



PRODUCT STANDARDS DOCUMENT

FISH COLLAGEN PEPTIDE

PRODUCT INTRODUCTION

This product is derived from fish scales or skin that are naturally rich in collagen. Through a gentle, multi-enzyme hydrolysis process targeting specific protein cleavage sites, followed by advanced multi-stage separation and purification techniques, it yields a high-quality, low-molecular-weight collagen peptide. The result is a bioactive ingredient with excellent solubility, a clean sensory profile, and enhanced functional performance suitable for applications in nutraceuticals, functional foods, and beauty-from-within formulations.

1. PRODUCT IMPLEMENTATION STANDARD GB 31645-2018

2. SENSORY INDEX

Table 1 Sensory Indicators

Item	Specification	Testing Method:
Color	White or pale yellow	Section 5.1 of GB 31645-2018
Taste and Odor	Characteristic taste and odor of the product, free from off-flavors	
Appearance	Powder or granular form, free from clumping and visible foreign matter under normal vision	

3. PHYSICOCHEMICAL INDICATORS

Table 2 Physicochemical Indicators

Item	Indicators	Testing Method
Moisture / (%)	≤ 7.0	GB 5009.3
Ash / (%)	≤ 7.0	GB 5009.4
Protein (on dry basis, N×5.79) / (%)	≥ 86.85	GB 5009.5
The proportion of collagen peptides with a relative molecular mass less than 10,000 / (%)	≥ 90.0	GB 31645 Appendix A
Proportion of collagen peptides with a relative molecular mass less than 500 (tripeptides) / (%)	≥ 30.0	GB 31645 Appendix A
Hydroxyproline (on a dry basis) / (g/100g)	≥ 3.0	GB/T 9695.23
Total Arsenic (as As) / (mg/kg)	< 1.0	GB 5009.11
Lead (expressed as Pb) / (mg/kg)	< 0.9	GB 5009.12
Cadmium (expressed as Cd) / (mg/kg)	≤ 0.1	GB 5009.15
Chromium (expressed as Cr) / (mg/kg)	≤ 2.0	GB 5009.123
Total Mercury (expressed as Hg) / (mg/kg)	≤ 0.1	GB 5009.17
N-Nitrosodimethylamine (NDMA) / (μg/kg)	≤ 4.0	GB 5009.26
Polychlorinated Biphenyls (PCBs) / (mg/kg)	≤ 0.5	GB 5009.190



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4. PHYSICOCHEMICAL INDICATORS

Table 3 Microbiological Specifications

Indicators	Sampling Plan a and Limits				Testing Method:
	n	c	m	M	
Total Plate Count/(CFU/g)	5	2	10 ⁴	10 ⁵	GB 4789.2
Coliforms/(CFU/g)	5	2	10	10 ²	GB 4789.3 Plate Count Method
Molds and Yeasts/(CFU/g) ≤ ≤	50				GB 4789.15
Note: *n* represents the number of samples to be collected per batch; *c* is the maximum allowable number of samples exceeding limit *m*; *m* denotes the acceptable limit for microbiological criteria; M signifies the maximum safety limit for microbiological criteria.					
^a Sampling and processing of samples shall be performed in accordance with GB 4789.1 .					

Table 4 Pathogenic bacteria limits

Item	Sampling Plan and Limits (per 25 g)				Testing Method:
	n	c	m	M	
Salmonella	5	0	0	-	GB 4789.4
Staphylococcus aureus	5	1	100 CFU/g	1000 CFU/g	Method 2 of GB 4789.10
Note: *n* is the number of sample units to be taken from the same production batch. *c* is the maximum number of sample units allowed to exceed the m value. *m* is the acceptable limit for the pathogenic microorganism indicator. *M* is the maximum safe limit for the pathogenic microorganism indicator.					

PRODUCT LABELING

In accordance with GB 7718-2011 “General Standard for the Labeling of Prepackaged Foods” and GB 28050-2011 “General Standard for Nutrition Labeling of Prepackaged Foods.”

NUTRITION FACTS

Table 4 Nutrition Facts

Item	Per 100g	NRV%
Energy	1644 kJ	20%
Protein	96.7 g	161%
Fat	0g	0%
Carbohydrate	0g	0%
Sodium	117 mg	6%

PRODUCT PROCESSING PROPERTIES

1. Water Solubility: Excellent water solubility with rapid dissolution. After dissolving, the solution is a low-viscosity, clear, and transparent liquid with a light yellow to yellow color.
2. Solution Clarity and Taste: The solution is transparent, free from fishy or off-flavors, and has no bitterness.
3. Stability: Stable under acidic conditions and heat-resistant.
4. Low Fat and Low Carbohydrates: Contains minimal fat and carbohydrate content.



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PRODUCT APPLICATIONS

1. Health Foods
2. Foods for Special Medical Purposes (FSMPs)
3. Food Ingredient Additive: Can be used as an active ingredient in a wide range of food products such as beverages, solid drinks, biscuits, candies, pastries, and alcoholic beverages to enhance flavor and functional properties.
4. Pharmaceutical Formats: Suitable for various dosage forms including oral liquids, tablets, powders, and capsules.

PACKAGING

Inner Packaging: Made of food-grade materials. Standard packaging specification: 20kg/bag. Other specifications can be customized according to market demand.

PRODUCT LABELING

The product label includes: product name, ingredient list, net weight and specification, production date and shelf life, name, address, and contact details of the manufacturer and/or distributor, storage conditions, food production license number, product standard code, and any other required information.

TRANSPORTATION AND STORAGE

Transportation: Transport vehicles must be clean and hygienic. The product must not be transported or stored together with harmful substances. Avoid strong impact during handling, and protect from sunlight and rain.

Storage: Store in a well-ventilated, dry, and cool warehouse. Do not store together with toxic, hazardous, corrosive, or odorous substances.

SHELF LIFE

Under the specified packaging and storage conditions, the shelf life is 24 months from the date of production.

PRECAUTIONS

This product is a polypeptide-based substance and is prone to moisture absorption. Once opened, it is recommended to use it as soon as possible. If not fully used, reseal the bag tightly to prevent moisture absorption.