



Technical Data Sheet (TDS)

Food Grade Xanthan Gum (E415)

Product Description

Food Grade Xanthan Gum is a high-performance hydrocolloid produced through controlled fermentation. It is widely used in the food and beverage industry as a thickener, stabilizer, suspending agent, and texture modifier.

The product develops significant viscosity at relatively low concentrations and provides effective rheology control in both hot and cold processing systems.

Product Identification

Property	Description
Product Name	Food Grade Xanthan Gum
Food Additive Number	E415
CAS Number	11138-66-2
Form	Free-flowing powder
Appearance	White to cream-colored powder
Application	Food and beverage manufacturing

Typical Technical Specifications

Parameter	Typical Specification
Appearance	White to cream-colored free-flowing powder
Identification	Conforms
Particle Size	80 mesh or 200 mesh, depending on grade
Viscosity	Grade dependent
pH	Typically around 6.0–8.0
Loss on Drying	Typically ≤15%
Ash	Controlled according to grade
Pyruvic Acid	Grade dependent
Nitrogen	Controlled
Heavy Metals	According to applicable food specification
Lead	According to applicable regulatory limits
Total Plate Count	Controlled for food-grade use
Yeast and Mold	Controlled



Parameter	Typical Specification
Coliforms	According to specification
Salmonella	Absent in specified test quantity

Values may vary by manufacturer, test method, and supplied grade. Always refer to the Certificate of Analysis for batch-specific results.

Key Functional Properties

Food Grade Xanthan Gum provides:

- High viscosity at low dosage
- Excellent thickening performance
- Strong suspension capability
- Good emulsion stabilization
- Shear-thinning rheology
- Good water-binding properties
- Performance in hot and cold systems
- Good stability across a broad pH range
- Compatibility with many food ingredients
- Consistent texture control

Main Applications

Food Grade Xanthan Gum is commonly used in:

- Sauces
- Salad dressings
- Ketchup
- Mayonnaise
- Gluten-free bakery products
- Bread and cake mixes
- Ice cream
- Frozen desserts
- Dairy products
- Plant-based beverages
- Fruit drinks
- Nutritional beverages
- Syrups
- Soups



- Gravies
- Seasonings
- Ready-to-eat foods
- Processed foods

Typical Usage

The required dosage depends on the desired viscosity, formulation, processing method, pH, temperature, and interaction with other ingredients.

A relatively small amount can significantly increase viscosity.

Manufacturers should conduct formulation trials to determine the optimum dosage for each food product.

Dispersion and Hydration

For best results, add xanthan gum gradually under sufficient agitation.

Rapid addition directly into water may cause lump formation because the outside of the particles hydrates quickly.

Suitable dispersion methods include:

- Controlled powder addition
- High-shear mixing
- Premixing with sugar or other dry ingredients
- Gradual addition into the liquid phase

80 Mesh and 200 Mesh Grades

80 Mesh:

Commonly used for standard food and beverage applications.

200 Mesh:

Provides finer particle size and may offer different dispersion and hydration characteristics depending on equipment and formulation.

Particle size should be selected according to manufacturing requirements rather than considered a direct indicator of product quality.



Packaging

Food Grade Xanthan Gum is commonly packed in moisture-resistant industrial bags with an inner protective liner.

Common commercial packaging may include **25 kg bags**, although packaging options can vary according to supplier and customer requirements.

Storage

Store the product in a cool, dry, clean, and well-ventilated warehouse.

Protect from:

- Moisture
- Humidity
- Direct sunlight
- Excessive heat
- Contamination
- Strong odors

Keep opened packages tightly sealed.

Shelf Life

Typical commercial shelf life may be approximately **24 months** when stored in original unopened packaging under recommended conditions.

Always confirm the actual shelf life stated on the supplier's product documentation.

Food Grade Xanthan Gum Supplier

Basekim supplies Food Grade Xanthan Gum for international buyers and supports bulk inquiries based on required viscosity, particle size, packaging, quantity, and destination.

For commercial orders, buyers should request the latest TDS, SDS, Certificate of Analysis, and applicable food-compliance documents for the exact supplied grade.



Important Note

This TDS provides typical technical information and should not be treated as a batch-specific Certificate of Analysis.

Actual specifications may vary according to manufacturer, origin, test method, and individual product grade.