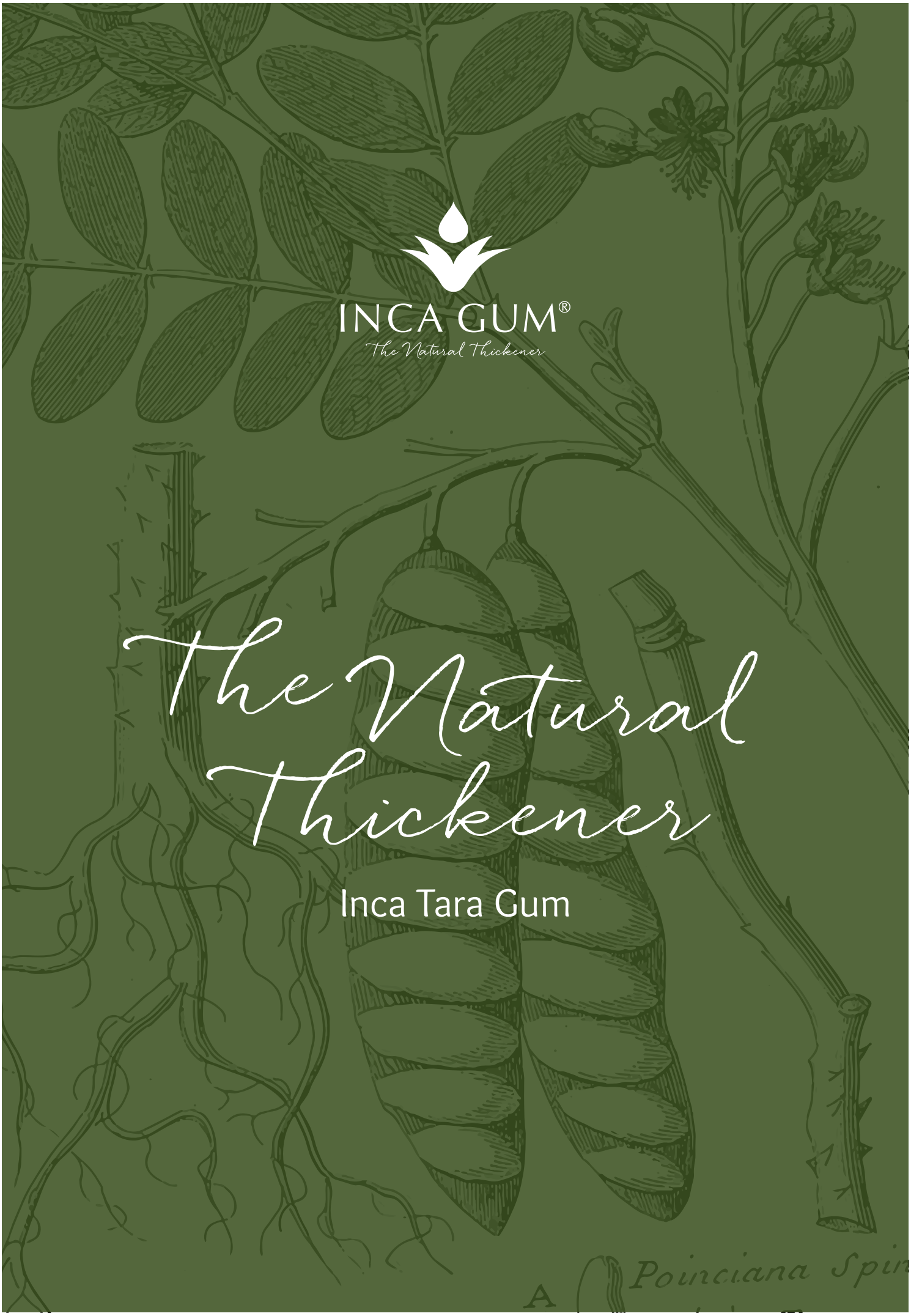
INCA GUM®

The Natural Thickener



The Natural Thickener

Inca Tara Gum

About Inca tara Gum

INCA TARA GUM is a vegetal polysaccharide obtained by grinding the endosperm of Caesalpinia spinosa commonly known as TARA (Quechua). Tara is a small leguminous tree or thorny shrub native to Peru and cultivated in the region of Ica.

INCA TARA GUM is commonly used as a rheology modifier in food and cosmetics.

INCA TARA GUM, a sustainable and regenerative plant product, is a perfect thickener in aqueous formulations.

The sensory profile and good tolerance even in association with other thickeners makes INCA TARA GUM a perfect ingredient for modern industry demands: NATURAL – VEGAN – ECOLOGICAL GROWN

KEYWORDS

- Natural thickener
- Natural stabilizer
- Increases viscosity and suspension
- Improves texture and spreadability
- Syneresis reduction and oil stability

INCI

- INCI Name: Caesalpinia Spinosa Gum
- CTFA Name: Caesalpinia Spinosa Gum (Tara) meal
- Other Names: Guarango, Leguminosae
- CAS No: 39300-88-4
- EINECS/ELINCS No: 254-409-6
- Food Additive: E 417

Inca Oil and Inca Gum

Over nearly 20 years INCA OIL has developed to a symbol of quality and trustiness for all major cosmetic or personal care companies worldwide.

Our Jojoba shrubs for the precious Jojobaoil grow considering environmental beneficial, conserving resources, pesticide free culture, social responsibility and stop desertification.
With the same philosophy and dedication our Tara trees are cultivated in the farm together with Jojoba.

Developing the excellent suitability of Tara gum as thickener and stabilizer for food and cosmetics, we decided to add this plant to our cultivation. Tara is a tree with spreading, grey-barked branches, The leaves are compound, bipinnate, alternate and spirally organized and reach a length of 35 cm. The fruit is a flat oblong indehiscent reddish pot, which contains 4 to 7 large round black seeds composed of endosperm (22 % by weight), germ (40 %) and hull (38%). This endosperm is our new raw material.

Inca Tara Gum at a glance

FACTS

- Odorless, white to ivory-colored powder
- Allowed as food ingredient – recognized as completely safe for other human applications
- INCA TARA GUM is better soluble in cold and hot system than locust bean gum, has higher galactose content (25%) than LBG (20%; guar has 34%)**
- In the same concentration INCA TARA GUM offers higher solution viscosity than LBG**
- Historically Tara gum has more stable and lower prices than LBG (locust bean gum) and Xanthan gum**.

(**BTC Trade for Development Centre/Globally Cool, Study 2016; Tara Gum, A look into current and future markets, Market research- Global market opportunities for tara gum)

CULTIVATION AND ENVIRONMENT

- INCA TARA GUM is sustainably grown in the area of Ica-Peru
- Native to the Cordillera region of Peru and Bolivia
- Mature pods are harvested by hand and sun dried before processing
- Pesticide and fungicide free cultivation
- Renewable raw material
- Eco-friendly

STORAGE

- Clean, dry, out of sunlight, away from walls
- Cool, with max. temperatures of 15 to 21°C and ranges between 0-21°C
- Properly protected against infestation by insects and other pests

BODY CARE & COSMETIC PRODUCTS

- Thickening and stabilizing agent in
- Creams, lotions, conditioners, soaps, hair spray

PHARMACEUTICS

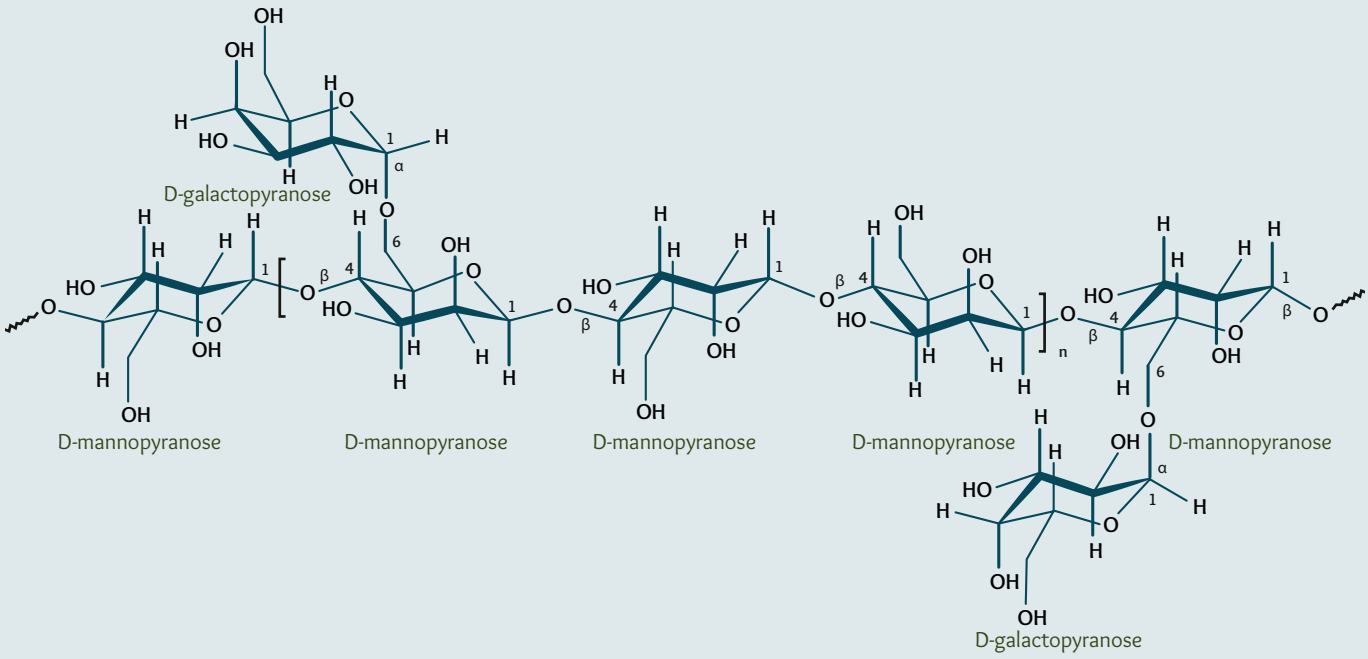
- Use as a controlled release carrier in the formulation of gastro retentive controlled release tablets
- Emulsion of drugs

EASY TO FORMULATE AND APPLY

- Soluble in hot water
- Partially soluble in cold water
- Results fully smooth and non sticky

CHEMISTRY

Chemically speaking, Caesalpinia spinosa gum is a polysaccharide composed of (1-4)- -D-mannopyranose linear chains, branched through (1–6) bonds with -D-galactopyranose units in a 3:1 ratio, a characteristic structure resembling that of other natural gums such as guar and carob, which, on the other hand, show a different mannose to galactose ratio.



The dispersibility in water of these polymers is proportional to the percentage of galactopyranose units in the polysaccharide chains [8]. Caesalpinia spinosa gum, with 25% galactose (meaning a medium branching level), results partially soluble in cold water, while it easily dissolves in hot water, fully hydrating while forming a medium force gel of exceptional softness. The pH value of an aqueous solution of Caesalpinia spinosa gum at 2% is 6.4 at 25 °C.

Source: MDPI cosmetics –Article „A New Gelling Agent and Rheology Modifier in Cosmetics: Caesalpinia spinosa Gum"

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