

CERTIFICATE OF ANALYSIS

Product name: Fish Collagen
 Lot number: 2818
 Manufacturing date: 08.10.18
 Shelf life: 08.10.21

Test	Specification	Test result	Test Method
Physicochemical parameter			
Appearance	White fine powder	White fine powder	Visual
Viscosity (20%, 25°C)	2.0-4.0 mPa.s	2.13	
Transparency (10% solution)	≤ 10 NTU	9.64 NTU	TCVN 6184:2008
pH value of 1% solution	5.0 – 6.5	5.93	USP
Average Molecular Weight (Mw)	2000 Da	2092 Da	HPLC
Moisture content	≤ 10 %	6.45%	USP
(Residue on ignition) Total ash content	≤ 2 %	0.43%	AOAC
Protein content	≥ 90 %	94.50%	FAO
Particle size	below 1000um (18 mesh) <10% below 75um (200mesh)	Pass	ISO 2591
SO ₂ *	≤ 10 ppm	Pass	AOAC
H ₂ O ₂ *	≤ 10 ppm	Pass	AOAC
Heavy metal			
Pb*	≤ 1.0 ppm	Pass	AOAC
As*	≤ 1.0 ppm	Pass	AOAC
Cd*	≤ 0.05 ppm	Pass	AOAC
Hg*	≤ 0.1 ppm	Pass	AOAC
Cr*	≤ 10 ppm	Pass	AOAC
Cu*	≤ 30 ppm	Pass	AOAC
Fe*	≤ 30 ppm	Pass	AOAC
Zn*	≤ 30 ppm	Pass	AOAC
Microbiological parameter			
Total Plate Count	≤ 1000 cfu/g	150 cfu/g	USP
<i>Escherichia Coli</i>	Not detected/10g	Not detected/10g	USP
Anaerobic sulfite-reducing spores	< 10 cfu/g	Not detected	TCVN 7902:2008
<i>Salmonella</i>	Negative/25g	Negative/25g	USP

* Performed on routine level, as per quality control plan