



FrieslandCampina 

Ingredients

product data sheet

Vivinal® GOS Powder

Vivinal GOS Powder is a galacto-oligosaccharide ingredient low in mono-sugars. Scientific studies have shown positive effects of oligosaccharides, among which galacto-oligosaccharides, on growth of bifidobacteria^{1,2}, stool consistency^{3,4}, bowel function and transit time^{5,6}, support of natural defences⁷⁻¹⁰ and mineral absorption¹¹⁻¹³.

Product characteristics

Vivinal GOS Powder is an ingredient rich in non-digestible galacto-oligosaccharides (GOS), produced from high quality lactose using a proprietary enzymatic production technology. State-of-the-art separation technology is used to obtain a purified, low-mono-sugar-containing ingredient. Due to low mono-sugar content this product is spray-dried and is therefore perfectly suitable for dry blending.

Applications

Vivinal GOS Powder is used world-wide as an ingredient for standard and premium infant formulas, follow-on formulas and growing-up milk. Scientific studies have shown positive effects of oligosaccharides, among which GOS, on growth of bifidobacteria^{1,2}, stool consistency^{3,4}, bowel function and transit time^{5,6}, support of natural defences⁷⁻¹⁰ and mineral absorption¹¹⁻¹³.

The taste of Vivinal GOS Powder can be characterized as neutral to slightly sweet. Vivinal GOS Powder is heat and acid stable and has excellent solubility properties.

Purified Vivinal GOS Powder is the preferred ingredient for dry blending. It provides more flexibility in the formulation of infant nutrition due to its higher purity, as lower dosages are needed to fulfil oligosaccharide requirements. Other advantages are low glucose content (5%) and reduction in operational costs.

Packaging

Vivinal GOS Powder is packed in a multiple layered paperbag with a polyethylene inner liner with net content of 25kg.

Shelf life and storage conditions

Vivinal GOS Powder is stable during long-term storage. Both the oligosaccharide content and the product characteristics making Vivinal GOS Powder unique remain unchanged (no degradation) for at least 18 months when stored under clean, dry and dark conditions and separated from strongly odorous materials.



This information is intended for industrial customers only and not intended for consumers.

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Typical analysis*

Chemical		Nutritional	
Dry matter (dm)	97%	Energy (kcal/100g)**	293
Galacto-oligosaccharides	69%	Total fat (g/100g)	0
Nitrogen	Max. 0.1%	Saturated (g/100g)	0
Sulphated ash	Max. 0.3%	Trans (g/100g)	0
Lactose	23%	Cholesterol (mg/100g)	0
Glucose and Galactose	5%	Total carbohydrate (g/100g)	97
Nitrite	Max. 1 ppm	Galacto-oligosaccharides (g/100g)	69
		Lactose (g/100g)	23
		Glucose (g/100g)	4.2
		Galactose (g/100g)	0.4
		Fibre (g/100g)**	47.6
		Total Protein (g/ 100g)	0
Microbiological		DP composition (on weight percentage of oligosaccharide)	
Total plate count 30°C	Max. 1,000 cfu/g	DP2 (other than lactose) (%)	31
Enterobacteriaceae	Absent in 10 x 10g	DP3 (%)	38
E. coli	Absent in 10g	DP4 (%)	18
Yeasts	Max. 10 cfu/g	DP5 (%)	8
Moulds	Max. 10 cfu/g	DP6 and higher (%)	5
Staphylococci coagulase-positive	Absent in 1g	Total (%)	100
Salmonella	Absent in 1,500g		
Cronobacter	Absent in 300g		
Bacillus cereus	Max. 100 cfu/g		
Sensoric			
Appearance	White homogeneous powder		
Taste	Neutral to slightly sweet		
Minerals (mg/100g)			
Calcium	4		
Sodium	20		
Magnesium	0.2		
Potassium	10		
Chloride	Max. 10		
Phosphorus	2		

* Please refer to the specifications for guaranteed limits.

** According to EU legislation (EU/1169/2011)

As with any organic material, there may be some variation in the nutritional composition. The preceding values are being supplied to aid in development work, but should not be used solely to determine nutrient labelling. Analysis of nutrients as they occur in final products may be required by the Code of Federal Regulations, Title 21; section 101.9.

References

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Potential consumer benefits are not to be considered as health claims. They should be considered as potential leads that might be developed into health claims complying with the local legal requirements.

FrieslandCampina Domo
Central office
Stationsplein 4
3818 LE Amersfoort
The Netherlands
Tel: +31 (0)33 713 33 33

FrieslandCampina Ingredients
Regional sales office Asia-Pacific
3 Temasek Avenue
#11-01 Centennial Tower
Singapore 039190
Tel: +65 6580 8163

FrieslandCampina Ingredients
Regional sales office China
2506, West tower of Twin Towers
B12 Jianguomenwai Ave. Chaoyang Dist.
Beijing, 100022, China
Tel: +86 10 6566 6099

FrieslandCampina Ingredients
Regional sales office North America
61 S. Paramus Road, Suite 422
Paramus, NJ 07652, USA
Tel: +1 201 655 7786

FrieslandCampina Ingredients
Regional sales office Latin America
Rua dos Canários 65
Vinhedo, SP
13280 000 Brasil
Tel: +55 19 38866820

Please visit www.domo.nl, www.vivinalgos.com or email info.domo@frieslandcampina.com

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