

# VIDOGUM LS 35/E

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(native locust bean gum, viscosity reduced guar gum)



## Raw materials

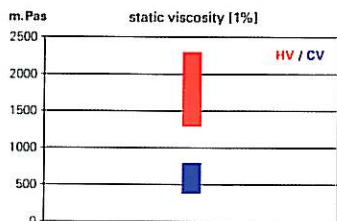
VIDOGUM LS 35/E consists of native locust bean gum E 410 and viscosity-reduced guar gum (E 412). Locust bean gum is extracted from the endosperm of the wild tree "Ceratonia siliqua L.". Origin: Mediterranean countries.

Guar gum is extracted from the endosperm of the bush «Cyamopsis tetragonoloba L.». Unlike locust bean and tara gum, this is cultivated rurally. Origin: India, Pakistan .

## Production

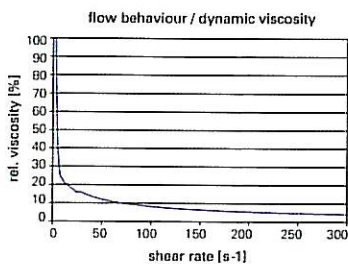
Separation of the endosperm, milling, sifting, partial thermal viscosity reduction, standardisation.

## Characteristics



Viscosity

VIDOGUM LS 35/E is only suitable for products that pass through a heating process. VIDOGUM LS 35/E demonstrates a slightly reduced viscosity in comparison with VIDOGUM L 150 – 175 -> this enables a slightly higher dosage, which results in an improvement of the full-bodied taste. VIDOGUM LS 35/E is only used for dairy products for which an increased full-bodied taste is to be achieved.



Flow behaviour

VIDOGUM LS 35/E demonstrates a creamy mouth-feel and behaves considerably less pseudo-plastically than native guar gum. Mouth-feel comparison: VIDOGUM GH: slimy <-> VIDOGUM SP: full-bodied <-> VIDOGUM LS 35/E: creamy, full-bodied. Its creaminess is close to that of native locust bean gum, although you also obtain an increased full-bodied taste as an additional benefit. Due to this unique mouth-feel, VIDOGUM LS 35/E is used with great success in quark-based spreads and quark desserts.

Gelling strength

VIDOGUM LS 35/E strengthens the gelling network of agar-agar and k-Carrageenan. The gel structure becomes considerably more elastic through the addition of VIDOGUM LS 35/E. The gelling optimum in aqueous solutions – k-Carrageenan: VIDOGUM LS/35E lies at 70 : 30. In comparison to VIDOGUM L, a reduced strengthening of the gelling strength is observed – this is, however, often desired when a specially creamy structure is to be achieved.

## 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 LS35/E is used in many different applications. The characteristics, benefits and application possibilities listed here can thereby only represent a selection.

### Characteristics and benefits

- Synergy with k-Carrageenan, agar-agar ->strengthening of the gelling network -> cost reduction
- Synergetic viscosity increase together with native and modified starch
- Syneresis reduction, of particular importance when using k-Carrageenan
- Increase of the elasticity of the k-Carrageenan gelling networks-> improved spreading
- Improved protective colloid effect due to the increased cold viscosity – of special importance with a fat content < 27%. At higher fat concentrations, the protective colloid effect of the milk fat is usually sufficient.
- Unsuitable for cold applications
- Non-stable for freezing and defrosting
- Creamy full-bodied mouth-feel is particularly well suited for fruit quark and dairy-based spreads
- Very good aroma release
- Very good taste neutrality



Product Group	Dosage [%]	Benefits in final product using a selected example
 <b>Dairy and dessert products</b>	0.2 – 0.4	Thermally processed quark desserts and cream cheese – alone or in combination with k-Carrageenan, gelatine: <ul style="list-style-type: none"> <li>• Protects milk proteins from sandiness during the heating step due to the specific solubility characteristics -&gt; higher process security, improved quality (protective colloid effect)</li> <li>• Creamy mouth-feel, finer melting-away action</li> <li>• Improved spreading</li> <li>• Can form a firm, spoonable and elastic structure with k-Carrageenan</li> <li>• Outstanding aroma release</li> <li>• Very good taste-neutrality</li> <li>• Syneresis prevention in comparison with pure k-Carrageenan</li> <li>• As a rule, an addition before fermentation requires the following conditions: Fat content: &gt; 14%; Use of additional hydrocolloid as a stabiliser (e.g., pectin, agar-agar)</li> </ul>
 <b>Organic products</b>		VIDOGUM LS 35/E (conventional locust bean and guar gum) may be used for the production of organic products within the framework of the current EU directives.