



FrieslandCampina 

Ingredients

product data sheet

Vivinal® GOS Easy Drying Syrup

Vivinal GOS Easy Drying Syrup is a liquid 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 Easy Drying Syrup 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.

Application

Vivinal GOS Easy Drying Syrup 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 Easy Drying Syrup can be characterized as neutral to slightly sweet. Vivinal GOS Easy Drying Syrup is heat and acid stable and has excellent solubility properties.

Purified Vivinal GOS Easy Drying Syrup provides enhanced drying properties in wet blending applications. Furthermore, it gives 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%), higher process flexibility and reduction in operational costs.

These properties make application possible in a wide product range such as infant and follow-on formula and growing-up milk.

Packaging

Vivinal GOS Easy Drying Syrup is packed in a 1,000 l PE-container and contains 1,200kg of product. The handling of Vivinal GOS Easy Drying Syrup is comparable to glucose syrup, meaning that viscosity is the most important parameter to take into account when emptying.

Shelf life and storage conditions

Vivinal GOS Easy Drying Syrup is stable during long-term storage. Both the oligosaccharide content and the product characteristics making Vivinal GOS Easy Drying Syrup 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

Dry matter (dm)	75%
Galacto-oligosaccharides	72% on dm
Nitrogen	Max. 0.032% on dm
Sulphated ash	Max. 0.3% on dm
Lactose	23% on dm
Glucose and Galactose	5% on dm
Nitrite	Max. 1 ppm on dm
pH	3,4

Microbiological

Total plate count 30°C	Max. 500 cfu/g
Enterobacteriaceae	Absent in 1g
E. coli	Absent in 5g
Yeasts	Max. 20 cfu/g
Moulds	Max. 20 cfu/g
Staphylococci coagulase-positive	Absent in 1g
Salmonella	Absent in 125g

Sensoric

Appearance	Clear to slightly yellowish syrup
Taste	Neutral to slightly sweet

Minerals (mg/100g)

Calcium	4
Sodium	20
Magnesium	0,2
Potassium	10
Chloride	Max. 10
Phosphorus	2

Nutritional

Energy (kcal/100g)**	224
Total fat (g/100g)	0
Saturated (g/100g)	0
Trans (g/100g)	0
Cholesterol (mg/100g)	0
Total carbohydrate (g/100g)	74.5
Galacto-oligosaccharides (g/100g)	53.3
Lactose (g/100g)	17.3
Glucose (g/100g)	3.6
Galactose (g/100g)	0.3
Fibre (g/100g)**	36.8
Total Protein (g/ 100g)	0

DP composition (on weight percentage of oligosaccharide)

DP2 (other than lactose) (%)	31
DP3 (% on dm)	38
DP4 (% on dm)	18
DP5 (% on dm)	8
DP6 and higher (% on dm)	5
Total (%)	100

* 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.

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