



COLONY GUMS

Hydrocolloid & Stabilizer Systems

COMMON NAMES

- ~ Cassia Gum
- ~ Cassia Tora

SOURCE

Sourced from dried dehulled endosperm of legume seeds of *Senna obtusifolia* (*Cassia obtusifolia*, Chinese Senna or Sickle pod) and *Senna tora* (*Cassia tora*, Sickle Senna, Sickle Wild Sensitive-Plant).

QUALITIES

- ~ Viscosity
- ~ Gel Strength
- ~ Particle Size

FUNCTIONALITY

- ~ Thickener
- ~ Gel Former
- ~ Moisture Management

Cassia Gum



BOTANICAL SOURCE & PROCESSING

Cassia Gum is sourced from dried dehulled endosperm of legume seeds of *Senna obtusifolia* (*Cassia obtusifolia*, Chinese Senna or Sickle pod) and *Senna tora* (*Cassia tora*, Sickle Senna, Sickle Wild Sensitive-Plant). The botanical history of these plants is cloudy. They are easy to confuse and some believe they are variants of the same genus and species. The whole plant, roots, leaves and seeds have been widely used in traditional Indian, South Asian and Ayurvedic medicines. Roasted seeds are ground and used as a substitute for coffee. Although only approved for pet food and industrial applications in the US, Cassia Gum is an approved food additive in Japan (ca. 1995) and can be used for human food applications in the EU (ca. 2010). Check regulatory status for US human food applications.

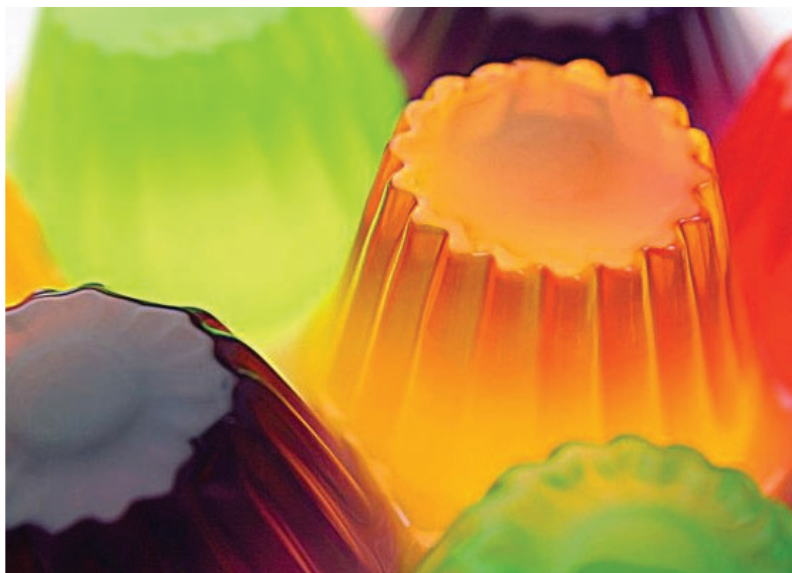
APPLICATIONS

The largest application for Cassia Gum is in wet canned pet food. It is used along with Carrageenan to enhance the appearance, improve texture and stabilize the product through gelling functionality. For thickening, moisture management and stability, Cassia Gum is added to bakery fillings, gelled desserts, soup mixes, oil free salad dressings, meat and poultry products (sausages, deli-meats, etc.). Additional non-food applications include textiles, mining, air freshener gels, cosmetics, paper production and water treatment. Like other hydrocolloids from legumes, Cassia Gum is synergistic with other hydrocolloids for enhanced thickening or gelling functionality (Guar Gum, Xanthan Gum, Carrageenan).

Visit ColonyGums.com for samples, technical assistance or placing an order.

CASSIA GUM POLYMER CHEMISTRY

The carbohydrate polymer of Cassia Gum is a galactomannan, like Fenugreek, Guar, Locust Bean and Tara Gums. The linear polymer chain of mannose units joined by $\beta(1-4)$ -D linkages contains galactose substitutions attached with an $\alpha(1-6)$ linkage. The overall proportion of mannose to galactose is approximately 5:1. Only partial functionality is achieved in cold applications. Full functionality and synergies require the addition of heat in product processing. Depending on usage level and food composition, the functionality of Cassia Gum ranges from thickening through the formation of gels. The pH in solution is near neutral (5-7).



*Established in 1938.
Three generations of excellence
in service, innovation and quality.*



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