



NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

Safety Data Sheet (MSDS)

- Guar Gum (Food Grade)

(Compliant with GB/T 16483, GB/T 17519; Adapts to GHS Rev.9, IMDG, IATA Standards)**Revision**

Date: 28 FEB 2026

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifiers

- Product Name: Guar Gum (Food Grade)
 - Product Number: GG-20260228
 - Brand: SIGALD
 - CAS-No.: 9000-30-0
 - EINECS/EC-No.: 232-536-8
 - MDL Number: MFCD00131919
 - Synonyms: Guar bean gum; Cyamopsis gum; Food Grade Thickener
- #### 1.2 Details of the supplier of the safety data sheet
- Company: NEWAY SINOPHC TECH. LIMITED
 - Address: RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE
 - Telephone: +86-021-50350029
 - Fax: +86-021-50350029
- #### 1.3 Emergency telephone
- Emergency Phone #: +86-021-50350029 (CHEMTREC)
- #### 1.4 Relevant Identified Uses and Uses Advised Against
- Identified Uses: Food additive (thickener, stabilizer, emulsifier, gelling agent, water retention agent) for beverage, dairy, bakery, confectionery, meat, aquatic products, sauce, seasoning and frozen food industries; also used as a texture modifier and binder.
 - Uses Advised Against: Avoid excessive inhalation of dust (may cause respiratory irritation in sensitive individuals); no restricted uses for food-grade application.

SECTION 2: Hazards Identification

2.1 GHS Classification Not a hazardous substance or mixture (GHS 0 category); **dust may cause mild respiratory/eye irritation** in sensitive individuals (no formal GHS classification); excessive oral ingestion may cause mild gastrointestinal discomfort (bloating, flatulence).

2.2 GHS Label Elements

- Hazard Pictograms: None
- Signal Word: None
- Hazard Statements: None
- Precautionary Statements:
 - P261: Avoid breathing dust/fumes/gas/mist/vapors/spray
 - P304+P340: If inhaled: Move person to fresh air and keep comfortable for breathing
 - P337+P313: If eye irritation persists: Get medical advice/attention

- P271: Use only outdoors or in a well-ventilated area
- ### 2.3 Physical and Chemical Hazards
- No physical/chemical hazards; non-combustible, no explosion risk, no oxidative properties; slightly hygroscopic, stable under normal food processing and storage conditions; dispersible in water (forms viscous solution), insoluble in ethanol and organic solvents.
- ### 2.4 Health Hazards
- No acute/chronic systemic toxicity at normal food use doses; mild transient respiratory/eye irritation in sensitive individuals from bulk dust inhalation; no skin irritation/sensitization, no known allergenicity.
 - Natural polysaccharide (dietary fiber), indigestible by human enzymes; excessive oral ingestion may cause mild gastrointestinal discomfort (bloating, flatulence, diarrhea) with no long-term adverse effects; safe for normal food-grade application doses.
 - Natural plant extract (Guar bean endosperm), widely used in food industry with confirmed food safety.
- ### 2.5 Environmental Hazards
- Environmentally friendly; fully biodegradable (microbial degradation to CO₂ and H₂O); no toxic breakdown products.
 - No acute aquatic toxicity (Zebrafish LC₅₀, 96h >20000 mg/L); no bioaccumulation potential (natural polysaccharide, no biological adsorption); no soil/water pollution risk.
- ### 2.6 Other Hazards
- Slight hygroscopicity may cause minor caking under high humidity; dust may form explosive mixtures in air at extremely high concentrations (**no food processing risk**).

SECTION 3: Composition/Information on Ingredients

- Substance / Mixture: Natural plant polysaccharide (refined extract)
- Main Component: Galactomannan (β -1,4-mannose backbone with α -1,6-galactose side chains)
- CAS-No.: 9000-30-0

Component	Classification	Concentration (w/w)	CAS No.	Hazard Statements
Galactomannan Polysaccharide	Non-hazardous	≥85.0%	9000-30-0	None
Moisture	Non-hazardous	≤10.0%	7732-18-5	None
Ash (Inorganic Salts)	Non-hazardous	≤1.5%	-	None
Trace Plant Residues	Non-hazardous	≤3.5%	-	None

SECTION 4: First Aid Measures

4.1 Description of First-Aid Measures

- **Inhalation:** Move victim to fresh air, keep airway open. If coughing/irritation occurs, allow to rest and provide fresh air; consult a doctor if symptoms persist for more than 2 hours.
- **Skin Contact:** Brush off residual powder, rinse affected area with running water for 3-5 minutes. Dry skin thoroughly; no further treatment needed (no skin irritation).
- **Eye Contact:** Rinse eyes cautiously with plenty of running water for 10-15 minutes (hold eyelids open to flush all surfaces). Remove contact lenses if present and easy to do; consult a doctor if irritation persists.



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- **Ingestion:** Rinse mouth with water, drink plenty of plain water (do not induce vomiting). No special treatment for normal ingestion; consult a doctor if excessive intake causes severe gastrointestinal discomfort (bloating/diarrhea).
 - **Acute:** Mild transient respiratory/eye irritation from bulk dust; mild bloating/flatulence from excessive oral ingestion.
 - **Delayed:** No known delayed toxic effects based on comprehensive toxicological testing.
- Indication of Immediate Medical Attention No immediate medical attention required for normal food-grade handling/ingestion; consult a doctor only if irritation symptoms persist or excessive intake causes severe gastrointestinal discomfort.

SECTION 5: Firefighting Measures

5.1 Extinguishing Media

- **Suitable:** All common fire-extinguishing media (water spray, CO₂, dry chemical powder, foam).
- **Unsuitable:** None (no fire hazards associated with the product).
- Non-combustible; decomposes at high temperature (>300°C) to produce non-toxic carbon dioxide, water and carbon black; no hazardous gases or combustion products produced during fire or normal heating.
- Dust may form explosive mixtures in air at extremely high concentrations (**not a risk in normal food processing/storage**).
- Wear standard fire-fighting gear (self-contained breathing apparatus if dust concentration is high); fight fire from upwind.
- Cool exposed containers with water spray if near fire (prevent thermal expansion); avoid dust inhalation during firefighting.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions

- Wear N95 dust mask, food-grade safety goggles and disposable nitrile gloves for large spills; ensure good ventilation in the spill area (prevent dust accumulation).
- No open flames/sparks required (no fire risk); no special PPE for small spills (simple dust mask sufficient).

6.2 Environmental Precautions

- No special environmental precautions; the product is biodegradable and non-toxic. Sweep up spilled powder to avoid entry into drains (may cause minor clogging due to viscosity).

6.3 Methods and Materials for Containment and Cleaning Up

- **Small Spill:** Sweep into a sealed HDPE container for reuse; wipe the area with a dry cloth (dispose as general waste). Do not use water (avoids viscous gel formation).
- **Large Spill:** Collect with a dust-free vacuum cleaner (no water) into sealed food-grade drums for reuse; no need for neutralization (non-corrosive, non-toxic).
- **Note:** Avoid wetting the spilled powder (forms viscous solution/gel that is difficult to clean); use dry cleaning methods only.

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling

- Operate in a well-ventilated area with dust collection equipment (prevent dust inhalation/accumulation).
- Use dry food-grade equipment/tools (HDPE, stainless steel) for weighing/mixing; avoid generating excessive dust (sift powder slowly to reduce dust).
- Do not mix with water directly in bulk (add powder to water with high-speed stirring to avoid clumping); Hygiene Measures: Wash hands/face thoroughly with soap and water after handling; do not eat/drink/smoke in the processing area.

7.2 Conditions for Safe Storage

- **Storage Type:** Store in a cool, dry, well-ventilated food-grade warehouse; temperature $\leq 25^{\circ}\text{C}$, relative humidity $\leq 60\%$ (prevents slight hygroscopic caking and maintains viscosity).
- **Containers:** Sealed food-grade HDPE plastic drums or aluminum foil bags; label clearly with product name, batch number, "Keep Dry" and "Avoid Dust" warnings.
- **Incompatibilities:** No significant incompatibilities; stable with most food ingredients/additives (acidulants, sweeteners, preservatives, salts); avoid long-term contact with strong oxidizing agents (industrial grade only).
- **Separation:** Store separately from odorous substances (no odor absorption); no special separation requirements for other food raw materials/additives.
- **Shelf Life:** 24 months (unopened, in specified storage conditions); 6 months after opening (if resealed tightly and stored in accordance with requirements).

7.3 Specific End Use Only for food production as thickener and stabilizer; compliant with GB 2760/FDA/EC dosage limits (GMP for most food categories).

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

- No official occupational exposure limits (OEL) for food-grade guar gum; follow general industrial dust limit ($10 \text{ mg}/\text{m}^3$ TWA) for bulk handling (national occupational health standards).
 - No PEL/REL established by US OSHA/NIOSH (non-hazardous substance).
- ### 8.2 Exposure Controls
- **Engineering Controls:** Local exhaust ventilation with dust collection (air exchange rate ≥ 8 times/hour) for bulk handling/loading/unloading; closed mixing systems to minimize dust release.

- **Personal Protective Equipment (PPE):**

- **Respiratory Protection:** N95 dust mask (**mandatory** for bulk dust handling; disposable dust mask for light handling).
- **Eye/Face Protection:** Food-grade safety goggles (recommended for large-scale dust handling; no face shield required).
- **Skin Protection:** Disposable food-grade nitrile gloves (optional for normal handling; mandatory for large-quantity processing).



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- o **Other:** Dust-proof food-grade overalls and non-slip shoes (for industrial processing).8.3 Environmental Exposure Controls
- No special environmental exposure controls; use closed transfer systems to prevent dust release; no wastewater/air pollution associated with handling.

SECTION 9: Physical and Chemical Properties

Property	Details (25°C, 1 atm)
Physical State	Off-white to creamy white powder
Color	Off-white
Odor	Odorless
Taste	Bland, slightly sweet, no bitter aftertaste
Melting Point	Decomposes >300°C (no melting)
Boiling Point	Not applicable (solid, decomposes)
Flammability	Non-combustible (NFPA Flammability: 0)
Flash Point	Not applicable
Autoignition Temperature	Not applicable
Vapor Pressure	<0.0001 kPa (25°C)
Vapor Density	Not applicable (solid)
Relative Density (Water=1)	1.3-1.4
pH Value (1% aqueous solution)	6.0-7.5 (Neutral)
Water Solubility	Dispersible (forms viscous solution); insoluble in cold water (hydrates slowly)
Solubility	Insoluble in ethanol, methanol, ether, benzene and all organic solvents
Hygroscopy	Slightly hygroscopic
Viscosity	1% aq. sol: ≥5000 mPa·s (25°C, 20rpm); increases with concentration
Bulk Density	0.5-0.7 g/cm ³
Corrosivity	Non-corrosive to metal/plastic/glass (food-grade materials)

SECTION 10: Stability and Reactivity

10.1 Chemical Stability: **Highly stable** under normal food processing and storage conditions (natural polysaccharide); stable in neutral/weak acidic/weak alkaline food systems (pH 4.0-9.0); stable at low temperatures (freezing) and moderate heating (≤100°C).10.2 Possibility of Hazardous Reactions:

- No hazardous reactions with water, food ingredients or common food additives (acidulants, sweeteners, stabilizers, preservatives) under normal food processing conditions.
- Hydrates in water to form a viscous colloidal solution (**intended use, non-hazardous**); viscosity decreases at high temperature (>120°C) or extreme pH (<3.0/>10.0) (no toxic products).10.3 Conditions to Avoid: Extreme pH (<3.0/>10.0), high temperature (>120°C for long time), excessive moisture (caking), bulk dust accumulation (irritation risk).10.4 Incompatible Materials: Strong oxidizing agents (industrial grade only), concentrated strong acids/alkalines (non-food use); no incompatible materials for food-grade use.10.5 Hazardous Decomposition Products:

Non-toxic carbon dioxide, water and carbon black (decomposes >300°C); no toxic gases or products produced at food processing temperatures. 10.6 Hazardous Polymerization: Will not occur under any conditions (natural polysaccharide, no polymerization).

SECTION 11: Toxicological Information

11.1 Information on Toxicological Effects

- **Acute Toxicity:** Oral (Rat, LD₅₀) >20000 mg/kg; Dermal (Rabbit, LD₅₀) >20000 mg/kg; Inhalation (Rat, LC₅₀) >5000 mg/m³/4h – **Practically non-toxic.**
- **Skin Corrosion/Irritation:** No skin irritation (Rabbit, 24h exposure; GHS 0 category); no corrosion, no sensitization.
- **Serious Eye Damage/Irritation:** Mild transient eye irritation from bulk dust (GHS 0 category); no irreversible eye damage.
- **Respiratory Irritation:** Mild transient respiratory irritation from bulk dust (GHS 0 category); no chronic respiratory effects.
- **Germ Cell Mutagenicity:** Negative (Ames test, chromosome aberration test; no genotoxicity).
- **Carcinogenicity:** IARC Group 3 (not classifiable as to carcinogenicity to humans; no evidence of carcinogenicity).
- **Reproductive Toxicity:** No reproductive/developmental toxicity (rat feeding test at 5000 mg/kg/day; safe for maternal/fetal health).
- **Specific Target Organ Toxicity:** No single/chronic target organ toxicity at normal food use doses; acts as dietary fiber, promotes intestinal peristalsis with no adverse effects.

11.2 Additional Information Guar gum is a natural plant polysaccharide (dietary fiber) approved by FAO/WHO, FDA, EFSA and CFSA as a safe food additive; no adverse health effects at normal food application doses; suitable for all population groups including children and the elderly.

SECTION 12: Ecological Information

12.1 Toxicity:

- Aquatic: Zebrafish LC₅₀ (96h) >20000 mg/L, Daphnia EC₅₀ (48h) >20000 mg/L – **Non-toxic;** no adverse effects on aquatic organisms at any normal use level.
 - Terrestrial: No toxic effects on soil microorganisms/plants; acts as a carbon source for soil microbes, promotes microbial activity (no negative environmental impact).
- 12.2 Persistence and Degradability: **Fully biodegradable;** degraded by soil/aquatic microbes (galactomannanase) to CO₂ and H₂O within 7-14 days; no environmental persistence.
- 12.3 Bioaccumulative Potential: Log Kow = -4.5 (estimated) – **No bioaccumulation potential** (water-dispersible polysaccharide, no adsorption to biological tissues/organisms).
- 12.4 Mobility in Soil: Low mobility (hydrates to form viscous gel); no leaching risk to groundwater; remains in topsoil and is degraded by microbes.
- 12.5 PBT/vPvB Assessment: Not classified as PBT/vPvB (fully biodegradable, non-toxic, no bioaccumulation); meets all environmental safety criteria.
- 12.6 Other Adverse Effects: No known long-term ecological effects; no soil/water pollution at

normal food-grade application and disposal; may slightly increase water viscosity if released in large quantities (easily degraded).

SECTION 13: Disposal Considerations

13.1 Waste Treatment Methods

- **Uncontaminated Product Waste:** Reuse directly (no quality degradation if dry); expired/contaminated waste can be disposed of as general solid waste (non-hazardous) or composted (biodegradable).
 - **Spilled Wet Gel:** Dilute with large amounts of water and discharge to municipal sewage treatment (biodegradable by sewage microbes); no toxic impact.
 - **Packaging Waste:** Rinse containers thoroughly with water (meet food hygiene standards); recycle/dispose of as non-hazardous plastic/foil waste (no residual hazards).
- 13.2 Disposal Compliance: Comply with China General Solid Waste Pollution Control Law, Food Safety Law and local environmental regulations; no hazardous waste disposal procedures required.

SECTION 14: Transport Information

14.1 UN Number: None (non-hazardous substance)
14.2 UN Proper Shipping Name: None (not a hazardous good)
14.3 Transport Hazard Class(es): None
14.4 Packaging Group: None
14.5 Environmental Hazards: IMDG Marine Pollutant: **No**; ADR/RID: No
14.6 Special Precautions for User

- Transport in sealed food-grade HDPE drums/aluminum foil bags to prevent dust release, hygroscopic caking and contamination.
- Use covered dry transport vehicles; avoid rain, snow, moisture and direct sunlight during transport (maintain relative humidity $\leq 60\%$).
- Secure containers to prevent tipping/collision; avoid rough handling (prevents packaging damage and dust release).
- Do not mix with toxic/harmful/odorous substances or strong oxidizing agents in the same vehicle; transport with other non-hazardous food additives/raw materials is allowed.
- No special transport documentation required (non-hazardous food additive); comply with general food raw material transport regulations.

SECTION 15: Regulatory Information

15.1 National/International Regulations

- **China:** Compliant with GB 2760 (National Food Safety Standard for Food Additives), GB 1886.307-2021 (Food Additive Guar Gum); classified as non-hazardous chemical; approved for use in **all food categories** with GMP dosage limits.
- **EU:** Compliant with EC 1333/2008; E412 (food additive code); REACH registered (no SVHC); approved for food use with GMP dosage limits.
- **US:** TSCA listed (CAS 9000-30-0); FDA GRAS (21 CFR Part 184.1339); approved for use in all food and beverage categories with no dosage limit (GMP).



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- **International:** Compliant with Codex Alimentarius Commission (CAC) standards; FCC/USP certified (food grade); approved by FAO/WHO JECFA; recognized as a safe natural food additive worldwide.15.2 Other Regulations: Comply with local food safety, occupational health and environmental regulations; food production use must meet GMP/HACCP standards.

SECTION 16: Other Information

- **Further Information:** This MSDS is for **Food Grade Guar Gum (Galactomannan ≥85%)** (CAS 9000-30-0), compliant with GB/T 16483, GB/T 17519 and GHS Rev.9. It applies to safe handling, storage, transport and disposal of the product for food production use. The supplier is not liable for damage caused by improper industrial use (non-food) or non-compliance with storage/handling precautions.
- **Revision Date:** 28 FEB 2026
- **Version:** V1.0



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