

Ingredients Solutions, Inc.

2017 marks ISI's 25th Anniversary as the *World's Largest Independent Supplier of Carrageenan!* We thank our customers and our supply partners for helping us grow our business.

Over the years we've added several other specialty hydrocolloids to our product line, including Alginates, Pectin, Tara Gum, Konjac and Locust Bean Gum. Our latest addition is **Gellan Gum**, which we'll highlight here.

A relative newcomer to the Hydrocolloid Tool Box, Gellan gum is a bio-fermentation gum. Fermentation gums make use of certain strains of bacteria to produce polysaccharides for both food and industrial applications. It is available in its native form as high acylated (HA) or in deacylated form as low acylated (LA). The native form is listed by the USDA as a non-synthetic, organic allowed ingredient while the deacylated form is not organic-allowed. After heating/cooling, HA Gellan gum forms extremely soft, elastic gels. Likewise, LA Gellan gum forms firm, brittle gels, in the presence of either mono- or divalent cations. Gels may be thermally stable or reversible depending on system composition.



Gellan gum has found a very useful niche in the stabilization of both dairy and non-dairy beverages and desserts. Whether milk-based or one of the many alternative milks available; soy, almond, coconut, etc., Gellan gum provides both stability and suspension of solids in either HTST or UHT processing. The HA type is favored for dairy however, blends of HA and LA Gellan gums may also be tailored to specific applications. Typical use levels are as low as 250 ppm for dairy-based, pasteurized or HTST products with lower levels required for UHT processed products.

Low acyl (LA) Gellan gum is preferred in applications where its strong gelling characteristics may be maximized. Dessert jellies, confectionaries and fruit spreads are among the more popular uses for LA Gellan gum. As mentioned earlier, LA Gellan gum requires divalent cations to gel and the resulting gels are not thermally reversible. This attribute is useful for bake-stable fillings and glazes. Gellan gums are also compatible with most hydrocolloids and additions of starch, Locust Bean and/or Tara gums are used to enhance the mouthfeel of the beverages while maintaining a smooth texture.

ISI supplies a full line of Value-Based Gellan Gum products and can provide formulation guidance to our customers.

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