



MATERIAL SAFETY DATA SHEET (MSDS)

Food Grade Guar Gum – E412

1. Product Identification

Product Name: Food Grade Guar Gum

Synonyms: Guar Gum Powder, Guaran, Guar Flour, E412

CAS Number: 9000-30-0

Food Additive Number: E412

Product Type: Natural Food-Grade Hydrocolloid

Recommended Use: Thickener, stabilizer, binder, water-retention agent, and texture modifier in food processing

Supplier: Basekim

2. Hazard Identification

Food Grade Guar Gum is generally considered non-hazardous under normal conditions of use.

However, airborne powder may cause temporary irritation.

Potential Hazards:

- Dust may irritate the eyes.
- Inhalation of high concentrations of dust may irritate the respiratory tract.
- Prolonged skin contact may cause mild irritation in sensitive individuals.
- Fine organic powder may create a combustible dust hazard under certain conditions.

Appearance: White to off-white powder

Odor: Mild or characteristic

3. Composition / Information on Ingredients

Component	CAS Number	Concentration
Guar Gum	9000-30-0	Typically ≥95%



Minor naturally occurring components and moisture may be present depending on grade and specification.

4. First Aid Measures

Eye Contact:

Rinse carefully with clean water for several minutes. Remove contact lenses if easy to do. Seek medical attention if irritation continues.

Skin Contact:

Wash affected skin with soap and water.

Inhalation:

Move the affected person to fresh air. Seek medical attention if coughing or breathing discomfort persists.

Ingestion:

Food Grade Guar Gum is intended for approved food applications. If a large unintended quantity is swallowed and discomfort occurs, seek medical advice.

5. Fire-Fighting Measures

Suitable Extinguishing Media:

- Water spray
- Foam
- Dry chemical powder
- Carbon dioxide

Specific Hazards:

Fine airborne organic dust may form combustible dust mixtures in enclosed environments.

Protective Equipment:

Firefighters should use suitable protective clothing and respiratory protection where necessary.



6. Accidental Release Measures

- Avoid generating excessive dust.
- Ensure adequate ventilation.
- Sweep or vacuum spilled powder using suitable equipment.
- Keep the material away from water to prevent slippery surfaces.
- Transfer collected material into suitable containers.
- Clean the affected area thoroughly.

Large spills should be handled according to local waste and environmental regulations.

7. Handling and Storage

Handling:

- Avoid unnecessary dust formation.
- Avoid breathing concentrated dust.
- Use appropriate industrial hygiene procedures.
- Keep containers closed when not in use.
- Prevent contamination during food-processing operations.

Storage:

- Store in a cool, dry, and well-ventilated location.
- Protect from moisture and humidity.
- Keep away from strong odors and incompatible contaminants.
- Protect packaging from damage.
- Keep away from ignition sources where significant dust may accumulate.

8. Exposure Controls / Personal Protection

No specific occupational exposure limit is generally established specifically for guar gum. Standard limits for nuisance or organic dust should be followed where applicable.

Respiratory Protection:

Use suitable particulate protection if significant dust is generated.

Eye Protection:

Safety glasses or goggles are recommended during dusty operations.

**Hand Protection:**

Protective gloves may be used during prolonged industrial handling.

Ventilation:

Provide adequate general or local exhaust ventilation.

9. Physical and Chemical Properties

Property	Typical Information
Appearance	White to off-white powder
Odor	Mild / characteristic
CAS Number	9000-30-0
Food Additive Code	E412
Solubility	Hydrates and disperses in water
pH	Typically near neutral; grade dependent
Bulk Density	Grade dependent
Viscosity	Grade dependent
Moisture	Specification dependent
Flash Point	Not applicable in conventional sense
Flammability	Combustible as fine organic dust under certain conditions

10. Stability and Reactivity**Stability:**

Stable under recommended storage and handling conditions.

Conditions to Avoid:

- Excessive moisture
- High humidity
- Excessive heat
- Dust accumulation near ignition sources

Incompatible Materials:

Strong oxidizing agents.

**Hazardous Decomposition Products:**

Thermal decomposition or combustion may produce carbon monoxide, carbon dioxide, and smoke.

11. Toxicological Information

Food Grade Guar Gum has low toxicity when used according to its intended food application.

Possible Effects:

- Eye contact: Temporary mechanical irritation from dust
- Skin contact: Generally low irritation potential
- Inhalation: Dust may irritate the nose and throat
- Ingestion: Intended for regulated food use

No significant adverse effects are expected during normal industrial handling when appropriate hygiene procedures are followed.

12. Ecological Information

Guar gum is a plant-derived and biodegradable material.

No significant environmental hazards are expected under normal conditions of use.

Avoid releasing large quantities into waterways because high organic loads may affect local environmental conditions.

13. Disposal Considerations

Dispose of unused material and contaminated packaging according to local regulations.

Where permitted, uncontaminated product may be handled as non-hazardous industrial waste.

Avoid uncontrolled discharge into drains or waterways.



14. Transport Information

Food Grade Guar Gum is generally **not classified as dangerous goods for transport.**

UN Number: Not applicable

Transport Hazard Class: Not regulated

Packing Group: Not applicable

Marine Pollutant: No

Always verify destination-specific transport requirements before shipment.

15. Regulatory Information

Food Grade Guar Gum is commonly identified as **E412** for food applications.

Regulatory requirements, permitted uses, purity criteria, and dosage limitations may vary by country and application.

Food manufacturers should verify compliance with the applicable regulations in the destination market.

16. Other Information

This MSDS provides general safety information for the handling, storage, transportation, and industrial use of Food Grade Guar Gum.

Exact technical parameters may vary depending on viscosity grade, particle size, purity, and manufacturer specifications.

Users should review the latest **Technical Data Sheet (TDS)**, Certificate of Analysis, and applicable food regulations before use.

Product: Food Grade Guar Gum E412

Supplier: Basekim

Revision: September 2026

