

Thixotropic Akucell[®] Cellulose Gum for extreme performance

The thixotropic Akucell products have unique properties that make a difference in various food and beverage formulations.

Thixotropic Cellulose Gum

Over the past years, new technologies were developed to manufacture a Cellulose Gum with special characteristics compared to the existing products. In water, this so called "Thixotropic Cellulose Gum" behaves as an associative water soluble polymer and can form gels.

Rheological measurements show that an aqueous solution of the associative Cellulose Gum is thixotropic, meaning a time-dependent viscosity builds up. Dynamic viscometry demonstrates that the solution is a gel because the viscoelastic system has a storage modulus (G') larger than the loss modulus (G'').

The Akucell products with thixotropic properties are Akucell AF 3265, AF 3275, and AF3285.

Product properties

The physical properties of the Thixotropic products differ significantly compared to those of regular Cellulose Gums. Thixotropic Cellulose Gum provides:

- Gel structure
- Increased thickening efficiency
- Thixotropic rheology
- Increased water absorption and absorption rate
- Improved temperature stability

Typical applications

Examples of applications where the Thixotropic Akucell products' specific characteristics are especially beneficial are:

- Bakery products
- Processed meat
- Dairy products
- Sauces
- Instant noodles
- Pet food

