

PRODUCT TECHNICAL DOSSIER

SPIRULINA POWDER

Product Code:

P1921

Raw Material Full Name:

Spirulina Powder

Raw Material Full Botanical/Chemical/Latin/Trade Name/Synonyms:

Spirulina

This material is Food Grade

FEMAS Status:

Assured

Limit/Range/Specification:

Total Carotenoids >0.20%

Protein >55%:

Chlorophyll:

NLT 0.50g

Solubility in Water:

Insoluble

Solubility in Alcohol:

Soluble

Particle Size:

80 Mesh

Percentage passed through:

100%

Bulk Density:

Around 0.4 g/ml

pH:

7– 9

Loss on Drying:

Max 7%

Ash:

Max 7%



Residue on Ignition:

Max 7%

Country of Origin:

China

Country of Origin of the Manufacture:

China

Base Source/Start Material:

Spirulina

Origin of Product – Synthetic, Plant, Mineral, Animal, Fish or Fermented:

Plant

Species used:

Spirulina (Arthrospira Platensis)

Part of the plant used:

Whole plant

Material is:

100%

Compound Ingredients:

None

Sterilisation:

No additional sterilisation required, the spray drying process involves temperatures high enough to control microbial bioload

Shelf Life from Date of Manufacture:

2 years

Storage Conditions:

Cool condition and sealed, away from heat and light

Appearance:

Fine Powder

Colour:

Blue/Green

Flavour/Taste:

Characteristic

Texture:

Powder

Odour:

Smell of seaweed

Microbiological Test**Total Viable Count:**

Max 100,000cfu/g

Yeast & Moulds:

Max 100cfu/g

E.Coli:

Negative in 1g

Staphylococcus:

Negative in 20g

Salmonella:

Negative in 25g

Metals**Lead (Pb):**

Max 3ppm

Arsenic (As):

Max 1ppm

Cadmium (Cd):

Max 1ppm

Mercury (Hg):

Max 0.1ppm

Total Heavy Metals:

Max 10ppm

There are no nuts in this recipe and are no nuts on site, however we cannot guarantee that the raw materials entering the site are nut free.



INTOLERANCE DATA			
	If No please give details		
Free from All Animal Products (Beef, Pork, Poultry or other)	YES		
Free from Bovine Products or Derivatives by using hormones to increase milk yield in cows	YES		
Free from Bone Meal	YES		
Free from Peanuts and Peanut Derivatives (including possible cross contamination)	YES		
Free from other Nut and Nut Derivatives	YES		
Free from Nut Derived Oil	YES		
Free from Sesame Seeds and Sesame Seed Derivatives	YES		
Free from Poppy Seeds and Poppy Seed Derivatives	YES		
Free from Sunflower Seeds and Sunflower Seeds Derivatives	YES		
Free from other Seeds and Seed Derivatives	YES		
Free from Milk and Milk Derivatives (including lactose)	YES		
Free from Egg and Egg Derivatives	YES		
Free from Cereals containing Gluten (wheat / rye / oats / barley/ spelt/ kamut or their hybridised strains) and Derivatives	YES		
Free from Soya and Soya Derivatives	YES		
Free from Maize and Maize Derivatives	YES		
Free from Corn and Corn Derivatives	YES		
Free from Lupin and Lupin Derivatives	YES		
Free from Yeast and Yeast Derivatives	YES		
Free from Cotton Seeds (Flour) and Cotton Seed Derivatives	YES		
Free from Rice and Rice Derivatives	YES		
Free from Mustard and Mustard Derivatives	YES		
Free from Celery or Celery Derivatives	YES		
Free from Celeriac or Celeriac Derivatives	YES		
Free from Fruit and Fruit Derivatives	YES		
Free from Vegetable and Vegetable Derivatives	YES		
Free from Carrot and Carrot Derivatives	YES		
Free from Legumes / Pulses	YES		
Free from Fish and Fish Derivatives	YES		
Free from Crustaceans / Molluscs and their Derivatives	YES		
Free from Additives	YES		
Free from Added Salt	YES		
Free from Added Sugar	YES		
Free from Antioxidants	YES		
Free from Artificial Glutamates	YES		
Free from Aspartame	YES		
Free from Azo and Coal Tar Dyes	YES		
Free from Benzoates (E210 / E219)	YES		
Free from BHA / BHT (E320 / E321)	YES		
Free from Caffeine	YES		
Free from Cinnamon	YES		
Free from Cocoa	YES		
Free from Colours (Artificial / Nature Identical / Natural / Smoked)	YES		
Free from Dextrose	YES		
Free from Dioxins	YES		
Free from Ethanol	YES		



INTOLERANCE DATA			
		If No please give details	
Free from Ethylene Oxide	YES		
Free from Flavourings (Artificial / Nature Identical / Natural / Smoked)	YES		
Free from Garlic	YES		
Free from Gelatine	YES		
Free from Glutamates (E620 to E625)	YES		
Free from Histamine	YES		
Free from Hickory	YES		
Free from Honey	YES		
Free from Lactose	YES		
Free from Latex	YES		
Free from MSG (Added and Naturally Occurring E621)	YES		
Free from Nucleotides (E627, E630, E631, E635)	YES		
Free from Polyols	YES		
Free from Preservatives	YES		
Free from Starch Products (Including Maltodextrin)	YES		
Free from Sorbic Acid (E200, E203)	YES		
Free from Sulphur Dioxide and Sulphites at levels above 10mg/kg or 10mg/litre expressed as SO ²	YES		
Free from Sulphites (E220, E228)	YES		
Free from Sweeteners	YES		
Free from Vannillin	YES		
Suitable for Diabetics	YES		
Suitable for Coeliacs	YES		
Suitable for Ovo-Lacto Vegetarians	YES		
Suitable for Vegans	YES		
Kosher Certified		NO	Not Certified
Halal Certified		NO	Not Certified



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.

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.

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 regulations 1829/2003/EC and 1830/2003/EC.

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 1999/3/EC.

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.

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.

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 regulation 86/609/EEC.

CONFIRMATION OF PESTICIDES STATUS

This is to certify that the above-mentioned product complies with the regulation (EC) No.396/2005 of 23rd February 2005 and commission Regulation (EU) No. 559/2011 of 7th June 2011 amending annexes II and III of the above Regulation.

CONFIRMATION OF NANOPARTICLE STATUS

This is to certify that unless otherwise stated, the above-mentioned product is free of nanoparticles. Commission Recommendation 2011/696/EU, 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".



TYPICAL NUTRITIONAL INFORMATION Per 100g

Carbs	16 – 20g
Fat	5 – 8g
Protein	55 – 70%
Minerals	14 – 20%

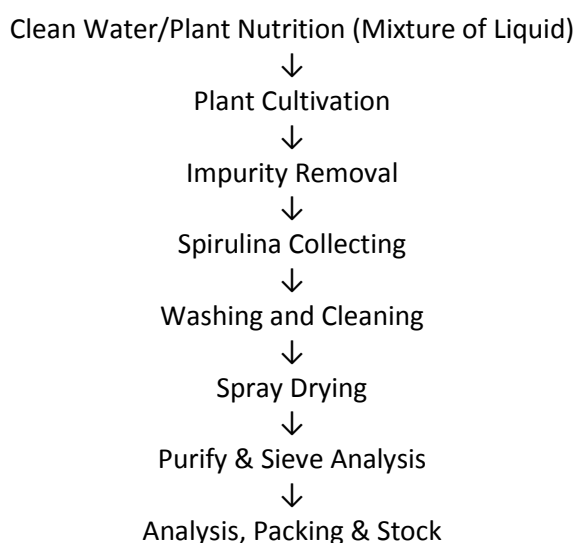
Note: These results are a representative of the actual batch analysed and may be different from products with different batch numbers.

TYPICAL MINERAL BREAKDOWN

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

Note: These results are a representative of the actual batch analysed and may be different from products with different batch numbers.

PROCESS FLOW CHART



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success starts with the finest ingredients...

MATERIAL SAFETY DATA SHEET

Section 1 Description

PRODUCT NAME: SPIRULINA POWDER

PRODUCT CODE: P1921

Supplier: Cambridge Commodities Limited
203 Lancaster Way, Ely, Cambridgeshire, CB6 3NX.
Tel: 01353 667258. Email: mail@c-c-l.com

Section 2 Ingredients/Identity Information

<u>Components</u>	<u>% in Product</u>	<u>CAS Number</u>	<u>Formula</u>	<u>EINECS Number</u>
Spirulina Powder	100	N/A	N/A	N/A

Section 3 Possible Hazards

Caution	Avoid contact and inhalation.
Hmis Rating	Health 1. Flammability 0. Reactivity 0.
Nepa Rating	Health 1. Flammability 0. Reactivity 0.

Section 4 Emergency and First Aid Procedures

Eyes	If symptoms develop immediately move individual away from exposure and into fresh air. Rinse with plenty of water for at least 15 minutes while holding eyelids apart. Seek medical attention.
Skin	Remove contaminated clothing. Wash with soap and copious amounts of water.
Swallowing	Seek medical attention immediately. Wash out mouth and drink water if conscious. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air. If breathing is difficult, administer oxygen and seek medical help.

Section 5 Fire and Hazard Data

Fire and Explosion Hazards	May emit toxic fumes under fire conditions
Extinguishing Media	Foam, water spray, carbon dioxide, dry chemical powder.
Fire Fighting Instructions	Wear a self-contained breathing apparatus with a full-face piece operated in the positive pressure demand mode. Use personal protective equipment. Equipment should be thoroughly decontaminated after use

Section 6 Accidental release measures.

Procedure of Personal Precaution	Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.
Cleaning up Methods	Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete

Section 7 Storage

Handling	Avoid creating dust. Avoid contact with eyes, skin and clothing, avoid prolonged or repeated exposure.
Storage	Keep containers tightly closed in a cool and dry place for quality reasons. Protect from humidity and light

Section 8 Control Methods/Personal Protection

Engineering Measures	Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure.
Respiratory Protection	Avoid inhalation and wear respirator if needed. 3M Dust respirator No. 8710 or 9900 is recommended, or a NIOSH/MSHA jointly approved dust respirator.
Hand/Body Protection	Avoid contact and prolonged or repeated exposure. Wear resistant gloves. Wash thoroughly after handling. Protective clothing recommended.
Eye Protection	Wear safety glasses in compliance with OSHA regulations if needed.

Section 9 Physical and Chemical Properties

Physical state	Fine powder
Colour	Blue/Green
Odour	Characteristic
Sieve Analysis	100% pass through 80 mesh

Section 10 Stability and Reactivity

Chemical Stability	Stable under conditions mentioned in section 7.
Hazardous Polymerisation	Product will not undergo hazardous polymerisation.
Incompatibility	Strong bases, strong acids.
Hazardous Decomposition Products	Nature of decomposition products unknown.

Section 11 Toxicological Information

Skin Contact	May cause skin irritation.
Skin Absorption	May be harmful if absorbed through skin.
Eye Contact	May cause eye irritation.
Inhalation	May be harmful if inhaled, material is irritation to mucous membranes and upper respiratory tract.
Ingestion	May be harmful if swallowed in large amounts.
Signs and Symptoms of Exposure	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 Ecological Information

Eco-toxicity	No Data Available
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Section 13 Disposal Considerations

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 Transport Information

Transport classification	Not classified as dangerous for any mode of UK or International transport.
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Section 15 Regulatory Information

European Regulation	This product is not classified according to the EU regulations.
Reviews, Standards and Regulations	Health & Safety at work act 1974. COSHH Regulations (1994). EH40 Occupational exposure limits.
US Federal Regulations	Not known.

Section 16 Other Information

This advice is given by Cambridge Commodities Ltd who accepts no legal liability for it. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.

Individuals working with chemicals should consider all chemicals to be potentially hazardous even if their individual hazards may be uncharacterised or unknown.



We confirm that the information above is sourced from the original manufacturers/suppliers Specification.

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 sterilisation information.	No
9	Updated Heavy Metals to conform with EU Regulations	Yes

Document Approval

Originator Job Title	QC Technician	Approver Job Title	QC Technician
 Jennifer Fordham (Feb 8, 2016)		 Adam Mulcahy (Feb 8, 2016)	









Spirulina Powder - P1921 - Technical Dossier V9

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