

No.	Specification	Unit	Result	Test method	Date of test	Source
BASIC SPECIFICATIONS						
1	Moisture	%	67.1	TCVN 4326:2001 (ISO6496:1999)	10-2-2023	Eurofins
2	Crude Protein	%	21.2	TCVN 4328-1:2007 (ISO5983-1:2005)	2-10-2023	Eurofins
3	Pepsin Digestibility	%	98.6		2-10-2023	Eurofins
4	Degree of hydrolysis protein (DH)	%	≥ 60.00			SPEC
5	Content of Soluble Peptides	%	85.00			Eurofins
6	Crude Fat	%	1.86			SPEC
7	Ash	%	4.80			SPEC
8	Total volatile base nitrogen (TVBN)	mgN/100g	< 650			SPEC
9	Energy	kcal/kg	DE 1,145ME 1,026NE 631			SPEC
10	Specific Gravity		1.0887	TCVN 2629:2007	4-24-2017	CASE
11	A.A / Crude protein	%	76.50			SPEC
AMINO ACID PROFILE						
12	Amino Acid profile	%	16.22	EC 15/2009 (VF)	16-01-2023	Upscience
13	Cystine	%	0.17	EC 15/2009 (VF)	16-01-2023	Upscience
14	Aspartic acid	%	1.6	EC 15/2009 (VF)	16-01-2023	Upscience
15	Methionine	%	0.3	EC 15/2009 (VF)	16-01-2023	Upscience
16	Threonine	%	0.72	EC 15/2009 (VF)	16-01-2023	Upscience
17	Serine	%	0.66	EC 15/2009 (VF)	16-01-2023	Upscience
18	Glutamic acid	%	2.45	EC 15/2009 (VF)	16-01-2023	Upscience
19	Glycine	%	1.12	EC 15/2009 (VF)	16-01-2023	Upscience
20	Alanine	%	1.35	EC 15/2009 (VF)	16-01-2023	Upscience
21	Valine	%	1	EC 15/2009 (VF)	16-01-2023	Upscience
22	Isoleucine	%	0.83	EC 15/2009 (VF)	16-01-2023	Upscience
23	Leucine	%	1.29	EC 15/2009 (VF)	16-01-2023	Upscience
24	Tyrosine	%	0.6	EC 15/2009 (VF)	16-01-2023	Upscience
25	Phenylalanine	%	0.81	EC 15/2009 (VF)	16-01-2023	Upscience
26	Histidine	%	0.39	EC 15/2009 (VF)	16-01-2023	Upscience
27	Lysine	%	1.15	EC 15/2009 (VF)	16-01-2023	Upscience
28	Arginine	%	0.79	EC 15/2009 (VF)	16-01-2023	Upscience
29	Proline	%	0.86	EC 15/2009 (VF)	16-01-2023	Upscience
30	Tryptophane	%	0.13	EC 15/2009 (VF)	16-01-2023	Upscience
FREE AMINO ACID						
31	Total Free Amino acid	%	4.89	ISO 13903:2005	4-16-2022	CASE
32	Alanine	%	0.88	ISO 13903:2005	4-16-2022	CASE
33	Arginine	%	0.26	ISO 13903:2005	4-16-2022	CASE
34	Aspartic acid	%	0.13	ISO 13903:2005	4-16-2022	CASE
35	Glutamic acid	%	0.09	ISO 13903:2005	4-16-2022	CASE

36	Glycine	%	0.46	ISO 13903:2005	4-16-2022	CASE
37	Histidine	%	0.04	ISO 13903:2005	4-16-2022	CASE
38	Isoleucine	%	0.36	ISO 13903:2005	4-16-2022	CASE
39	Leucine	%	0.72	ISO 13903:2005	4-16-2022	CASE
40	Lysine	%	0.38	ISO 13903:2005	4-16-2022	CASE
41	Methionine	%	0.22	ISO 13903:2005	4-16-2022	CASE
42	Phenylalanine	%	0.39	ISO 13903:2005	4-16-2022	CASE
43	Proline	%	0.04	ISO 13903:2005	4-16-2022	CASE
44	Serine	%	0.17	ISO 13903:2005	4-16-2022	CASE
45	Threonine	%	0.21	ISO 13903:2005	4-16-2022	CASE
46	Tyrosine	%	0.12	ISO 13903:2005	4-16-2022	CASE
47	Valine	%	0.42	ISO 13903:2005	4-16-2022	CASE
FATTY ACIDS PROFILE						
48	Myristic acid C14:0	mg/100g	29.60	ISO 12966-2:2017	2-12-2020	UPSCIENCE
49	Palmitic acid C16:0	mg/100g	593.90	ISO 12966-2:2017	2-12-2020	UPSCIENCE
50	Palmitoleic acid C16:1	mg/100g	61.60	ISO 12966-2:2017	2-12-2020	UPSCIENCE
51	Stearic acid C18:0	mg/100g	264.10	ISO 12966-2:2017	2-12-2020	UPSCIENCE
52	Oleic acid C18:1	mg/100g	485.80	ISO 12966-2:2017	2-12-2020	UPSCIENCE
53	Linoleic acid C18:2	mg/100g	524.20	ISO 12966-2:2017	2-12-2020	UPSCIENCE
54	Linolenic acid C18:3	mg/100g	43.10	ISO 12966-2:2017	2-12-2020	UPSCIENCE
55	Steradonic acid C18:4	mg/100g	4.60	ISO 12966-2:2017	2-12-2020	UPSCIENCE
56	Eicosenoic acid C20:1	mg/100g	47.50	ISO 12966-2:2017	2-12-2020	UPSCIENCE
57	Arachidonic acid C20:4	mg/100g	123.90	ISO 12966-2:2017	2-12-2020	UPSCIENCE
58	Eicosapentaenoic acid C20:5 (EPA)	mg/100g	171.50	ISO 12966-2:2017	2-12-2020	UPSCIENCE
59	Erucic acid C22:1	mg/100g	4.30	ISO 12966-2:2017	2-12-2020	UPSCIENCE
60	Docosapentaenoic acid C22:5 (DPA)	mg/100g	31.80	ISO 12966-2:2017	2-12-2020	UPSCIENCE
61	Docosahexaenoic acid C22:6 (DHA)	mg/100g	195.00	ISO 12966-2:2017	2-12-2020	UPSCIENCE
62	Sum of omega-3 (n-3)	mg/100g	452.20	ISO 12966-2:2017	2-12-2020	UPSCIENCE
63	Sum of omega-6 (n-6)	mg/100g	696.90	ISO 12966-2:2017	2-12-2020	UPSCIENCE
64	Sum of omega-9 (n-9)	mg/100g	514.70	ISO 12966-2:2017	2-12-2020	UPSCIENCE
65	Cholesterol	ppm	2,037.00		9-7-2020	SPEC
MINERALS						
66	Calcium (Ca)	%	1.14	EVN-R-RD-2-TP-12622 (ref TCVN 9588:2013, ISO27085:2009, AOAC 2015.06)	2-6-2023	Eurofins
67	Phosphorus	%	0.37	TCVN 1525:2001 (ISO6491:1998)	2-6-2023	Eurofins
68	Sodium	%	0.79		9-7-2020	SPEC
69	Magnesium (Mg)	g/100g	0.14	GE297 - ICP MS (VF)	9-12-2022	UPSCIENCE
70	Chloride (Cl)	g/100g	4.34	Potentionmetry	9-12-2022	UPSCIENCE
71	Copper (Cu)	ppm	31.29	GE297 - ICP MS (VF)	9-12-2022	UPSCIENCE
72	Manganese (Mn)	ppm	8.18	GE297 - ICP MS (VF)	9-12-2022	UPSCIENCE

73	Zinc (Zn)	ppm	26.44	GE297 - ICP MS (VF)	9-12-2022	UPSCIENCE
74	Iron (Fe)	ppm	73.89	GE297 - ICP MS (VF)	9-12-2022	UPSCIENCE
75	Selenium (Se)	ppm	0.69	GE297 - ICP MS (VF)	9-12-2022	UPSCIENCE
HEAVY METALS						
76	Arsenic (As)	mg/kg	2.19	EVN-R-RD-2-TP-12623 (Ref TCVN 9588:2013, ISO27085:2009, AOAC 2015.06)	2-10-2023	Eurofins
77	Lead (Pb)	mg/kg	Minor traces detected (<0.01)	EVN-R-RD-2-TP-12623 (Ref TCVN 9588:2013, ISO27085:2009, AOAC 2015.06)	2-10-2023	Eurofins
78	Cadmium (Cd)	mg/kg	0.12	AOAC 2015.01	2-10-2023	Eurofins
79	Mercury (Hg)	mg/kg	Minor traces detected (<0.03)	EVN-R-RD-2-TP-12623 (Ref TCVN 9588:2013, ISO27085:2009, AOAC 2015.06)	2-10-2023	Eurofins
VITAMINE						
80	Vitamin B1-thiamin	ppm	Not detected	3 - HPLC (Ref. NF EN 14122/2003)	9-12-2022	UPSCIENCE
81	Vitamin B2-riboflavin	ppm	3.74	4 - HPLC (Ref. NF EN 14152/2004)	9-12-2022	UPSCIENCE
82	Vitamin B6-pyridoxine	ppm	7.01	NF EN 14164:2008 (VF)	9-12-2022	UPSCIENCE
83	Vitamin B12	µg	Not detected	CA.SK.0124 (LC/MS/MS)	9-12-2022	UPSCIENCE
84	Niacin	ppm	35.31	CH138 - LCMSMS (VF)	9-12-2022	UPSCIENCE
85	Pantothenic acid	ppm	Not detected	CH121 - LCMSMS (VF)	9-12-2022	UPSCIENCE
86	Folic acid	ppm	Not detected	CH134 - LCMSMS (VF)	9-12-2022	UPSCIENCE
87	Biotin	ppm	Not detected	CA.SK.0124 (LC/MS/MS)	9-12-2022	UPSCIENCE
88	Betaine	%	3.36	Spectrometry	6-16-2022	UPSCIENCE
89	Taurine	%	0.27	ISO 13903:2005	4-16-2022	CASE
90	Choline	ppm	2.17	CH092 - Spectrophotometer (VF)	12-9-2022	UPSCIENCE
MICROORGANISMS						
91	Total plate counts (TPC)	cfu/g	70.00	4833-1:2013 / TCVN 4884-1:2015	12-9-2022	UPSCIENCE
92	Total yeast and mould	cfu/g	<10	21527-1:2008 / TCVN 8275-1:201	12-9-2022	UPSCIENCE
93	Escherichia coli	cfu/g	Not detected (LOD=10)	TCVN 7924-2:2008 (ISO 16649-2:2001)	2-10-2023	Eurofins
94	Salmonella	/25g	Not detected	TCVN 10780-1:2017 (ISO 6579-1:2017)	2-10-2023	Eurofins