

PRODUCT DATA SHEET

GELLAN GUM HS-201

Gellan gum is a fermentation-derived hydrocolloid produced by the microorganism *Pseudomonas elodea* (ATCC 31461). Gellan Gum HS-201 is a unique texturizing agent designed to be used in chocolate spreads, custard fillings, mayonnaise, processed cheese, fruit fillings and confectionery products to impart creaminess and improve texture. Gellan Gum HS-201 can be used in combination with other hydrocolloids to give different textures and mouthfeels. Typical use levels of Gellan Gum HS-201 range from 0.1% to 0.5%.

HS-201 Features and Benefits

Key feature	Benefits
Optimal gelling profile	Reduced tendency for pre-gelling in high solids systems
Unique texture	Imparts creamy mouthfeel and improves body in low fat and/or low sugar systems
Highly pseudoplastic	Excellent pumpability and spreadability
Heat tolerant	Stable under high storage temperature (<70°C)

Dispersion

To disperse the product without lumps:

- Premix the powder with other dry ingredients, and add the dry mix slowly into the liquid under sufficient stirring to obtain a complete dispersion;
- Or disperse the product in a non-solvent medium such as oil or alcohol before adding to water.

Hydration

Gellan Gum HS-201 swells in deionized water to a starch-like consistency (when the concentration is high enough). Heat is required to fully hydrate Gellan Gum HS-201. The gum can usually hydrate at about 85-90°C. Hydration of Gellan Gum HS-201 can be improved with the addition of a chelating agent such as sodium citrate.

Gel Formation

Gellan Gum HS-201 forms a strong gel in the presence of cations such as calcium. Gellan Gum HS-201 can also gel without the use of cations if gum concentration is high enough or under high solids environment.

Regulation

This product conforms many legislative standards. However, we recommend that the user ensures that this product is in compliance with the local regulations in force, particularly in the country where the product is to be consumed.

Quality Assurance

Zhejiang DSM Zhongken Biotechnology is certified with ISO 9001 and FSSC 22000. It is also approved for Kosher and Halal.

Packaging, Storage and Shelf Life

The product is packed in 20 kg/carton with a PE inner bag. Store product in ambient temperature and away from direct sunlight. The product, when stored in these conditions and in its original unopened packaging, will maintain its initial properties for 24 months.

Specifications

(Testing done on every lot)

Property	Requirement
Appearance	Off-white powder
Purity (gellan gum content)	85-108%
Gel strength (1%)	320-540 g/cm ²
Particle size (Pass 60 mesh with 280 µm aperture)	≥96%
Loss on drying	≤15%
Ash	≤15%
pH value	4.5-6.5
Total bacterial count	≤10000 cfu/g
Mold & yeast	≤400 cfu/g
Coliform	≤30 MPN/100g

Other Specifications

(Periodic inspection)

Property	Requirement
Salmonella	Negative in 25g
E. coli	Negative in 25g
Lead	≤2 mg/kg
Heavy metals	≤20 mg/kg
Total arsenic	≤3 mg/kg
Mercury	≤1 mg/kg
Cadmium	≤1 mg/kg
Nitrogen	≤3 g/100g

DSM Hydrocolloids

For further information, please see:

www.dsm.com

www.dsm.com/hydrocolloids

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