

## TECHNICAL DATA SHEET

**Product Name:** Guar Gum

**INCI Name:** Cyamopsis Tetragonoloba (Guar) Gum

**CAS:** 9000-30-0

**Chemical Classification:** Gums, Hydrophilic Colloids, and Derivatives

**Functional Category:** Viscosity Modifier (Thickener), Binding Agent, Stabilizer ~ Emulsion Stabilizer

**Description:** Guar gum is a natural polysaccharide derived from the seeds of the guar plant (*Cyamopsis tetragonoloba*). Thanks to its high content of galactomannan, a polysaccharide made up of galactose and mannose molecules, it effectively enhances the texture and stability of cosmetic products. When hydrated in the aqueous phase, it forms a gel that helps creams, lotions, and shampoos maintain a stable and pleasant texture, preventing component separation. Guar gum also has humectant properties, aiding skin and hair in retaining moisture, making it particularly beneficial in products intended for dry skin and damaged hair care. In hair care products, guar gum forms a protective layer around hair strands, reducing friction and making hair silky and easy to style. Additionally, it reduces static electricity, contributing to a more neat and well-groomed appearance. Guar gum ensures even distribution of active ingredients, enhancing the effectiveness of hydrating and anti-aging components. It is suitable for all skin types, including sensitive skin. Being a natural-origin ingredient obtained from renewable sources, it meets the market demands for sustainable and eco-friendly cosmetics. The viscosity of a 1% guar gum solution after two hours is 6000–7000 cps. Guar gum is stable over a wide pH range, usually between 2 and 10. It also possesses hygroscopic properties, meaning it can absorb moisture from the environment, which may impact its storage stability.

### Benefits:

- Guar gum increases viscosity and improves the texture of cosmetic products.
- Helps stabilize emulsions, preventing the separation of the oil and water phases.
- Has moisturizing properties, enhancing skin and hair hydration levels.

**Disclaimer:** The details provided here are specific to the identified material and may not remain accurate if that material is combined with other substances or used in different processes. The information presented is, to the best of the company's knowledge, considered precise and trustworthy as of the date mentioned. However, the company does not make any explicit or implied assurance, guarantee, or claim regarding the information's precision, trustworthiness, or comprehensiveness, and will not be held accountable for any losses, damages, or costs, whether direct or indirect, that arise from its use. Users are encouraged to independently verify the appropriateness and thoroughness of this information for their specific purposes.

## TECHNICAL DATA SHEET

- Forms a thin protective film on the skin and hair, retaining moisture and protecting against pollutants.
- Acts as a conditioning agent, softening hair and making it easier to style.
- Compatible with a wide range of cosmetic ingredients.
- Of natural origin and ideal for use in natural and organic cosmetic formulations.
- Suitable for use in various cosmetic products, including creams, lotions, serums, masks, shampoos, and conditioners.

**Usage:** In skin care formulations, such as creams and lotions, guar gum is used to achieve the desired thickness and create a stable emulsion. It effectively thickens the aqueous phase and creates a creamy and rich consistency that is easy to apply and absorbs quickly. Typical concentrations are relatively low, usually between 0.2% and 0.5%, but are sufficient to ensure emulsion stability and prevent oil and water phase separation, which is particularly important for the product's long-term stability. Additionally, due to its ability to form a thin film on the skin, guar gum improves hydration and helps retain moisture. In hair care formulations, guar gum plays a unique role in stabilizing foaming products, such as shampoos and conditioners. Its ability to stabilize foam and increase viscosity allows shampoos and shower gels to be thicker and richer, enhancing the luxurious feel during use. In these formulations, typical concentrations vary from 0.2% to 1%, depending on the product type and desired effect. Moreover, guar gum gives hair a softer and smoother feel, facilitating detangling and preventing static electricity. In lighter formulations, such as face serums and gels, guar gum is used at lower concentrations to maintain a lightweight and non-greasy texture. Thanks to its ability to form a gel without adding weight, it is used in concentrations of 0.1% to 0.3%, which is enough to ensure smoothness and stability without altering the skin feel. Importantly, in such formulations, guar gum also aids in the even distribution of active ingredients, ensuring their efficacy.

**Raw Material Source:** Seeds of the guar plant (*Cyamopsis tetragonoloba*).

**Animal Testing:** Substance not tested on animals.

**GMO:** Non-GMO.

**Vegan:** Contains no animal-derived components.

---

**Disclaimer:** The details provided here are specific to the identified material and may not remain accurate if that material is combined with other substances or used in different processes. The information presented is, to the best of the company's knowledge, considered precise and trustworthy as of the date mentioned. However, the company does not make any explicit or implied assurance, guarantee, or claim regarding the information's precision, trustworthiness, or comprehensiveness, and will not be held accountable for any losses, damages, or costs, whether direct or indirect, that arise from its use. Users are encouraged to independently verify the appropriateness and thoroughness of this information for their specific purposes.