



matriNutra B

Food-grade macromolecular elastin



Product Specifications

Product No.: FN1B
Source: Bovine

Version: 1.0
Ver. date: July 15, 2026

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1. Identity

Parameter	Specification	Method
Protein content	≥ 90 %	Kjeldahl (Nx6.25)
Desmosine ¹⁾	≥ 0.1 wt%	Amino acid analysis
Isodesmosine ¹⁾	≥ 0.1 wt%	Amino acid analysis
Elastin content in protein fraction ¹⁾	≥ 90 %	HPLC-MS/MS

2. Physical and Chemical Properties

Parameter	Specification	Method
Appearance	Flake-like granules	Organoleptic
Color	Yellowish to orange to brownish	Organoleptic
Odor	Odorless to faint	Organoleptic
Solubility	Insoluble	Intrinsic property
Water content	≤ 10 wt%	Loss on drying (10 g, 105 °C, 1 h)
Active water (a _w)	< 0.6	Sensor measurement

3. Microbiological Analysis

Parameter	Specification	Method
Total Aerobic Mesophilic Microorganisms	≤ 500 CFU/g	ISO 4833-1
Anaerobic sulphite-reducing spores	≤ 10 CFU/g	ISO 15213-1:2023-05
Enterobacteriaceae	≤ 10 CFU/g	ISO 21528-2
Listeria monocytogenes	Absence/25 g	ISO 11290-1
Escherichia coli	Absence/10 g	ISO 16649-3:2018-1
Salmonella	Absence/25 g	ISO 6579-1

4. Heavy Metal and Chemical Analysis

Parameter	Specification	Method
Arsenic (As)	≤ 1 mg/kg (ppm)	ICP-MS
Cadmium (Cd)	≤ 0.5 mg/kg (ppm)	ICP-MS
Chromium (Cr)	≤ 10 mg/kg (ppm)	ICP-MS
Copper (Cu)	≤ 30 mg/kg (ppm)	ICP-MS
Iron (Fe)	≤ 30 mg/kg (ppm)	ICP-MS
Lead (Pb)	≤ 3 mg/kg (ppm)	ICP-MS
Mercury (Hg)	≤ 0.1 mg/kg (ppm)	ICP-MS
Zinc (Zn)	≤ 50 mg/kg (ppm)	ICP-MS
Sulfur dioxide (SO ₂)	≤ 10 mg/kg (ppm)	Photometric
Hydrogen peroxide (H ₂ O ₂)	≤ 10 mg/kg (ppm)	Semiquantitative



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4. Amino Acid Profile¹⁾

Amino acid	Amount (g/100g)	Amino acid	Amount (g/100g)
Glycine	24.70	Serine	0.74
Alanine	19.78	Threonine	0.59
Valine	15.15	Arginine	0.66
Proline	13.14	Asparagine/Aspartate	0.77
Leucine	8.10	Cysteine	0.08
Phenylalanine	4.83	Histidine	0.04
Tyrosine	1.46	Methionine	0.03
Glutamine/Glutamate	2.25	Ornithine	0.02
Isoleucine	3.30	Hydroxylysine	<0.02
Hydroxyproline	1.42	Taurine	<0.02
Lysine	0.40	γ-Aminobutyric acid	<0.02

5. Nutritional Analysis²⁾

Nutritional value	Result (per 100g)
Energy	1716 kJ / 404 kcal
Protein	97.8 g
Total fat	1.4 g
- of which saturates	0.55 g
- of which monounsaturates	0.82 g
Carbohydrates	0.1 g
Ash	0.27 g
Salt	0.36 g
Sodium (Na)	0.144 g

1) This parameter is monitored through periodic validation and is not part of routine batch release testing.

2) Indicative analytical values subject to process-related variability. This analysis is not included in the batch release testing.