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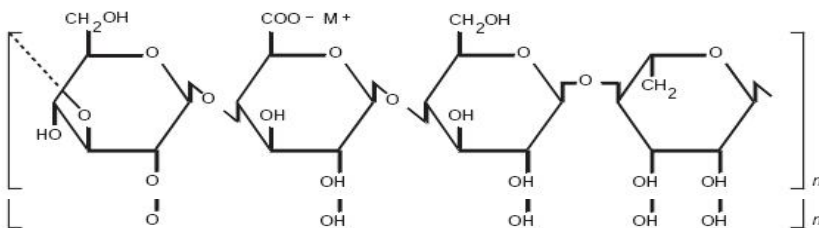
## Product Data Sheet for Plant Media Gellan Gum

Commodity Name	:	Gellan Gum
Commodity Type	:	Low Acyl ; De-Acyled Type
Related Type Code	:	LAT / LAT(Y)
Synonym	:	Gelling Agent ; Gelrite ; Phytigel
CAS. NO.	:	71010-52-1
INS. NO.	:	E418
H.S. CODE	:	391390 ; 350699
Applications	:	Agriculture; Plant Tissue Culture Media ; Cell Tissue Culture Media
Origin Country	:	China.
Available Certificates	:	ISO.

### 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/Gelling Agent



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	:	≥400g/cm <sup>2</sup>
Ash	:	≤15.0%
PH(0.5% Solution)	:	5.0—7.5
Bacterium account	:	≤10000CFU/g
Coliforms	:	≤30MPN/100g
Yeast and mould	:	≤400CFU/g
Salmonella	:	0/25g
Nitrogen	:	≤3.0%

### Features & Benefits :

1. Easy to dissolve in water; Very Clear Medium Solutions or Gels formed (easier to observe growth);
2. Heat Stability; Heat Irreversible;
3. Excellent acid stability;
4. Quite low dosage(0.4%-0.5%).

### Application Instruction :

1. Make gellan gum dispersed in cool deionised water by stirring;
  2. Heat solution 1. to 85 Celcius Degree for 10-15mins; 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 functions available.
- To disperse the product without lumps: Premix the powder with the other dry ingredients (except cations or salts), and pour the preparation into the liquid under efficient stirring. Continue stirring to obtain a complete dispersion.

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 for 10-15mins with sequestrants(Sequestrants such as sodium citrate may be required for hydration in hard water).

### Regulatory Information:

Gellan Gum LAT 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. Small Packages with 1Kgs N.W. foil bags also available.

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:

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