

VIDOGUM L

(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, sifting, standardisation.

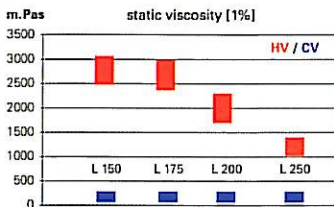
Characteristics

VIDOGUM L is only suitable for products that pass through a heating process.

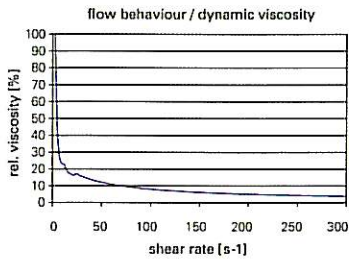
On the other hand, it is in fact advantageous for heating processes that the viscosity only increases at the end of the process:

- The counter-pressure in a closed heating system will thereby be reduced
- In the cooking of fruit preparations, the retention of the fruit pieces will be better.
- Substances injected into ham (no problems in the injection)
- In the case of cakes and pastries, a specific crumb structure can be achieved with the help of the viscosity increase during the baking process (e.g., French brioche).

Compared to VIDOGUM L 150 – 200, VIDOGUM L 250 demonstrates a reduced viscosity, although the synergies with conventional hydrocolloids (gelling strengthening) are not affected by this.



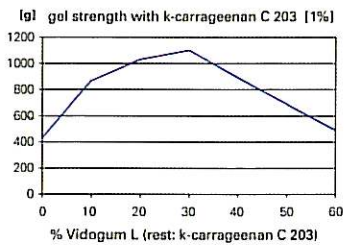
Viscosity



Flow behaviour

VIDOGUM L demonstrates a creamy mouth-feel and has considerably less pseudo-plasticity compared to guar gum. As a result of 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: creamy



Gelling strength

VIDOGUM L 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. The gelling optimum in aqueous solutions – k-Carrageenan: VIDOGUM L lies at 70 : 30.

Together with xanthan, VIDOGUM L forms a comparably strong gel at low dosages. The gelling optimum in aqueous solutions of xanthan: VIDOGUM L lies at 50 : 50.

APPLICATION AREAS



Dairy and dessert products



Fruit products and soft drinks



Culinary products



Meat products



Organic products



Dietary and pharmaceutical products








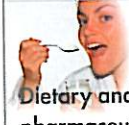
Your product

Areas of use

VIDOGUM L is used in many different applications. The characteristics, benefits and application possibilities listed here can thereby only represent a selection.

Characteristics and benefits

- 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
- Forms gels after the heating step (-> synergy) with xanthan (-> mayonnaise, dressings)
- Synergetic viscosity increase together with native and modified starch
- VIDOGUM L unsuitable for cold applications
- Non-stable for freezing and defrosting, but binds the water again after the 2nd heating step
- Creamy mouth-feel is particularly well suited for dairy products, fruit quark and milk spreads
- Very good aroma release and very good taste neutrality
- Solubility in saccharose solutions up to 60%

Product Group	Dosage [%]	Benefits in final product using a selected example
 Dairy and dessert products	0.2 – 0.4	Thermally processed quark desserts – with k-Carrageenan or gelatine: <ul style="list-style-type: none"> • Creamy mouth-feel, finer melting-action • Together with k-Carrageenan, can form a firm, spoonable and elastic structure • Outstanding aroma release • Syneresis prevention in comparison with pure k-Carrageenan • As a rule, addition before the fermentation requires the following pre-conditions: Fat content: > 14%; use of additional hydrocolloids as stabilisers (e.g., pectin, agar-agar).
 Fruit products and soft drinks	0.15 – 0.3	Fruit preparations with pectin: <ul style="list-style-type: none"> • Specially suitable for fruit preparations for all non-stir yoghurts • Flows pleasantly from the spoon – can be easily stirred into the white mass (-> two-chamber beakers) • Outstanding aroma and acidity release (-> feeling of freshness) • Solubility in saccharose solutions up to 60%
 Culinary products	0.1 – 0.2	Mayonnaise, dressings – hot produced with xanthan and modified starch: <ul style="list-style-type: none"> • Due to its strong gelling with xanthan, is particularly suited when strong gelling is required, such as: Fillings, stabilisation of herbs and strong adhesion to the meal being refined • Not stable for freezing and defrosting, but can be used in certain cases for deep-freeze products that will be heated up again.
 Meat products	0.1 – 0.3	Ham-injection substance, for brine injection for cooked, salted products together with k-Carrageenan. Only for hot applications – particularly recommended when very high yields (> 170%) are required: <ul style="list-style-type: none"> • Improved slicing consistency • Reduction of cooking losses • Reduction of syneresis in vacuum packaging
 Organic products		VIDOGUM L (conventional locust bean gum) may be used for the production of organic products within the framework of the current EU directives.
 Dietary and pharmaceutical products	0.1 – 0.6	In principle, many similar applications, such as dairy products, desserts, soups and sauces: <ul style="list-style-type: none"> • Only suitable for applications that pass through a heating step • Soya desserts and drinks • Dietary fat-free sauce binder • Thickening agent for baby foods (addition at home) -> effective against vomiting • Gluten free noodles “al dente” after cooking • Gluten free bread: improved crumb structure