

Product Technical Dossier

Product	Spirulina powder
CCL Product Code	P1921

Specification Details

Identification	positive		
Assay/Actives	Total Carotenoids Min 0.30% Protein Min 60%		
Appearance	Fine Powder		
Colour	Blue/Green/Dark Green (**)		
Aroma	Characteristic		
Flavour	Characteristic		

(**) Please note the colour of this natural material could be subject to slight change due to many factors such as seasonal variations

Sieve Analysis % passed	Min 95% Pass 80 Mesh
Loss on Drying	Max 8%
Ash	Max 8%
Bulk Density	0.40~0.65g/ml
рН	7– 9
Chlorophyll	Max 2%

Microbiological Limits

Total Viable Count	Max 100,000cfu/g		
Yeasts & Moulds	Max 300cfu/g		
E. Coli	Negative/10g		
Salmonella	Negative/25g		
Staphylococcus aureus	Negative/10g		

Heavy Metal Limits

Total Heavy metals	Max 10ppm
Lead (Pb)	Max 3ppm
Cadmium (Cd)	Max 1ppm
Mercury (Hg)	Max 0.1ppm
Inorganic Arsenic (As)	Max 1ppm
Total Arsenic (As)	Max 2ppm

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Additional Technical Information

Raw Material Full Botanical / Chemical Name	Spirulina (Arthrospira platensis)		
Part Used	Whole plant		
The material is Food Grade	Yes		
Country of Origin	China		
Country of Manufacture	China		
Solvent Used	None		
Solubility in Alcohol	soluble		
Solubility in Water	Dispersible		
Shelf Life from Date of Manufacture	Min 2 years		
Suitable for Vegetarians?	YES		
Suitable for Vegans?	YES		
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
Spirulina Powder	-	100%	Arthrospira platensis

Typical Nutritional Data

Test	Value per 100g
Energy kJ / Kcal	1540kJ/368kcal (+/-20%)
Fat (g)	3g (+/- 2g)
-Of which Saturates (g)	0.4g (+/- 0.4g)
Carbohydrate (g)	14g (+/-3.5g)
-Of which Sugars (g)	1.5g (+/-1.5g)
Fibre (g)	12.5g (+/-2.5g)
Protein (g)	65.0g (+/-5g)
Salt (g)	1.0g (+/-0.375g)

Typical Mineral Composition (Provided by Supplier)

Test	Value per 100g		
Potassium	1300 – 2000mg		
Calcium	90 – 150mg		
Phosphorous	800 – 1100mg		
Magnesium	200 – 300mg		
Iron	30 – 50mg		
Zinc	10 – 20mg		
Copper	0.5 – 0.8mg		
Manganese	1.0 – 3.0mg		
Selenium	0.005 – 0.01mg		
Chromium	0.1 – 0.3mg		

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Typical Vitamin Composition (Tested)

Test	Value per 100g
Vitamin C	<1.0mg
Vitamin B1	<0.1mg
Vitamin B2	1.4mg
Vitamin B6	0.6mg
Folic Acid	450µg

Note: slight variation in results is expected from batch to batch, and is attributed to the natural nature of the product

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	No	No	N/A
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	contains naturally occurring sulphites.*

^{*} Naturally occurring sulphites are not required to be declared as an allergen as per FSA

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	No	No	N/A
Flavourings (Artificial / Nature Identical / Natural / Smoked)	No	No	N/A
Maize / Corn and any Derivatives	No	Yes	No
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	Yes	No
Honey	No	No	N/A
Lactose	No	No	N/A
Yeast and Yeast Derivatives	No	No	N/A

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All Animal Products (Beef, Pork, Poultry or other) and Derivatives (which may include growth/yield hormones, antibiotics etc.)	No	No	N/A
Bovine Products or Derivatives (which may include growth/yield hormones, antibiotics etc.)	No	No	N/A

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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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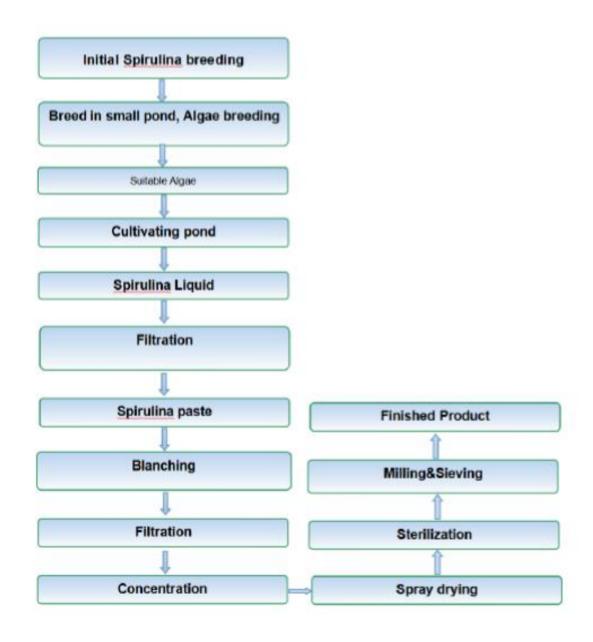








Product Flow Chart



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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 onscreen 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
1-5	Pre-change history	N/A
6	pH changed from 8-9 to 7-9	No
7	Added FEMAS status	No
8	Update of document format, correction of salmonella specification, inclusion of E. Coli and staph units, addition of sterilization information.	No
9	Updated Heavy Metals to conform with EU Regulations	Yes
10	Chlorophyll has been updated from NLT 0.50g to Max 0.5% due to a historic clerical error	Yes
11	Updated Typical Nutritional Information per 100g Addition of Typical Vitamin Composition per 100g	No
12	Loss on Drying and Ash have been updated from Max 7% to Max 8% due to the supplier updating their specification	Yes
13	The staphylococcus parameter was removed, yeast & moulds were changed from max 100cfu/g to max 300cfu/g, E. coli was changed from negative/1g to max 10cfu/g and the chlorophyll was changed from max 0.5% to min 0.5%. The allergen and additive table format were also updated.	Yes
14	The staphylococcus parameter was added, and the E. coli parameter was modified.	Yes
	The following information have been amended: - Total carotenoids >0.20% to min 0.3% - Protein >55% to min 60% - Bulk Density from around 0.4 g/ml to approx. 0.5g/ml - Shelf life from 2 Years to minimum 2 Years Added supplementary technical information. Amended nutritional values and updated production flow chart.	Yes

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16	Changed solubility in water from insoluble to Dispersible	Yes
17	Added natural sulphite statement	Yes
18	Removed Femas from Name, removed risk of contamination from crustaceans Added solvent used,	Yes
19	Changed Sieve Analysis from 100% Pass 80 Mesh to Min 95% Pass 80 Mesh, Bulk Density from Approx. 0.5g/ml to 0.40~0.65g/ml, Chlorophyll from Max 0.5% to Max 2% Updated Product Flow Chart	Yes
20	Specified Arsenic testing as "Inorganic Arsenic"	Yes
21	Added Total Arsenic (As) Max 2ppm	Yes

Document Approval

Originator		Approver	
10 A D D	Mel Lee	Dealin Augus	Cecilia Anzani
09/09/2022 19:56	Quality Administrator	X 09/09/2022 11:00	Senior Quality Specialist

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