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	ORGANIC WHOLE SESAME SEEDS	Version: 05/2016

1. DESCRIPTION

Sesame seeds, which belong to the *Sesamum Indicum* species in the Pedaliacea family, have been grown by Mesopotamian, Chinese, Indian and Greek civilizations since ancient times. They were used as an energetic food and as a dressing. Harvest and consumption of this seed has expanded across the globe, both because of its nutrition attributes and its exquisite flavor.

Whole sesame seeds are 100% natural and free from GMO. Because they are not toasted or hulled, all nutrition properties are preserved intact: protein, fiber, vitamin, minerals and the quality of its fats.

Our seeds are produced entirely under organic standards.

- Seed Season: Sep – October
- Harvest Season: April – May

2. INGREDIENTS

Organic whole sesame seeds


3. QUALITY PARAMETERS

- **Origin:** Argentina
- **PHYSICAL PURITY** >99.8 %; <0.2 % traces of vegetables
- **FOREING BODY DETECTION LIMIT** > 0.3 mm
- **COLOR** white, yellow.
- **APPEARANCE** small flat, long seeds, spatula-like
- **AROMA AND TASTE** fresh, typical from sesame
- **Organic Certification:** USDA-NOP Standard/UE/kosher

4. MICROBIOLOGICAL PARAMETERS

Parameter	Expected values
Aerobic mesophilic count	<10 ⁶ UFC/g
Total coliforms count	<10 ² NMP/g
Escherichia coli	<10 NMP/g
Salmonella	Absent in 25 g
Yeasts and molds	<10 ⁴ UFC/g
Staphylococcus aureus	<10 ² UFC/g
Listeria monocytogenes	Absent
Bacillus cereus	<10 ² UFC/g
Clostridium perfringens	<10 ² UFC/g

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5. CONTAMINANTS

Parameter	Expected
HEAVY METALS	
Arsenic	<1 ppm
Cadmium	<1 ppm
Lead	<1 ppm
Mercury	<1 ppm
AFLATOXINS	
Aflatoxins	<15 ppb

6. NUTRITIONAL FACTS (amount per 100 g of product)

Nutrients	Units	Values
Moisture	%	<8
Ashes	g	4.45
Energy	Kcal	573
Energy	Kj	2397
Protein	g	17.73
Carbohydrates	g	20.16
Fiber	g	11
Total fats	g	46.66
Total saturated fat	g	39.29
Omega-9	g	21.44
Omega-6	g	17.85
Minerals		
Calcium	mg	975
Phosphorus	mg	629
Potassium	mg	468
Magnesium	mg	351
Sodium	mg	11
Iron	mg	14.55
Zinc	mg	7.75
Copper	mg	4.08
Selenium	µg	34.4
Vitamins		
Thiamin	mg	0.791
Riboflavin	mg	0.247
Niacin	mg	4.515
Folates	µg	97
Phytosterols	mg	714

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Nutrients	Units	Values
Amino acid profile		
Tryptophan	g	0.388
Threonine	g	0.736
Isoleucine	g	0.763
Leucine	g	1.358
Lysine	g	0.569
Methionine	g	0.586
Cysteine	g	0.358
Phenylalanine	g	0.940
Tyrosine	g	0.743
Valine	g	0.990
Arginine	g	2.630
Histidine	g	0.522
Alanine	g	0.927
Aspartic acid	g	1.646
Glutamic acid	g	3.955
Glycine	g	1.215
Proline	g	0.810
Serine	g	0.967

Fatty acid profile (g/100g fats)			
Caproic acid (C6:0)	<0.05	Palmitoleic acid (C16:1)	0.1
Caprylic acid (C8:0)	<0.05	Stearic acid (C18:0)	5.91
Capric acid (C10:0)	<0.05	Oleic acid (C18:1)	45.47
Undecylic acid (C11:0)	<0.05	Linoleic acid (C18:2)	37.84
Lauric acid (C12:0)	<0.05	Linolenic acid (C18:3)	0.34
Tridecylic acid (C13:0)	<0.05	Arachidonic acid (C20:0)	0.62
Myristic acid (C14:0)	<0.05	Gadoleic acid (C20:1)	0.18
Pentadecylic acid (C15:0)	<0.05	Behenic acid (C22:0)	0.13
Palmitic acid (C16:0)	9	Lignoceric acid (C24:0)	0.09


7. PESTICIDES

Free of pesticides according to legislation.

8. PACKAGING

Bulk loaded in 20'FCL, containing 24-25 metric tons each
 Type of package: 70 g/m2 white laminate polypropylene bags
 Net Content: 25 Kg. per bag
 Storage conditions: keep in a dry place (60-65% relative humidity) and at a temperature of 18-20°C.

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9. SHELF LIFE

24 months as of harvest date

10. TREATMENT / PROCESSING

PROCESSING

Organic sesame seeds are cleaned by sifting, blowing and color sorting. Classification is made by densimetric table until a 99.8% purity minimum parameter is reached.

FUMIGATION

Products: carbon dioxide gas.

11. COMMENTS

Nutrition values of organic sesame seeds may vary among harvests and production areas because it is a vegetable food.

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