



CERTIFICATE OF ANALYSIS

Product Name: Xanthan Gum
CAS Number: 11138-66-2
Molecular Formula: (C₃₅ H₄₉ O₂₉)_n
Molecular Weight: Not applicable (polysaccharide)
EINECS No.: 234-394-2
EC Code: E415

1. Product Description

Xanthan Gum is a high molecular weight extracellular polysaccharide produced by fermentation of carbohydrates using *Xanthomonas campestris*. It appears as a cream-colored free-flowing powder and is widely used as a thickener, stabilizer, and rheology modifier. It exhibits excellent viscosity stability over a wide range of temperatures, pH levels, and salt concentrations, making it highly versatile for food, pharmaceutical, and industrial applications.

2. Specification

Parameter	Specification
Appearance	Cream-colored powder
Particle Size	80 – 200 mesh
Viscosity (1% solution, Brookfield, 25°C)	1200 – 1600 mPa·s
Loss on Drying	≤ 13.0%
Ash	≤ 15.0%
pH (1% solution)	6.0 – 8.0
Nitrogen	≤ 1.5%
Pyruvic Acid	≥ 1.5%
Heavy Metals (Pb)	≤ 2 ppm
Arsenic (As)	≤ 3 ppm
Residual Ethanol	≤ 500 ppm
Microbiological Standards	
Total Plate Count	≤ 5000 CFU/g
Yeast & Mold	≤ 500 CFU/g

Parameter	Specification
E. coli	Negative
Salmonella	Negative

3. Applications

- Food industry – sauces, dressings, dairy, bakery products
 - Beverages – suspension and stabilization
 - Oil & gas industry – drilling fluids, viscosity control
 - Cosmetics – lotions, creams, personal care formulations
 - Pharmaceuticals – suspending and stabilizing agent
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4. Packaging & Storage

- **Packaging:** 25 kg net weight per kraft paper bag or fiber drum with inner PE liner
 - **Shelf Life:** 24 months when properly stored
 - **Storage Conditions:** Store in a cool, dry place, away from moisture and direct sunlight
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5. Regulatory Status

- Food grade, compliant with **FCC, USP, EU E415 standards**
- Produced under ISO and HACCP-certified facilities
- Non-GMO, allergen-free, BSE/TSE-free