



TECHNICAL DATA SHEET (TDS)

Food Grade Guar Gum – E412

1. Product Identification

Product Name: Food Grade Guar Gum

Synonyms: Guar Gum Powder, Guaran, Guar Flour

Food Additive Number: E412

CAS Number: 9000-30-0

Product Type: Natural Food-Grade Hydrocolloid

Supplier: Basekim

2. Product Description

Food Grade Guar Gum is a natural galactomannan hydrocolloid obtained from the endosperm of guar seeds.

It is widely used in food manufacturing as a thickener, stabilizer, binder, suspension aid, texture modifier, and water-retention agent.

The product hydrates efficiently in water and can develop high viscosity at relatively low concentrations.

3. Typical Technical Specifications

Property	Typical Specification
Appearance	White to off-white powder
Odor	Mild / characteristic
CAS Number	9000-30-0
Food Additive Code	E412
Main Component	Galactomannan
Moisture	Max. 12%
pH (1% Solution)	5.5 – 7.5
Viscosity	Grade dependent
Particle Size	Typically 80–200 mesh
Protein	Grade dependent



Property	Typical Specification
Ash	Max. 1.5%
Acid Insoluble Matter	Max. 7%
Solubility	Hydrates / disperses in water
Color	Creamy white to off-white
Foreign Matter	Within food-grade limits

Exact specifications may vary by viscosity grade and customer requirement.

4. Microbiological Specifications

Parameter	Typical Limit
Total Plate Count	Max. 5,000 CFU/g
Yeast & Mold	Max. 500 CFU/g
E. coli	Absent
Salmonella	Absent
Coliforms	Within food-grade limits

Microbiological limits should be confirmed on the current Certificate of Analysis.

5. Functional Properties

Food Grade Guar Gum provides:

- High thickening efficiency
- Strong water-binding capacity
- Good cold-water hydration
- Viscosity control
- Texture improvement
- Suspension support
- Moisture retention
- Emulsion stabilization
- Improved processing consistency
- Compatibility with many food formulations



6. Main Applications

Food Grade Guar Gum is suitable for use in:

- Bakery products
- Bread and cakes
- Gluten-free foods
- Ice cream
- Frozen desserts
- Yogurt
- Dairy products
- Sauces
- Salad dressings
- Gravies
- Beverages
- Noodles
- Pasta products
- Confectionery
- Processed foods
- Instant food formulations

7. Typical Usage Level

Dosage depends on the formulation, desired viscosity, and processing conditions.

Typical application levels may range from approximately:

0.1% – 1.0%

Higher or lower levels may be required depending on the finished product.

Manufacturers should conduct formulation and production trials before establishing the final dosage.

8. Hydration and Processing

For best performance:

- Add guar gum gradually to the liquid phase.
- Avoid adding large quantities at once.



- Use sufficient agitation to prevent lump formation.
- Allow adequate hydration time.
- Adjust dosage based on required viscosity.
- Evaluate interaction with sugar, salts, proteins, acids, and other hydrocolloids.

Proper dispersion improves viscosity development and final product consistency.

9. Packaging

Typical export packaging includes:

- 25 kg multi-layer paper bags
- 25 kg PP woven bags with inner polyethylene liner
- Palletized packaging
- Customized packaging subject to availability

Packaging should protect the product from moisture and contamination.

10. Storage Conditions

Store Food Grade Guar Gum in a:

- Cool
- Dry
- Clean
- Well-ventilated

warehouse.

Keep bags tightly closed and protect the product from humidity, water, strong odors, direct sunlight, and contamination.

11. Shelf Life

Typical shelf life:

24 months from production date

Shelf life depends on packaging integrity and storage conditions.



Always refer to the production batch documentation for the exact expiry or best-before date.

12. Quality Documentation

Available documentation may include:

- Technical Data Sheet
- Safety Data Sheet
- Certificate of Analysis
- Food-grade specification
- Country of origin documentation
- Packing list
- Commercial invoice

Additional certificates may be available depending on batch, origin, and destination-market requirements.

13. Ordering Information

When requesting a quotation, buyers should specify:

- Required viscosity
- Mesh size
- Quantity
- Packaging
- Food application
- Destination country
- Destination port
- Required certifications
- Preferred Incoterm

Providing complete technical requirements helps ensure selection of the correct Food Grade Guar Gum grade.



14. Product Summary

Product: Food Grade Guar Gum

Food Additive Number: E412

CAS Number: 9000-30-0

Form: Fine powder

Main Function: Thickener and stabilizer

Primary Applications: Food and beverage manufacturing

Packaging: Typically 25 kg bags

Supplier: Basekim