

Product Technical Dossier

Product	Fish Collagen Type 1
CCL Product Code	P03394

Specification Details

	Specification
Identification	Positive
Assay (On dried basis)	Protein Min 94%
Appearance	Fine powder
Colour	White to Cream
Aroma	Characteristic
Flavour	Characteristic
Moisture	Max 8%
Residue on ignition (550°C)	Max 2%
Sulfites (SO ₂)	Max 10 ppm
На	5 – 6.5
Turbidity (Clarity)	Max 50 FTU
Viscosity (20%, 60°C)	Report Only
Viscosity (10%, 25°C)	Report Only
Hydrogen Peroxide (H2O2)	Max 10 ppm

Microbiological Limits

Total Viable Count	Max 1,000 cfu/g
Yeasts & Moulds	Max 100 cfu/g
E. Coli	Negative/10g
Salmonella	Negative/25g
Staphylococcus aureus	Negative/10g
Anaerobic sulphite-reducing spores	Max 10cfu/g

Heavy Metal Limits

Total Heavy metals	Max 20ppm
Lead (Pb)	Max 3ppm
Cadmium (Cd)	Max 0.5 ppm
Mercury (Hg)	Max 0.1ppm
Arsenic (As)	Max 1ppm
Chromium (Cr)	Max 10 ppm
Copper (Cu)	Max 30 ppm
Zinc (Zn)	Max 30 ppm

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Additional Technical Information

Raw Material Full Botanical / Chemical Name	Fish Collagen Type 1	
Part Used	Fish skin	
The material is Food Grade	Yes	
Cultivated / Wild	Farmed	
Country of Origin	Vietnam, Honduras, Brazil, Indonesia, Ecuador, Costa Rica, Taiwan	
Country of Manufacture	Italy, Taiwan	
Solubility in Water	Soluble in water	
Average Molecular weight	<3000 Dalton	
Shelf Life from Date of Manufacture	Min 3 Years (batch specific)	
Suitable for Vegetarians?	No	
Suitable for Vegans?	No	
Storage Conditions	This material is to be stored in a tightly sealed bag/container and to be kept in a cool place away from moisture and direct sunlight.	

Composition Origin, Function and Percentages

Ingredients	Function	% Composition	Source
Collagen	-	100%	Hydrolysed Fish Skin

Typical Nutritional Data

Test	Value per 100g
Energy kJ / Kcal	1528 KJ / 365 Kcal
Fat (g)	<0.1g
-Of which Saturates (g)	<0.1g
Carbohydrate (g)	<1g
-Of which Sugars (g)	<0.1g
Fibre (g)	<1g
Protein (N*6.25) - dry weight basis (g)	>94g
Protein (N*5.55)- dry weight basis (g)	>85g
Salt (g)	0.713g

Please note that surveillance testing may mean that not all the parameters stated on this specification are tested for every batch.

The allergen information is supplied by the manufacturer, we have not tested for each individual allergen to ensure they are not present. The information given is based on a documented risk assessment and is accurate to the best of our knowledge. If you intend to make a voluntary "free from" claim on your pack, additional testing may need to be carried out. For technical and labelling guidance, you should always speak to the competent authority for the market or member state in which the final products are placed.

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Allergens	Product Contains YES/NO	Listed Item on Site at Manufacturer YES/NO	Where applicable, is there risk of cross- contamination? YES/NO or N/A
Peanuts and Peanut Derivatives (including possible cross contamination)	No	No	N/A
Nut and Nut Derivatives Almond (Amygdalus communis L.), Hazelnut (Corylus avellana), Walnut (Juglans regia), Cashew (Anacardium occidentale), Pecan nut (Carya illinoiesis (Wangenh.) K. Koch), Brazil nut (Bertholletia excelsa), Pistachio nut (Pistacia vera), Macadamia nut and Queensland nut (Macadamia ternifolia)	No	No	N/A
Sesame Seeds and Sesame Seed Derivatives	No	No	N/A
Milk and Milk Derivatives (including lactose)	No	No	N/A
Egg and Egg Derivatives	No	No	N/A
Cereals and Derivatives containing OR POTENTIALLY CONTAMINATED WITHGluten (wheat, wheatgrass, faro, freekeh, spelt, kamut, rye, oats, barley, barley grass)	No	No	N/A
Soya and Soya Derivatives	No	No	N/A
Lupin and Lupin Derivatives	No	No	N/A
Mustard and Mustard Derivatives	No	No	N/A
Celery or Celery Derivatives (including Celeriac)	No	No	N/A
Fish and Fish Derivatives	Yes	Yes	Raw material
Molluscs and their Derivatives	No	No	N/A
Crustaceans and their Derivatives	No	No	N/A
Sulphur Dioxide and Sulphites (E220, E228) at levels > 10mg/kg or 10mg/litre	No	No	N/A

Additives / Contaminants / Dietary Requirements / Intolerances	Product Contains YES/NO	Listed Item on Site at Manufacturer YES/NO	Where applicable, is there risk of cross- contamination? YES/NO or N/A
Additives / E Numbers	No	No	N/A
Antioxidants	No	No	N/A
Ethylene Oxide	No	No	N/A
Gelatine	Yes	Yes	Collagen
Flavourings (Artificial / Nature Identical / Natural / Smoked)	No	No	N/A
Maize / Corn and any Derivatives	No	No	N/A
Legumes / Pulses	No	No	N/A
Rice and Rice Derivatives	No	No	N/A
Added Salt	No	No	N/A
Added Sugar / artificial or natural sweeteners	No	No	N/A
Aspartame	No	No	N/A
BHA / BHT (E320 / E321)	No	No	N/A
Caffeine	No	No	N/A
Colours (Artificial / Nature Identical / Natural / Smoked)	No	No	N/A
Dextrose	No	No	N/A
other Seeds and Seed Derivatives (Poppy Seeds, Cotton Seeds, Sunflower Seeds)	No	No	N/A
Kiwi fruit	No	No	N/A
Polyols (sugar alcohols)	No	No	N/A
Grapefruit	No	No	N/A
Sorbic Acid (E200, E203)	No	No	N/A
Any other Preservatives	No	No	N/A
Ethanol	No	No	N/A
Honey	No	No	N/A
Lactose	No	No	N/A
Yeast and Yeast Derivatives	No	No	N/A
All Animal Products (Beef, Pork, Poultry or other) and Derivatives (which may include growth/yield hormones, antibiotics etc.)	Yes	Yes	Fish skin
Bovine Products or Derivatives (which may include growth/yield hormones, antibiotics etc.)	No	Yes	NO

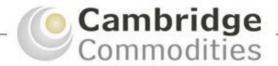
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Compliance Statements

Confirmation of BSE / TSE Status This is to certify that this product complies with all relevant current UK and EU Legislative requirements in regard to Transmissible Spongiform Encephalopathies (TSE) and Bovine Spongiform Encephalopathy (BSE) for human food, and so is free of TSE/BSE.	Yes
This is also to certify that, during the course of their manufacture, the above-mentioned product did not come into contact with any materials, which could be derived from TSE/BSE risk materials.	Yes
Confirmation of GM Status This is to certify that this product is not manufactured from GM raw materials and is therefore not subject to labelling under current regulations.	Yes
Confirmation of Non-Irradiation Status This is to certify that this product, whole or in part, has not been subjected to Ionising Radiation as per European Directives.	Yes
Confirmation of Nandrolone Status This is to certify that this product, whole or in part, has not come into contact with Nandrolone or any of its precursors in any way.	Yes
Confirmation of IOC Product Status This is to certify that this product, whole or in part, has not come into contact with any product/s, which is banned by the IOC (International Olympics Committee) and or WADA.	Yes
Confirmation of Animal Testing Status This is to certify that all the products sold by Cambridge Commodities have not been tested on animals in any part of its manufacture in accordance with current regulations.	Yes
Confirmation of Pesticides Status This is to certify that the above-mentioned product complies with the EU max residue limits (MRLs) on pesticides.	Yes
Confirmation of Nanoparticles Status This is to certify that unless otherwise stated, the above-mentioned product is free of nanoparticles. Commission Recommendation, defines as follows: "'Nanomaterial' means a natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 50 % or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm - 100 nm".	Yes
Packaging Status We hereby certify that the packaging used in the above-mentioned material conforms to EU regulations and subsequent amendments on food grade packaging	Yes
Confirmation of PAH status This is to certify that the above-mentioned product complies with the max PAH limits set by the EU regulations	Yes

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Product Flow Chart

Dissolve fish gelatin in hot water (60° C, min 3 hours) Withdrawal of liquid fish gelatin from the production line of gelatin Add proteolytic enzyme and monitor until required degree of hydrolysis is achieved Inactivate enzyme by heating to 85-90° C, for about 1 hour Filter through polypropylene filter (diameter 40 µm) Sterilisation (min 138° C for 4 seconds minimum) CCP1 Sieving (diameter 40 µm) SPRAY DRY Metal Detector CCP2 (Fe 1.2mm; Non Fe 1.5mm; SS2.0 mm) Vibrating Screen CCP3 (diameter 2mm) Pack (15 kg paper sack with food grade polyethylene liner) CCP4 Delivery

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Material Safety Data Sheet

To download this product's material safety data sheet, please click <u>here</u> and search for the Cambridge Commodities product code. If there is no MSDS available, please follow the on-screen instructions to request one.

The Information provided in this document is subject to change and the batch specific certificate of analysis should always be referenced.

To be used as per local legislation.

Change History

Version	Change	Customer Notification required Yes / No
1	First Issue	N/A
2	Changed to incorporate European supplier of the same material who complies to EU regulations	Yes
3	Edited the gelatin content on the additives table. The format was also updated.	Yes
4	Flow chart and Nutritionals were added.	No
5	Updated format Removed Pharmacopeia used Updated compound ingredients citric acid monohydrate from 0-1% to none and flavour from 0-0.15% to none Updated country of origin from Europe to Vietnam, Honduras, Brazil, Indonesia, Ecuador, Costa Rica Updated the typical energy value from 378 to 387Kcal to correct an error These changes were made so that our specifications match those of the supplier. Replaced MSDS with the link to CCL MSDS database	Yes
6	Added more technical information. Amended the following information Cadmium (Cd) from Max 1ppm to Max 0.5 ppm, Mercury (Hg) from Max 0.1ppm to Max 0.15ppm Total Viable Count from Max 10,000 cfu/g to Max 1000Cfu/g, E. Coli from Negative/g to Negative/10g Shelf life from minimum 2 years (batch specific) to minimum 5 years, CAS Number from 92113-31-0 to 68410-45-7, EC/EINECS Number from 295-635-5 to 270-082-2. Removed Ash Max 7% specification.	Yes

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7	Removed Particle Size Max 50 % Pass 140-230 Mesh information, Viscosity (20%, 25°C) from 2.0 ~ 4.0 mPa.s, Density (Bulk) 0.40 - 0.55 g/ml and Solubility in Alcohol information. Amended the following information: Turbidity (Clarity) from Max 10 FTU to Max 50 FTU, Assay (On dried basis) Protein Min 90% to Min 94%, pH from 5 - 7.5 to 5 - 6.5, Moisture from Max 10% to Max 8%, Mercury (Hg) from Max 0.15ppm to Max 0.1ppm Country of Manufacture from Europe to Italy. Added the following: Viscosity (20%, 60°C) Report Only, Viscosity (10%, 25°C) Report Only.	Yes
8	 Changed: Staphylococcus aureus from Negative/g to Negative/10g Product name from Collagen Hydrolysed Marine Source Type 1 to Fish Collagen Type 1 	Yes
9	Updated Nutritional information and product flow chart including CCP's.	Yes
10	Changed bovine handle on site with no risk of cross-contamination	Yes
11	Added Taiwan to Country of Origin and Country of Manufacture Updated shelf life from minimum 5 years to minimum 3 years Removed CAS and EC numbers	Yes

Document Approval

Originator		Approver	
Anne Stevens Quality Administrator	Anne Stevens	C White	Civilite
	X 29/11/2023 09:40	Senior Quality Specialist	29/11/2023 11:01

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