

Technical Specification INCA GUM

Obtained by grinding the endosperm of the seeds of *Caesalpinia spinosa* consists chiefly of polysaccharides of high molecular weight composed mainly of galactomannans. The principal component consists of a linear chain of (1,4)-beta-D-mannopyranose units with alpha-D-galacto-pyranose units attached by (1,6) linkages; the ratio of mannose to galactose in INCA GUM is 3:1.

	Technical Specification	Typical Results
Color	White Powder	White Powder
Odor	Odorless	Odorless
Moisture	Max 12 %	9,02%
Galactomannans	Min 85 %	85,64 %
Proteins (N x 5.7)	Max 3,00 %	2,42 %
Fats	Max 0,75 %	0,22 %
Ashes	Max 1,5 %	0,79 %
Insolubles in Acid	Max 2 %	1,05 %
pH (Solution at 1%)	5-7,5	6,76
Lead	Max 2 mg/kg	<0,2 mg/kg
Arsenic	Max 3 mg/kg	<0,1 mg/kg
Mercury	Max 0,1 mg/kg	<0,02 mg/kg
Cadmium	Max 1 mg/kg	<0,01 mg/kg
Total Heavy Metals (Cu + Zn)	Max 20 mg/kg	1,25 mg/kg
Starches	Not detectable	Not detectable
Viscosity After Heat (Solution at 1 %, 25 °C, 20 RPM, spindle #4)	5200-6000 cps	5750 cps
Viscosity Cold (Solution at 1 %, 25 °C, 20 RPM, spindle #4)	3000-4000 cps	3950 cps

Particle Seize

Mesh	200	150	100
Micrometer	75µ	105µ	150µ
% of passing through mesh	40%	93 %	>98 %

Bacteriological Analysis

Total Plate Count:	≤ 100 u.f.c./g	<50 u.f.c./g
Moulds and Yeasts:	≤ 50 u.f.c./g	< 30 u.f.c./g
Escherichia Coli-Coliforms:	Absence /g	Absence / g
Detection Salmonella:	Negative in 25 g	Negative in 25 g

Packaging: Paper bags with interior transparent plastic bags of 25 kg.

Product life: 2 years

INCI code: *Caesalpinia Spinosa Gum*

Storage Conditions: Fresh ambient, dry and vented without direct sunlight exposure and odors. Keep the product with the bags closed hermetically.

Ingredient: Endosperm of the Tara Seed (*Caesalpinia Spinosa*) 100%

Origin: *Caesalpinia spinosa* (Molina) Kuntze of Peru

Uses: Cosmetic use, manufacture of cosmetic thickening agent, texture agent

OMG Free Declaration: We declare that INCA GUM is not produced from genetically modified raw materials within the scope of the EU regulations relating to GM(genetically modified) Food and Feed EU 1829/2003 and GM Traceability and Labelling EU 1830/2003

Methods: Moisture: FCC, p187 appendix II p749 (Guar Gum loss and drying). Proteins: NTP-ISO 5983 2002 Alimentos para animales. Determinación del contenido de nitrógeno y cálculos de contenido de proteína bruta. Método Kjeldahl. Insolubles en medio ácido: Food Chemicals CODEX, p 210 Fifth Edition 2004. Guar Gum. Acid-Insoluble Matter. Arsenic: AOAC 952.13 On line 18th Ed. 2005 Arsenic in Food Diethyldithiocarbamate Method. Mercurio: Norma Chilena Oficial N.Ch 2667. Of2001 Productos Hidrobiológicos - Determinación de mercurio - Método espectrofotométrico de absorción atómica por generación de vapor frío. Viscosity: Brookfield AOCS 10-87 (1cps= 1mPas). Aerobic Microorganisms: AOAC (990.12 re-count Aerobics Microorganisms in food; dried rehydrate film); Yeast and Moulds: AOAC (997.02 Yeast and Moulds recount in food; dried rehydrate film). E. Coli -Coliforms: AOAC (991.14 E. Coli-Coliforms recount in food; dried rehydrate film); Salmonella (detección): ICMSF. Microorganisms in Foods 1.Their Significance and Methods of Enumeration; Vol.I; pp.160-172; 2nd Ed. Reprinted 1988 (with revisions) - University of Toronto Press (excepto Serological Test for Salmonellas IV y V) 1978 Salmonella; Cadmium AOAC 999.11. Online. 18th Ed 2005. Determination of Lead, Cadmium, Cooper, Iron and Zinc in Foods; Metales Pesados: USP29.2006 pag 2780 <230> Metales Pesados Método II; Grasa: AOAC 920.39 C. On Line 18th Ed2005. Fat (Crude) or Ether Extract in Animal Feed; Galactomannanos: Food Chemical CODEX p.210 Fifth Edition 2004 Guar Gum. Galactomannanos.