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# Food-Grade Compound Protease for Tobacco Processing

Solid compound protease preparation for hydrolysing tobacco leaf proteins under mild processing conditions.

SKU **ENZ348** CATEGORY **TOBACCO** CAS **9014-01-1** GRADE **FOOD GRADE**

Food grade · Not restricted for transport

| OPTIMUM TEMPERATURE | OPTIMUM PH | SHELF LIFE | TYPICAL ADDITION RATE |
|---|---|---|---|
| **40–50 °C** | **2.5–8.5** | **12 months** | **50–300 g per metric ton** |
| working range 30–60 °C | working range pH 2.5–10.0 | sealed, see storage below | of raw tobacco material |

## SPECIFICATION

| IDENTITY | |
|---|---|
| Enzyme type | Compound protease from multiple proteolytic enzymes Typical |

| PHYSICAL | |
|---|---|
| Form | Solid powder Typical |
| Solubility | Dispersible in water Typical |

| WORKING WINDOW | |
|---|---|
| Temperature range | 30–60 °C Typical |
| Optimal temperature | **40–50 °C** Typical |
| pH working range | 2.5–10.0 Typical |
| Optimal pH range | **2.5–8.5** Typical |

| PURITY AND HYGIENE | |
|---|---|
| Lead (Pb) | ≤ 5.0 mg/kg Typical |
| Total arsenic (As) | ≤ 3.0 mg/kg Typical |
| Total plate count | ≤ 50,000 CFU/g Typical |
| Coliforms | ≤ 30 CFU/g 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, dry place, sealed**

PACK SIZE
**1 kg/bag, sealed food-grade aluminum foil bag**

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

## APPLICATIONS

**Treat cured tobacco leaves with the enzyme solution by spraying or mixing**
Reduces harshness, pungency and bitterness

**Hydrolyse tobacco leaf proteins into peptides and free amino acids**
Improves combustibility and balance of chemical components

**Hold treated leaves in a controlled chamber for enzymatic hydrolysis**
Enriches aroma and reduces burnt and off-odors

**Inactivate treated leaves at 120 °C before cutting**
Stops enzyme action before further processing

## DOSAGE

**50–300 g per metric ton**
per metric ton of raw tobacco material

| | |
|---|---|
| Substrate | **Raw tobacco material** |
| Preparation | **Dissolve protease in water at a specified concentration** |
| Application | **Spray or mix evenly onto leaves** |
| Hydrolysis | **Temperature- and humidity-controlled chamber, defined conditions** |
| Inactivation | **120 °C after treatment** |

The optimal application rate should be determined through pilot trials.

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-compound-protease-for-tobacco-processing

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