

## Alpacasa Technical Sheet

Product: **Chia**

Scientific Name: **Salvia Hispanica**



Chia is an annual herb growing up to 1.75 meters.

Approved by European Union as novel food with high percentage of protein, antioxidants and very rich in omega-3 fatty acids, Chia seeds may be added to other foods as a topping or put into smoothies, breakfast cereals, energy bars, yogurt and bread. They also may be made into a gelatin-like substance or consumed raw. Preliminary research indicates many potential health benefits from consuming chia seeds.

### 1. General information

- a. **Origin:** Paraguay
- b. **Classification:** Species of flowering plant in the mint family Lamiaceae.
- c. **Processing:** Seeds are mechanically and/or hand harvested and cleaned to result in a premium food grade product.  
Seeds may pass through an electronic color-sorting machine to reject discolored, immature or off-sized.
- d. **Trade:** Sesame exports sell across a wide price range. Quality perception, particularly how the seed looks, is a major pricing factor. Most importers who supply ingredient distributors only want to purchase scientifically treated, properly cleaned, washed, dried, colour-sorted, size-graded, and impurity-free seeds packed according to international standards. Seeds that do not meet these quality standards are considered unfit for exportation.



## 2. Specifications

- a. Seed Appearance
  - i. Color: Mottle-colored with brown, gray, black, and white
  - ii. Size: Small ovals with 1.8 mm long by 1 mm wide
- b. Moisture content: 8.0% max
- c. Oil content: 29-38% max
- d. Purity: 99.97% / 99.4%
- e. Hygiene



The Chia seeds are handled in accordance with the General Principles of Food Hygiene (CAC/RCP 1-1969) and other Codes of Practice recommended by the Codex Alimentarius Commission which are relevant to these products.

## 3. Characteristics

### a. PHYSICOCHEMICAL

	Value	Method
Ashes	5,1 g / 100 g	Incineration 550 ° C
Total acidity	< 2.05	

### b. MICROBIOLOGICAL

Result	Measured value	Unit	Method
Yeast	200 max	CFU/g	
Mould	200 max	CFU/g	
Salmonella spp	<200	CFU/g	
Staphylococcus Aureaus	Not detected	CFU/g	
E.Coli	< 10	CFU/g	
Aflatoxin			
Aflatoxin B1	< 1	ug/kg	H.P.L.C
Aflatoxin B2	< 1	ug/kg	H.P.L.C
Aflatoxin G1	< 1	ug/kg	H.P.L.C
Aflatoxin G2	< 1	ug/kg	H.P.L.C

c. NUTRITIONAL

Amounts per  
1 cup (150g) %DV

**Calorie Information**

Calories	729	36%
From Carbohydrate	241	12%
From Fat	440	22%

**Carbohydrates**

Total Carbohydrate	1.1 g	0%
Dietary Fiber	61.4 g	180%
Starch	0.0 g	
Sugars	0.0 g	

**Fats & Fatty Acids**

Total Fat	49.1 g	80%
Saturated Fat	5 g	10%
Total trans fatty acids	0.14 g	
Total Omega-3 fatty acids	30.4 g	480%
Total Omega-6 fatty acids	10.2 g	93%

**Protein & Amino Acids**

Protein	31.7 g	61%
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**Vitamins**

Vitamin A	81.2 IU	11%
Vitamin C	2.40 mg	3%
Vitamin E (Alpha Tocopherol)	0.75 mg	5%
Vitamin K	0.0 mcg	0%
Vitamin B1 Thiamin	1.0 mg	78%
Vitamin B2 Riboflavin	0.26 mg	20%
Vitamin B3 Niacin	13.25 mg	83%
Vitamin B6	0.0 mg	0%
Folate	73 mcg	18%
Vitamin B12	0.0 mcg	0%
Pantothenic Acid	0.0 mg	0%

**Minerals**

Calcium	946.5 mg	95%
Iron	11.58 mg	89%
Magnesium	590 mg	145%
Phosphorus	1290 mg	160%
Potassium	610 mg	15%
Sodium	24 mg	2%
Zinc	6.87 mg	62%
Copper	1.39 mg	154%
Manganese	4.08 mg	178%
Selenium	82 mcg	151%

**4. Others**

a. Gluten Content

Content of Prolamines	<0.1 mg / 100 gr
Classification	Free of Gluten

b. Alergenicity

Allergy to Chia is very rare as no allergenic reaction has been reported in the medical literature. Chia is an oleaginous and has a taxonomic classification different from other products such as peanuts.

c. G.M.O.

Crop of Sesame are totally free of Genetically Modified Organisms (GMO's). Sesame seeds result from natural selection processes.

Genetically Modified Organisms	Negative
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d. Kosher

As a natural product Sesame seed has Kosher certification.

## 5. Storage Conditions

Temperature	20 °C
Humidity	60%
Shelf Life	12 to 24 depending on variety



## 6. Packaging, Marking and Shipping:

As per contractual agreement

**7. Storing:** Under dry ventilated and hygienic conditions

## 8. Sampling:

Representative samples are drawn according to international sampling method standards at the bagging section, in the warehouse and during production.

For packed units, sampling frequency and reference method are: 3 % of bags and minimum 50 bags (e.g. 60 increments for a lot of 100 MT, packed in 50 kg bag). One laboratory samples of about 3 kg is required by lot or sub-lot of 500MT maximum. Reference GAFTA 124-2

For the bulk (static and flowing), the sampling follows the rules described in paragraphs 5.2 of ISO 24333-2009.

## 9. Certifications

