tobacco aroma
Improves smoking texture and the grade of tobacco leaves.

Spray enzyme solution onto tobacco leaves
Enables enzymatic hydrolysis in a constant temperature and humidity chamber.

DOSAGE

50-300g per ton

per ton of raw material

Substrate	**tobacco leaf raw material**
Addition	**enzyme solution sprayed evenly on tobacco leaves**
Post-treatment	**tobacco leaves inactivated at 120°C, then sliced**

Actual adding mode and amount must be determined by test. Rate depends on application field, raw material composition and process parameters.

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

enzymes.bio · Level 1, 6 Johnsonville Road, Wellington 6037, New Zealand · **Tel (USA) +1 (507) 428-6057** · wholesale@enzymes.bio

Online: enzymes.bio/product/acid-protease-for-breaking-the-protein-down-on-tobacco-leaves

Enzyme preparations are proteins that may cause sensitization and allergic reactions; avoid prolonged skin, eye and nasal 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