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TECHNICAL DATA SHEET

TDS-ENZ334-EN · REV. 02 · 2026-11-03

Nuclease Food Grade

Food-grade nuclease preparation that hydrolyses nucleic acids (RNA) for food applications.

SKU **ENZ334** CATEGORY **NUCLEASE** CAS **9026-81-7** GRADE **FOOD GRADE**

Food grade Not restricted for transport

DECLARED ACTIVITY	WORKING TEMPERATURE	WORKING PH	SHELF LIFE
100,000 U/g	**45°C–85°C**	**4.0–8.0**	**12 months**
food grade, as stated on the product page	no optimum stated	no optimum stated	sealed, see storage below

SPECIFICATION

IDENTITY	
CAS	9026-81-7 Typical
ACTIVITY	
Declared activity	**100,000 U/g** Typical
PHYSICAL	
Appearance	Brown powder Typical
Loss on drying, %	≤ 8.0 Typical
Fineness (pass rate through 40-mesh standard sieve), %	≥ 80 Typical
WORKING WINDOW	
Temperature range	45°C–85°C Typical
pH range	4.0–8.0 Typical
PURITY AND HYGIENE	
Lead (Pb), mg/kg	≤ 5.0 Typical
Total arsenic (as As), mg/kg	≤ 3.0 Typical
Total plate count, CFU/g	≤ 50,000 Typical
Coliforms, CFU/g	≤ 30 Typical
Escherichia coli (CFU/g) / (MPN/g)	Not detected Typical
Salmonella (25 g)	Not detected 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
Store sealed in a cool, dry place; avoid moisture and excessive heat

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

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

APPLICATIONS

Seasonings
Supports RNA hydrolysis for savory and umami-oriented formulations

Nucleotides
Supports controlled enzymatic hydrolysis of nucleic acids

Yeast extract
Hydrolyses yeast RNA during yeast extract processing

Food processing
Operates across a 45°C–85°C and pH 4.0–8.0 range

DOSAGE

2%–4% enzyme addition

per substrate dry matter, using yeast nucleic acid (RNA) as substrate

Substrate	**Yeast nucleic acid (RNA)**
Substrate concentration	**2%–5%**
Hydrolysis time	**7–9 hours under suitable conditions**

Yeast substrate: 0.3%–0.5% enzyme on yeast dry matter at 10%–12% yeast.
Stop activity by inactivation at 95°C for 10 minutes.

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/nuclease-food-grade-100g

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