



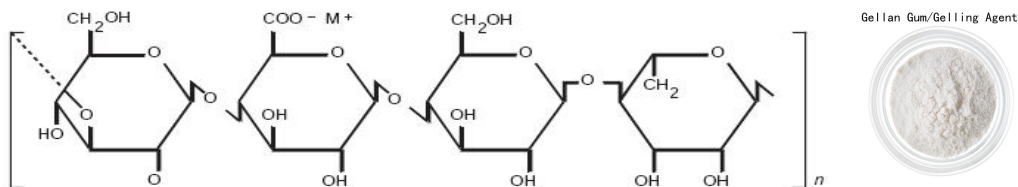
Product Data Sheet for Low Acyl Gellan Gum (LAG)

Commodity Name	:	Gellan Gum
Commodity Type	:	Low Acyl ; De-Acyled Type
Related Type Code	:	LAG
Synonym	:	Gelling Agent ; Gelrite ; Phytigel
CAS. NO.	:	71010-52-1
INS. NO.	:	E418
H.S. CODE	:	391390 ; 350699
Applications	:	Food Additives; Cosmetics; Agriculture; Chemical Industry...
Origin Country	:	China.
Available Certificates	:	KOSHER, ISO, HALAL.

Product Description :

Gellan gum is a hydrocolloid produced by the microorganism *Sphingomonas elodea*. Gellan gum is manufactured by fermentation from a carbohydrate source (glucose). Deacylation is carried out by treating the product with alkali. Low Acyl Gellan Gum is a perfect stabilizing agent and gelling agent for foods, beverages or personal care products which needs very high transparency and easy solubility. Appearance of Low Acyl Gellan Gum is white fine powder. The application of gellan gum needs to follow our instructions.

Low Acyl Gellan Gum



Gellan gum is based on a linear structure of repeating, glucose, rhamnose and glucuronic acid units. In high acyl Gellan gum two acyl side chains, acetate and glycerate are present. Both substituents are present on the same glucose molecule and on average there is one glycerate per repeating unit and one acetate every two repeating units. In low acyl Gellan gum the acyl groups are removed.

Specifications :

Items		Standard
Appearance	:	White powder
Gellan Gum content	:	85.0%–108.0%
Loss on drying	:	≤15.0%
Lead	:	≤2.0mg/kg
Particle size	:	60 Mesh ≥95%
Transparency	:	≥85%
Gel. Strength	:	≥900g/cm ²
Ash	:	≤15%
PH (0.5% Solution)	:	5.0–7.5
Bacterium account	:	≤10000CFU/g
Coliforms	:	≤30MPN/100g
Yeast and mould	:	≤400CFU/g



ZHENGZHOU OPAL BIOTECH. LIMITED.

Tel.:+86 -371-55675271 ; Mob.:+86 -17335701862

Salmonella	:	0/10g
E.Coli.	:	0/5g
Soya Trace	:	≤2.5ppm
Nitrogen	:	≤3.0%
Isopropyl Alcohol	:	≤750ppm
Residue of Ethanol	:	≤750ppm
Assay / Purity (as CO ₂ content on dry basis)	:	3.3%-6.8%
Molecular Weight	:	Approx 500000
Heavy Metals	:	≤20mg/kg
Mercury	:	≤1mg/kg
Arsenic	:	≤2mg/kg
Cadmium	:	≤1mg/kg
Metal Detection Limits	:	Ferrous:1.5mm; NON-Ferrous:2.0mm; S/Steel:2.5mm.

Nutritional Information :

Total Carbohydrates	:	83.82g/100g (≤85%)
Energy	:	285Kcal/100g
Energy	:	1190KJ/100g
Protein (N*6.25)	:	0.94g/100g (≤18.7%)
Total Fat	:	0%
Saturated Fat	:	0%
Sugars	:	0%
Total Dietary Fibre	:	0.1g/100g (≤85%)
Sodium	:	3520mg/100g
Calcium	:	4630mg/100g
Potassium	:	80mg/100g
Magnesium	:	91.5mg/kg
Fe	:	16.8mg/100g
MUFA	:	0%
Ash	:	7.2g/100g (≤15%)
Moisture	:	8.0g/100g (≤15%)
Cholesterol	:	0%

Ingredients Composition:

Pure Gellan Gum. Ingredients Composition is 100% Gellan Gum.

Main Raw Materials:

1. Corn /Maize based Glucose Powder.
2. Soya / Pea Based Protein.
3. Yeast Extract.



ZHENGZHOU OPAL BIOTECH. LIMITED.

Tel.:+86 -371-55675271 ; Mob.:+86 -17335701862

Features & Benefits:

1. Brittle Strong Clear Gels;
2. Heat Irreversible Gels; Acid Stable Gels; Wide pH range 3.8-7.0;
3. Low Ions Reaction ; Easy to dissolve;
4. Quite low gelling dosage (0.1%-0.4%);
5. Plant Based Raw Materials.

Typical Applications:

Jellies and Puddings	Meat (Aspics)	Bakery Filliers
Solid Car Airfrensher	Bakery Fillings	Confectionary
Crystal Jelly Balls	Cosmetics	Desserts Gels

Application levels vary from 0.05%-0.5% according to different target textures and functions.
Gelling performance could be controlled subject to different level of ions and concentrates.

Dispersion / Hydration / Gelling Property:

LAG Type Gellan Gum is newly researched gellan gum which is of weak reaction to ions and easily to be dissolved in water due to heavy density of product. Clear Gels could be available by adding LAG Gellan Gum into tap water with target concentration under shearing, heating up to 90 Celcius Degree, adding ions and cooling to 23 Celcius Degree for gelling. Both monovalent and divalent ions could be applied to help gelling : K⁺ , Na⁺, Ca⁺⁺, and Mg ⁺⁺. Monovalent ions help to form heat reversible gels; while Divalent ions are used to form heat irreversible gels. Sequestrants such as sodium citrate or phosphates may be required for hydration in hard water.

Regulatory Information:

Gellan Gum LAG complies with requirements contained in the following regulations and standards:
In China: GB25535-2010; In U.S.A.: FOOD CHEMICALS CODEX, 21 CFR § 172.665; In Canada: CANADIAN FOOD AND DRUG LAW (ITEM G.2, TABLE IV), In EU: THE PURITY CRITERIA IN THE CURRENT EC DIRECTIVE, 1829/2003/EC; Others: JECFA Standard.

Packaging, Storage and Shelf Life:

The product is packed in 25Kg/Drum or 25Kg/Drum Square Cartons with a PE bag inner.
Store away from heat and moisture, preferably at a cool and dry place.
The product, when stored in these conditions and in its original unopened packaging, will maintain its initial properties for 24 months.

For further information please contact:

Mr. JOKE, WANG (Product Manager)

Zhengzhou OPAL Biotech. Limited.

Tel: +86-371-55675271;

Mob.: +86-173-3570-1862

SKYPE: OPALBIO@HOTMAIL.COM

Web.: www.opalbiotech.com

Email: 8001@opalbiotech.cn

THE END