

	TECHNICAL DATA SHEET MACA GELATINIZED POWDER – ORGANIC CERTIFIED	Code: SGC-AO-0060 Version: 10 Updated: 10/10/2022 Page: 1/5
---	--	---

GENERAL INFORMATION

Product	MACA GELATINIZED POWDER - ORGANIC CERTIFIED	
Scientific Name	Lepidium meyenii, Walp	
Common Name	Maca	
Plant Part Used	Root	
Composition	100% dried maca roots	
Origin	Andean highlands of Peru	
HS Code	1106.20.10.00	
Description	Naturik maca gelatinized powder organic certified is a water-soluble powder obtained from organic maca roots cultivated in the Andean highlands of Peru between 3,800 and 4,200 meters above sea level. Maca roots are selected, washed, chopped, extruded, dehydrated, milled, and sieved into a fine powder. The maca is gelatinized through a controlled heated extrusion process that breaks down the starch concentrating more its nutrients and allowing for easier digestion. Gelatinized maca is more soluble, digestible, and absorbed faster than raw maca powder. It is ideal for people with sensitive stomach or any other issue with digestion.	
	Naturik maca gelatinized powder has improved taste, solubility, digestibility, and microbiological safety than other maca gelatinized powders in the market. It is gelatinized using our more advance <u>twin screw extruding technology</u> to improve sensorial attributes, digestibility, and nutritional value. • <u>Improved taste</u> – It has improved taste that is sweet and earthy with nutty and malty undertones. • <u>Improved solubility</u> – It dissolves faster and better in liquids. • <u>Improved digestibility</u> – It has a more homogeneous cooking process ensuring a better digestibility of protein and starch (gelatinizing). • <u>Improved microbiological safety</u> – It has a kill step with the controlled heat extrusion that ensures food safety peace-of-mind.	
Maca Colors	Yellow, Red, Black and Tricolor Blend.	

	TECHNICAL DATA SHEET MACA GELATINIZED POWDER – ORGANIC CERTIFIED	Code: SGC-AO-0060 Version: 10 Updated: 10/10/2022 Page: 2/5
---	---	--

Contains	It is highly digestible and more soluble than regular maca. Rich in high quality carbohydrates, protein, and important minerals, such as magnesium, calcium, iron and phosphorous.
Uses	It can be mixed easily into juices, smoothies, shakes, yogurt, and cereal and can be added to pancakes, desserts, and baked goods. Ideal for capsules, energy drinks and energy bars.
Properties	As an adaptogen, maca helps your body cope with the effects of stress. It Increases stamina and immune system function, boosts libido and combats fatigue.
Process	Raw material quality control, selecting, cleaning, washing, chopping, extruding, drying, milling, sieving, filling, metal detection, final product quality control, labelling, packing, storing, and dispatching.
Shelf Life	24 months, as long as the package is store sealed at recommended conditions.
Storage & Shipping Conditions	Store the product in a cool and dry place at room temperature under 25 °C with relative humidity under 65% and away from sunlight.
Seasonality	High from April to October. Medium from November to March.

GUARANTEES

Non-GMO	Our maca gelatinized powder is produced without the use of any input or raw material that can proceed from Genetically Modified Organisms (GMO).
Allergen Free	Our maca gelatinized powder is produced without the use of any input or raw material that may contain allergens.
Gluten Free	Our maca gelatinized powder is produced without the use of any input or raw material that may contain gluten.
Irradiation Free	Our maca gelatinized powder is produced without the use of any input or raw material that have being irradiated.

CERTIFICATIONS

Organic USDA-NOP		Control Union Certifications
Organic EU		Control Union Certifications
Organic JAS		Control Union Certifications
Kosher		Orthodox Union
BRC		NSF International
GMP		NSF International

	TECHNICAL DATA SHEET MACA GELATINIZED POWDER – ORGANIC CERTIFIED	Code: SGC-AO-0060 Version: 10 Updated: 10/10/2022 Page: 3/5
---	---	--

HACCP		NSF International
Ethical Biotrade		Union for Ethical Biotrade

SUSTAINABLE SOURCING AND SOCIAL RESPONSIBILITY

We source our premium raw materials from our own crops and through direct partnerships with small farmers from several communities in the coastal plains, Andean highlands and the Amazon rainforest following social and environmental principles and contributing directly to regional development and environmental preservation. We were recognized as a member of the Union for Ethical Biotrade (UEBT) in 2014, an international non-profit association that promotes ethical trade of ingredients originating from native biodiversity. Being a member of UEBT certifies our commitment to biodiversity conservation, respect for traditional knowledge, and equitable sharing of benefits throughout the supply chain.



SENSORIAL CHARACTERISTICS

Parameter	Specification	Test Method
Color	Beige	Visual
Taste	Characteristic, without foreign flavors	Organoleptic
Aroma	Characteristic, without foreign odors	Organoleptic
Appearance	Powder	Visual

PHYSICOCHEMICAL CHARACTERISTICS

Parameter	Specification	Test Method
Particle Size	Max 400 micron (Mesh 40)	Own Method
Moisture Content	< 10%	AOAC 930.04. C3

CONTAMINANTS

Parameter	Specification	Test Method
Pesticides	Negative	LC-MS/MS & GC-MS/MS
Lead	< 1.0 mg/kg	ICP – MS Atomic Absorption
Cadmium	< 1.0 mg/kg	ICP – MS Atomic Absorption
Mercury	< 0.1 mg/kg	ICP – MS Atomic Absorption
Arsenic	< 1.0 mg/kg	ICP – MS Atomic Absorption

	TECHNICAL DATA SHEET MACA GELATINIZED POWDER – ORGANIC CERTIFIED	Code: SGC-AO-0060 Version: 10 Updated: 10/10/2022 Page: 4/5
---	---	--

MICROBIOLOGICAL CHARACTERISTICS

Parameter	Specification	Test Method
Mesophilic aerobic plate count	< 10,000 cfu/g	AOAC 990.12 or ICMSF 2da Ed. 1983
Molds	< 100 cfu/g	AOAC 997.02 or ICMSF 2da Ed. 1983
Yeast	< 100 cfu/g	AOAC 997.02 or ICMSF 2da Ed. 1983
Total Coliforms	< 100 cfu/g	AOAC 991.14 or ICMSF 2da Ed. 1983
E. coli	Absent/g	ISO 7251:2005
Bacillus cereus	< 1,000 cfu/g	ICMSF 2da Ed. 1983
Salmonella	Absent/25g	ICMSF 2da Ed. 1983

NUTRITIONAL CHARACTERISTICS (Average values for 100g of product)

Parameter	Result	Unit
Total Calories	360.78	kcal/100g
Calories from fat	5.22	kcal/100g
Total Fat	0.58	g/100g
Saturated Fat	0.118	g/100g
Trans Fat	0.000	g/100g
Cholesterol	0.000	g/100g
Total Carbohydrate	73.96	g/100g
Sugars	23.750	g/100g
Added Sugars	0.00	g/100g
Dietary Fiber	19.670	g/100g
Protein	14.93	g/100g
Ash	4.42	g/100g
Moisture	6.11	g/100g
Vitamin D	0.00	ug/100g
Sodium	13.488	mg/100g
Calcium	275.367	mg/100g
Iron	4.709	mg/100g
Potassium	1.454	mg/100g
Magnesium	81.472	mg/100g
Phosphorus	401.969	mg/100g

	TECHNICAL DATA SHEET MACA GELATINIZED POWDER – ORGANIC CERTIFIED	Code: SGC-AO-0060 Version: 10 Updated: 10/10/2022 Page: 5/5
---	---	--

PACKAGING

Packaging	Net Weight
Bag (NY-LDPE, transparent)	10 kg
Box (Cardboard)	20 kg (2 bags)
Heat treated Pallets ISPM15	1,120 kg (56 boxes)
Container Class A 20"	11,200 kg (560 boxes)
Container Class A 40"	22,400 kg (1,120 boxes)

*All packaging materials in accordance with the current versions of the FDA and EU regulations and the guidelines of the FDA and EU for food packaging.

CONTENT OF LABELLING

Product Name	Expiration Date	Kosher Logo (if applicable)
Lot Number	Gross Weight	Country of Origin
Presentation	Net Weight	Exporter Information
Production Date	Organic Logos (if applicable)	Client Name and PO#

*Label information can be customized upon client requirement.

PRIVATE LABEL SERVICES

We offer private label services to our clients to produce under their own brand name and packaging any of our superfoods and specialty oils or to create a new formulation based on their needs and specifications.



RESEARCH

All available third-party research on maca and its efficacy can be found on the U.S. National Institutes of Health PubMed database link: <https://pubmed.ncbi.nlm.nih.gov/?term=maca>

Agroindustrias Osho SAC
Calle Manuel Arispe 210, Callao, Perú
T.: +51(1) 465-1449

ventas@agroindustriasosho.com
www.agroindustriasosho.com