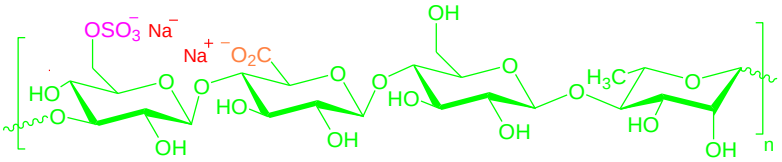
Product Information

Sulfated Gellan Gum

***Product Number*: 501300**

Synonyms

Sodium Gellan Gum sulfate



Specifications

CAS Number: -

M.F. (Repeat Unit): $C_{14}O_{12}H_{21}Na$ (× nSO_3Na)

M.W. (Repeat Unit): 404.30 (× n*103.05*) g.mol^{-1}

Molecular Weight: 1,000 kg/mol

Appearance (Form): Powder

Appearance (Color): White to Light Yellow

Store: - 4 °C

Infrared Spectrum: Conforms to Structure

Purity (Titration): ≥ 98 %

Degree of Substitution: 0 – 10%

pH: 6 – 7 (c = 10 mg.mL^{-1}; Water)

Solubility (water): up to c = 50 mg.mL^{-1}

Solubility (Color): Clear to Yellow

Description

Gellan Gum (GG) is a high molecular weight polysaccharide gum produced by a pure culture fermentation of a carbohydrate by *Pseudomonas elodea.* The GG aqueous solution can be gellified at elevated temperatures, around 50 °C. Such a high temperature is not appropriate for biological applications. Sulfated Gellan Gum can be gellified at physiological temperature, hence it is an ideal candidate for biomedical applications.

Applications

Sulfated Gellan Gum can be used is tissue engineering, drug delivery and 3D bioprinting as a bio-ink.

Precautions

For laboratory and research use. Not for drug, household or other uses.

Stability

Sulfated Gellan Gum is stable for at least 3 months at -4 °C. Storage its stock powder at high temperature for more than 1 week may cause decomposition and yield incorrect results.

Packaging

1 and 5 g in plastic bottle