

2 minutes application break

Guar gum



Facts

Origin India

Dates back Ancient times

Ingredients Ground guar beans

Thickening agent in food and cosmetics

MixSing Vortex



Design

Shear	CFD simulations confirms >200,000 s ⁻¹
Design	According to European legislation and CE marked
Hygiene	Complying with EHEDG guidelines
Viscosity	Up to 1,000 cP
Accessories	Table
Materials	Stainless steel: AISI 316L. All materials: EC 1935

Insight

Guar gum is a natural thickener and stabilizer derived from the seeds of the guar plant, also known as *Cyamopsis tetragonoloba*. The guar plant is primarily grown in India and Pakistan but can also be found in other parts of the world, such as Africa, the United States, and Australia.

The use of guar gum can be traced back to ancient India, where it was used as a thickener in food and as a laxative. The drought-resistant plant thrives in arid regions, and guar gum was used primarily in the food industry to thicken and stabilize food products.

Guar gum is made by grinding the endosperm of guar seeds to a fine powder. The powder is then processed to remove impurities and create a consistent product.

Guar gum is composed mainly of a complex carbohydrate called galactomannan, composed of a linear chain of mannose and galactose sugars. These sugars give guar gum its unique thickening and stabilizing properties. Guar gum is a hydrocolloid which can absorb water and form gels, making it an ideal thickener for a wide range of products.

Guar gum has various industrial and food

applications. In the food industry, it is used as a thickener in sauces, gravies, and soups and as a binder in processed meats and baked goods. It is also a fat replacer, emulsifier, and texturizer in low-fat and reduced-calorie products. Guar gum is used in the paper industry as a binder and in the cosmetic industry as a thickener and emulsifier in lotions and creams. In the oil and gas industry, it is used as a fracturing fluid in hydraulic fracturing.

It can lead to blood sugar issues if consumed in large quantities by people with diabetes or other blood sugar-related health conditions.



The power of simplicity

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