

#### **PRODUCT TECHNICAL DOSSIER**

#### **ORGANIC CHIA FLOUR**

Product Code: P19318

Raw Material Full Name: Organic Chia Seeds Milled Flour

Raw Material Full Botanical/Chemical/Latin/Trade Name/Synonyms: Semilla De Chia Salvia Hispanica

Certificate Number: GB-ORG-05

This material is Food Grade:

Vegan / Vegetarian Status: ✓

FEMAS Assured:

Limit/Range/Specification: 91% - 96% as Dry Matter

Ratio of Material: 100%

CAS Number: 3650-09-7

EC/EINECS Number: 297-250-8

Solubility in Water: Soluble

Solubility in Alcohol: Not soluble in Alcohol

Bulk Density: 0.667g/cm<sup>3</sup> - 0.722g/cm<sup>3</sup> Product Code: P19318











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#### **Tapped Density:** 0.931g/cm<sup>3</sup> – 1.075g/cm<sup>3</sup>

## **Specific Gravity:** 0.90 – 0.92

**pH:** Approximately 9.5

Purity: Min 99%

Foreign Matter: Max 0.5%

Damaged Seeds: Max 0.5%

**Seeds Size:** 1.5 – 2.0

Country of Origin: South America/Africa

Country of Origin of the Manufacture:  $\bigcup K$ 

**Base Source/Start Material:** Seeds of the Semilla De Chia Salvia Hispanica

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

What is the extraction/processing used? What solvents are used and at what ratio's? Cold Pressed Oil Extract from Seeds

Material is: 100%

**Compound Ingredients Origin, Function and Percentages:** None

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Shelf Life from Date of Manufacture: Min 1 Year

**Storage Conditions:** Store in a cool dry place. Away from sunlight.

Appearance (Fine/Crystals/Crystalline/Hygroscopic): Seed

Colour: Greyish

Flavour/Taste: Characteristic

Odour: Characteristic

Do any of the parameters change in different seasons? No

**Microbiological Test** 

Total Viable Count: Max 500,000cfu/g

Yeast & Moulds: Max 50,000cfu/g

E. Coli: Max 10cfu/g

Salmonella: Absent/25g

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#### **Heavy Metals**

Lead (Pb): Max 3ppm

Cadmium (Cd): Max 1ppm

Mercury (Hg): Max 0.1ppm

Arsenic (As): Max 1ppm

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

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

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ALLERGENS	Product Free From YES/NO	Listed Item on Site at Manufacturer YES/NO	If YES, Please Comment
Free from Peanuts and Peanut Derivatives (There are no nuts in this recipe, however CCL cannot guarantee that the raw materials entering the site are nut free.)	YES	NO	
Free from other 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) (There are no nuts in this recipe, however CCL cannot guarantee that the raw materials entering the site are nut free.)	YES	NO	
Free from Sesame Seeds and Sesame Seed Derivatives	YES	NO	
Free from other Seeds and Seed Derivatives (Poppy Seeds, Cotton Seeds, Sunflower Seeds)	YES	NO	
Free from Milk and Milk Derivatives (including lactose)	YES	NO	
Free from Egg and Egg Derivatives	YES	NO	
Free from Cereals and Derivatives containing OR POTENTIALLY CONTAMINATED WITH Gluten (wheat, wheatgrass, faro, freekeh, spelt, kamut, rye, oats, barley, barley grass)	YES	NO	
Free from Soya and Soya Derivatives	YES	NO	
Free from Lupin and Lupin Derivatives	YES	NO	
Free from Mustard and Mustard Derivatives	YES	NO	
Free from Celery or Celery Derivatives (including Celeriac)	YES	NO	
Free from Fish and Fish Derivatives	YES	NO	
Free from Molluscs and their Derivatives	YES	NO	
Free from Crustaceans and their Derivatives	YES	NO	
Free from Sulphur Dioxide and Sulphites (E220, E228) at levels > 10mg/kg or 10mg/litre	YES	NO	

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ADDITIVES / CONTAMINANTS / DIETARY REQUIREMENTS	Product Free From YES/NO	Listed Item on Site at Manufacturer YES/NO	If YES, Please Comment
Free from Additives	YES	NO	
Free from Antioxidants	YES	NO	
Free from Ethylene Oxide	YES	NO	
Free from Gelatine	YES	NO	
Free from Flavourings (Artificial / Nature Identical / Natural / Smoked)	YES	NO	
Free from Maize / Corn and any Derivatives	YES	NO	
Free from Legumes / Pulses	YES	NO	
Free from Rice and Rice Derivatives	YES	NO	
Free from Added Salt	YES	NO	
Free from Added Sugar / artificial or natural sweeteners	YES	NO	
Free from Aspartame	YES	NO	
Free from BHA / BHT (E320 / E321)	YES	NO	
Free from Caffeine	YES	NO	
Free from Colours (Artificial / Nature Identical / Natural / Smoked)	YES	NO	
Free from Dextrose	YES	NO	
Free from Dioxins	YES	NO	
Free from MSG (Added and Naturally Occurring E621) or Glutamates (E620 to E625)	YES	NO	
Free from Nucleotides (E627, E630, E631, E635)	YES	NO	
Free from Polyols (sugar alcohols)	YES	NO	
Free from Benzoates (E210 / E219)	YES	NO	
Free from Sorbic Acid (E200, E203)	YES	NO	
Free from any other Preservatives	YES	NO	
Free from Ethanol	YES	NO	
Free from Honey	YES	NO	
Free from Lactose	YES	NO	
Free from Yeast and Yeast Derivatives	YES	NO	
Free from All Animal Products (Beef, Pork, Poultry or other) and Derivatives (which may include growth/yield hormones, antibiotics etc.)	YES	NO	
Free from Bovine Products or Derivatives (which may include growth/yield hormones, antibiotics etc.)	YES	NO	

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#### NUTRITIONAL DATA

Test	Calculated Value per 100gm
Energy KJ / Kcal	1,832KJ / 444Kcal
Fat	31.4g
- Of which saturates	3.8g
- Of which Omega 3 Fatty Acids	18.5g
Carbohydrate	4.9g
- Of which sugars	0.8g
Dietary Fibre	33.7g
Soluble Fibre	4.0g
Insoluble Fibre	29.7g
Protein	21.2g
Salt	<0.001g

#### **VITAMIN DATA**

Test	Calculated Value per 100gm
Vitamin A	30IU
Vitamin B1 (Thiamine)	0.8mg
Vitamin B2 (Riboflavin)	0.05mg
Vitamin B3 (Niacin)	8.6g
Vitamin B6 (Pyridoxine)	0.1mg
Vitamin B12 (Cobalamin)	0.1mcg
Vitamin C	3.7mg
Vitamin E	0.74mg

#### **MINERAL DATA**

Test	Calculated Value per 100gm
Calcium (Ca)	669mg
Copper (Cu)	1.37mg
Iron (Fe)	8mg
Magnesium (Mg)	360mg
Manganese (Mn)	2.2mg
Phosphorous (P)	766mg
Potassium (K)	712mg
Sodium (Na)	10.7mg
Zinc (Zn)	3.5mg

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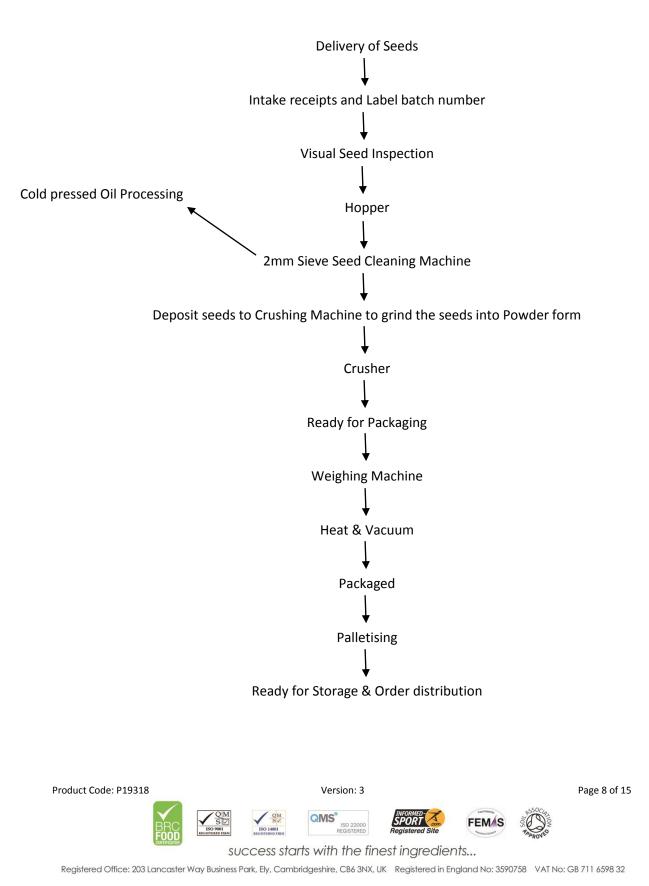


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#### **PRODUCTION FLOW CHART**





#### **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".

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#### MATERIAL SAFETY DATA SHEET

#### Section 1 Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identification	
Product Name: Product Code:	Organic Chia Flour P19318
1.2 INCI Name	
INCI Name:	Organic Chie Seeds (Milled) Flour (Salvia Hispanica Seed)
1.3 Company Details	
Company:	Cambridge Commodities Limited Lancaster Way, Ely, Cambridgeshire, CB6 3NX Tel: 01353 667258. Email: qa@c-c-l.com

#### Section 2 Hazards Identification

#### 2.1 Human

Eye contact may cause irritation. Unlikely to cause skin irritation unless exposure is excessive and/or prolonged. Unlikely to cause harm, apart from a laxative effect, if swallowed. The dust may irritate nose and throat. Information based on the properties of the material present.

#### 2.2 Environmental

This material is readily biodegradable and unlikely to accumulate in the aquatic environment. Discharge of large quantities into the aquatic environment may kill fish and other aquatic organisms by oxygen depletion caused by rapid biodegradation.

#### Section 3 Composition/Information on Ingredients

#### **3.1 Composition**

100% Organic Chia Seed (Salvia Hispanica)EINECS Number:297-250-8

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#### **Section 4 Emergency and First Aid Measures**

#### 4.1 Inhalation

Remove from area of exposure; seek medical attention if any symptoms occur.

#### 4.2 Ingestion

Call physician for advice.

#### 4.3 Eye Contact

Irrigate with heavy stream of water for at least 15 minutes.

#### 4.4 Skin Contact

Wash exposed area with soap and

#### **Section 5 Fire-fighting measures**

#### 5.1 Extinguishing Media

Water spray, dry chemical, foam, CO2, and other standard extinguishing media for oil.

#### **5.2 Special Fire Fighting Procedures**

Combustible material. Use air supplied equipment for fighting interior fires. Cool fire exposed containers with water.

#### **Section 6 Accidental Release Measures**

#### **6.1 Personal Precautions**

Not relevant.

#### **6.2 Environmental Precautions**

Contain and collect spillage.

#### 6.3 Methods for Cleaning Up

Remove sources of ignition. Contain spill to smallest possible area; sweep up spilled material. Area may be slippery; take precautions.

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#### Section 7 Handling and Storage

#### 7.1 Prevention of User Exposure

Wear safety glasses.

#### 7.2 Incompatible Products

Keep away from oxidizing agents, excessive heat, and sources of ignition.

#### 7.3 Incompatible Materials

Avoid contact with strong oxidizers.

#### 7.4 Suitable Storage Conditions

Store in closed containers below 40°C in well ventilated areas. Ground container when dispensing.

#### 7.5 Conditions to Avoid

Do not store or use near heat, sparks, or flame and store out of sun. Never use pressure to empty. Do not puncture, drag, or slide container.

#### 7.6 Ventilation

Handle in a well-ventilated area.

#### **Section 8 Exposure Controls/Personal Protection**

#### **8.1 Respiratory Protection**

Dust mask, when handling large quantities. Do not inhale the dust.

#### 8.2 Eye Protection

Safety goggles. Avoid eye and prolonged skin contact.

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#### **Section 9 Physical and Chemical Properties**

#### 9.1 Properties

Physical State:	Milled Flour
Form:	Fine
Colour:	Greyish/Tan
Odour:	Slightly Nutty
Specific Gravity @ 25°C:	~ 1
Vapour Density:	N/A
Flash Point (Cleveland Open Cup) :	>290°C
Vapour Pressure:	N/A
Solubility in H <sub>2</sub> O:	Insoluble
Volatiles (%):	<0.1

#### **Section 10 Stability and Reactivity**

#### 10.1 Stability

Stable

#### 10.2 Materials to avoid

Strong oxidizers

#### 10.3 Conditions to avoid

Excessive heat, sources of ignition.

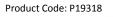
#### **10.4 Hazardous Decomposition Products**

Combustion produces carbon monoxide, carbon dioxide, and thick smoke. In general, products of combustion (such as organic materials) may be irritating and toxic.

#### Section 11 Toxicological Information

#### 11.1 Information

Eye contact may cause irritation. Prolonged skin contact may cause skin irritation. Inhalation of dust may irritate the respiratory tract. Ingestion of a single dose unlikely to cause harm.



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#### **Section 12 Ecological Information**

#### 12.1 Information

No ecological hazards are associated with this product.

#### Section 13 Disposal Considerations

#### 13.1 US

Discarded product is not a hazardous waste under RCRA, 40 CFR 261.

#### 13.2 EC

Dispose of material in accordance with appropriate regulations.

#### **Section 14 Transport Information**

#### 14.1 Information

USA DOT shipping name: Vegetable seed. No USA DOT classification for this product.

#### Section 15 Regulatory Information

#### 15.1 US

This material is not classified as hazardous under SARA or CERCLA, and contains no California Proposition 65 components.

#### 15.2 EU

This product is not classified as "Dangerous" according to the health and physical properties criteria of the EU Directives on the classification of substances and preparations.





#### **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.

This 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	Total Viable Count and Yeast & Moulds have been increased to conform with the EU Limits	Yes
3	E. Coli limit changed from Max 1cfu/g to Max 10cfu/g due to a clerical error.	Yes

#### **Document Approval**

Originator Job Title	Quality Specialist	Approver Job Title	Quality Specialist
Lucia Valle (Sep 25, 20	17)	Alleror D	



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# P19318-Organic Chia Flour-Technical Dossier V3

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