2 minutes application break

Xanthan gum

Facts

Origin America
Dates back 1950s
Ingredients Polysaccharide

Thickening agent in food products

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

Xanthan gum is a versatile and widely used ingredient in the food industry. It is a type of hydrocolloid, which is a food ingredient used to thicken, stabilize, and emulsify food products. Xanthan gum is a polysaccharide, which is a type of carbohydrate, derived from the fermentation of the microorganism Xanthomonas campestris. The microorganism is grown in a liquid medium containing glucose or other sugars and various other nutrients, and then the gum is extracted, dried and milled.

Xanthan gum was first developed in the late 1950s by the United States Department of Agriculture as a way to thicken and stabilize food products. However, it quickly became apparent that it had a wide range of uses in the food industry, from thickening and stabilizing salad dressings, sauces, and ice cream, to acting as a fat replacer and emulsifier in low-fat and reduced-calorie products. Xanthan gum is also used in the oil and gas industry as a thickener and in the cosmetic industry as a binder and emulsifier.

One of the key benefits of xanthan gum is its ability to improve the texture and stability of food products, as well as its ability to maintain the desired texture and consistency in products even under extreme conditions such as temperature changes or high shear conditions. It's also used in gluten-free baking, as it can help to mimic the texture and elasticity of gluten. The gum is able to form strong gels that are stable over a wide range of temperature and pH, which makes it an ideal ingredient for many food applications.
The history of xanthan gum is relatively short, being developed in the 1950s by the USDA, but it has quickly become one of the most widely used hydrocolloids in the food industry. Its use in the food industry was approved by the FDA in 1968, and since then, it has become a popular ingredient in many different food products.

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