

# VIDOGUM L.../C500

(native locust bean gum)

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## Raw materials

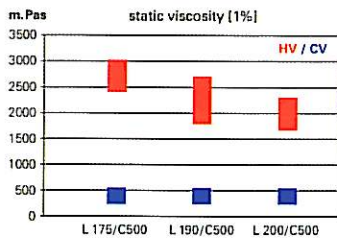
VIDOGUM L (native locust bean gum E 410) is extracted from the endosperm of the wild tree "Ceratonia siliqua L.". The active chain-shaped hydrocolloidal molecules belong to the Galactomannan group. Origin: Mediterranean countries.

## Production

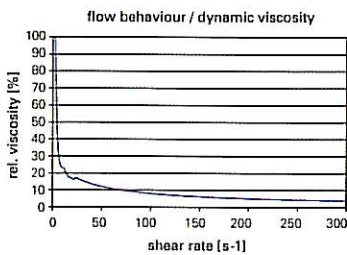
Separation of the endosperm, milling (special physical procedure -> increased cold viscosity), sifting, standardisation.

## Characteristics

VIDOGUM L.../C500 is only suitable for products that pass through a heating process. Despite the slightly increased cold viscosity in comparison to VIDOGUM L, a significantly improved protection of the whey proteins is achieved during the heating-up phase of thermally processed cream cheese products and quark desserts. The reason for this is that, initially, only those Galactomannan molecules with a lower molecular weight dissolve during the heating-up phase, which does not make a very large contribution with regard to the viscosity. Their protective colloid effect is, however, no different from that of long-chain molecules. The somewhat higher cold viscosity is therefore sufficient to provide adequate protection during the critical temperature range (40 – 60°C). It is the special advantage of this type that exactly as much locust bean gum dissolves as is needed for the protective colloid effect for the whey proteins. An excessively fast and overshooting reaction would correspondingly result in an impairment of the stability. And this is also exactly the reason why a partially cold soluble locust bean gum provides the optimum protection.



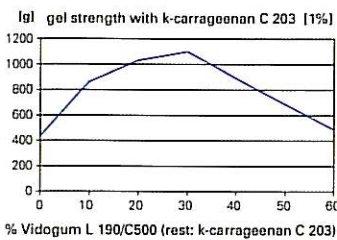
Viscosity



Flow behaviour

VIDOGUM L.../C500 demonstrates a creamy mouth-feel and behaves considerably less pseudo-plastically compared to guar gum. Due to this typical mouth-feel, VIDOGUM L traditionally finds a wide use, above all in dairy products.

VIDOGUM GH: slimy – VIDOGUM SP: full-bodied – VIDOGUM L.../C500: creamy



Gelling strength

VIDOGUM L.../C500 is particularly effective in strengthening the gelling network of agar-agar and k-Carrageenan.

The gel structure becomes considerably more elastic through the addition of VIDOGUM L.../C500. The gelling optimum in aqueous k-Carrageenan of xanthan: VIDOGUM L.../C500 lies at 70 : 30.

## APPLICATION AREAS



Dairy and dessert products

Fruit products and soft drinks

Culinary products

Meat products

Organic products

Dietary and pharmaceutical products

Your product





### Areas of use

VIDOGUM L.../C500 is recommended above all for use in thermally-processed cream cheese and quark desserts.

### Characteristics and benefits

- Improved protective colloid effect with heat-processed quark products due to the increased cold viscosity and the slow water absorption during heating – of special importance with a fat content < 27%. At higher fat concentrations, the protective colloid effect of the milk fat is usually sufficient
- Particularly strong synergy with k-Carrageenan, agar-agar -> Strengthening of the gelling network -> cost reduction
- Syneresis reduction, of particular importance when using k-Carrageenan
- Increase of the elasticity of the k-Carrageenan gelling networks (-> improved spreading)
- Viscosity increase together with native and modified starch
- VIDOGUM L.../C500 is unsuitable for cold applications
- Creamy mouth-feel is particularly well suited for cream cheese and quark desserts
- Very good aroma release and very good taste neutrality

Product Group	Dosage [%]	Benefits in final product using a selected example
 Dairy and dessert products	0.2 – 0.5	Thermally processed cream cheese and quark desserts – alone or in combination with k-Carrageenan: <ul style="list-style-type: none"> <li>• Protects milk protein from sandiness due to the specific solubility characteristics during the heating step -&gt; higher process reliability, better quality (protective colloid effect).</li> <li>• Creamy mouth-feel, finer melting-away action</li> <li>• Together with k-Carrageenan, can form a spreadable and gelled structure</li> <li>• Syneresis prevention in comparison with pure k-Carrageenan</li> <li>• Outstanding aroma release</li> </ul>
 Organic products		VIDOGUM L.../C500 (conventional locust bean gum) may be used for the production of organic products within the framework of current EU directives.