

2 minutes application break

Alginates

Facts

Origin Coastal regions

Dates back Early 1900s

Ingredients Seaweed extract and calcium

Alginates are used as thickening agents and gelling agents in food, and personal care 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

Alginates are a group of naturally occurring polysaccharides extracted from brown seaweed. They are widely used in industrial and food applications, including food thickening and gelling, textile printing, and oil drilling.

The history of alginates can be traced back to the early 1900s when scientists first began studying the properties of brown seaweed and discovering the potential uses of its polysaccharides. In the 1930s, scientists at the California Kelp Company found a method for extracting alginates from brown seaweed, which led to the commercial production of alginates.

Alginates can form a gel-like consistency when added to a liquid, making them a popular ingredient in the food industry. They thicken and stabilize various food products, including ice cream, yoghurt, and salad dressings. Alginates are also used to produce low-fat and fat-free products, as they can mimic the texture of fat without adding calories.

In addition to food applications, alginates are widely used in the textile, pharmaceutical, and cosmetic industries. They are used as thickeners, emulsifiers, and gelling agents in many products, including lotions, creams, and toothpaste.

They are also used in oil drilling to prevent oil from leaking from the well.

Alginates are typically extracted from brown seaweed such as kelp, rockweed, and bull kelp. The extraction process involves washing the seaweed to remove salt and grinding and mixing it with a strong alkali solution. The resulting solution is then treated with acid to precipitate the alginates, which are washed, dried and ground into a powder.



The power of simplicity

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