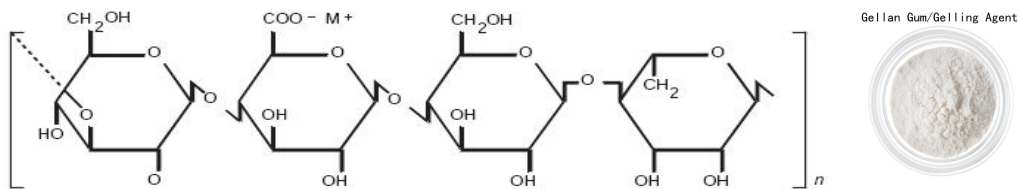


**Product Data Sheet for Low Acyl Gellan Gum (LAS)**

Commodity Name	:	Gellan Gum
Commodity Type	:	Low Acyl ; De-Acyled Type
Related Type Code	:	LAS
Synonym	:	Gelling Agent ; Suspension Agent ; Stabilizer
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 <sup>2</sup>
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 <sub>2</sub> 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.High Transparency Solutions;
- 2.Heat Stable Property;
- 3.Acid Stable Performance;
- 4.Quite low dosage(0.01%-0.03%); Strong Lifting Power ; Net Texture Stabilzier Organization.
- 5.Plant Based Raw Materials.

## Typical Applications:

Suspension Drinks      Crystal Jelly Balls

Yoghurts

Application levels vary from 0.012%-0.5% according to different target textures and functions.

## Typical Procedure of Gellan Gum Application:

Salts like Calcium Lactate would stop gellan gum from dissolving into water. So Gellan Gum LA should dissolve with ingredients and water which is free from salts.

1. Make gellan gum dispersed in cool deionised water by stirring;
2. Heat solution 1. to 85 Celcius Degree for 20-30mins; or boiling for 5-10mins;
3. Add cations or salts into solution 2.;
4. Cool down the solution 3. to certain temperatures, gelling or suspending fuctions available.

## Dispersion:

To disperse the product without lumps: Premix the powder with the other dry ingredients (except kations or salts), and pour the preparation into the liquid under efficient stirring. Continue stirring to obtain a complete dispersion.

## Dissolution/Hydration:

The dissolution of the product depends on the medium and the process: it is improved by heat treatment (time, temperature), shear stress(stirrer, homogenizer). A complete dissolution can be rapidly obtained by boiling for 5-10mins or at around 85-90°C for10-15mins with sequestrants(Sequestrants such as sodium citrate may be required for hydration in hard water).

## Regulatory Information:

Gellan Gum LAS 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 24months.

## 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](mailto:OPALBIO@HOTMAIL.COM)

Web.:www.opalbiotech.com

Email: [8001@opalbiotech.cn](mailto:8001@opalbiotech.cn)

THE END