



Hefei TNJ Chemical Industry Co.,Ltd.

D1508 Xincheng Business Center,
Qianshan Road, Hefei 230022 China

Tel : (0086) 551 65418678

Fax: (0086) 551 65418697

Email: info@tnjchem.com

Site: www.tnjchem.com

Technical Data Sheet

Basic information

| | | | |
|------------------|----------------|---------|---|
| Chemical name | Xanthan gum | Formula | (C ₃₅ H ₄₉ O ₂₉) _n |
| Synonyms | Corn sugar gum | | |
| CAS.No. | 11138-66-2 | | |
| EINECS No. | 234-394-2 | | |
| Molecular weight | - | | |

Physical properties

Xanthan Gum, which is mainly made from starch, is a high molecular weight polysaccharide produced by fermentation with *Xanthomonas Campestris* under the conditions of special nutrient medium, PH, O₂-supply and temperature, the purified, dried and milled into white-like or light-yellow free-flowing powder.

Xanthan Gum can be widely used in more than twenty industrial fields, such as food pharmaceutical, fine chemical, agriculture, oil drilling, and so on. Comparing with other kinds of gum, xanthan gum has many advantages.

1. Outstanding viscosity-enhancing property and solubility in water.
2. Unique pseudo-plasticity rheological property of xanthan gum makes it high-efficient emulsifier and stabilizer.
3. Excellent stability to large range of temperature and PH change.
4. Stable compatibility with acid, alkaline, brine, enzyme, surface active agent, antiseptic, oxidant and other thickener.
5. Perfect synergistic action when compounding with guar gum, locust bean gum and other gums.

Specification

| | |
|--|--|
| Appearance | Yellow to white powder |
| Starch, Guar, or other derivatives | Absent |
| Particle Size, max.425 μm, % | ≥95.0 |
| Particle Size, max.75 μm, % | ≤50.0 |
| Loss on drying | Max. 13% |
| Rheology / Direct reading viscometer | 300r/min mpa.s ≥11 (Reading≥55) |
| | 6r/min mpa.s ≥180 (Reading≥18) |
| | 3r/min mpa.s ≥320 (Reading≥16) |
| Brookfield Viscosity, (1.5r/min)mpa.s | ≥1950 |
| Remark: | a)300r/min: Viscosity (mpa.s)= Reading x 0.2 |
| | b)6r/min: Viscosity (mpa.s)= Reading x 10.0 |
| | c)3r/min: Viscosity (mpa.s)= Reading x 20.0 |

Application

Xanthan gum application in food industry

As a food additive, Xanthan gum has been accepted by many countries. This kind of polysaccharide remarkably improves the

texture, taste, appearance through controlling the rheology action of the product, improve its commercial value; in beverage, cake and pastry, jelly, canned food, sea food, meat product processing and other industries, it has become important stabilizer, suspending agent, emulsifier, thickening agent, adhesion agent and processing material with high added-value and quality. It can be concretely summarized into following aspects.

Application of Xanthan Gum in Petroleum Industry

A huge market for xanthan gum is petroleum industry. In the performance of Viscosity, thickening, salt resistance and contamination resistance, xanthan gum is far better than other polymer; especially in the well drilling of sea, beach, high halide layer and permafrost layer, xanthan gum has remarkable effect in sludge treatment, completion fluid, and tertiary oil recovery, and has significant function for accelerating drilling speed, preventing the well collapse, protecting oil and gas fields, preventing the blowout, enhancing oil recovery rate substantially, etc. As a kind of ideal additive, this product has very favorable development prospect.

Application of Xanthan Gum in Cosmetics and Detergent

Using in Cosmetics and Detergent, Xanthan Gum can make it quick diffusion and absorption which let the skin more smooth. Using in Shampoo and Hair Care Products, it has suspension stability and can also increase the foams. Using in Mask, it can make the mask more easily adhere to skin and more convenient to strip.

Other applications

Xanthan Gum is the light yellow powder produced by fermentation of carbohydrate with *Xanthomonas Campestris*. Xanthan Gum can be widely used into cosmetic and toothpaste as stabilizer, water retaining agent or adhesive. And it can be also used together with CMC and other gel. Xanthan Gum can make the surface of product fine and smooth but not subside. It can be easy to make more small foams with different Ph value and salt-resistant products.

Package

Packed in paper bags of 25kgs and 40 bags strapped well on pallets. 20MT / 20'FCL

Safety on transportation

It belongs to common delivery goods, always refer to MSDS.

Storage and handling

Keep tightly closed, store in a cool dry place.

Please refer to the Materials Safety Data Sheet (MSDS) for the handling methods.

The information above is believed to be accurate and represents the best information currently available to us. However, In no event shall we be liable for any claims, losses, or damages of any third party resulting from its use.

Issue Date: 1st, 01, 2018