



FrieslandCampina 

Ingredients

product data sheet

Vivinal® GOS Powder WPC

Vivinal GOS Powder WPC is a galacto-oligosaccharide ingredient with a whey protein concentrate as a carrier. 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 WPC is an ingredient containing galacto-oligosaccharides (GOS). It is produced from high quality lactose using a proprietary enzymatic production technology. This product is spray-dried with WPC and is perfectly suitable for dry blending.

Application

Vivinal GOS Powder WPC 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. Next to oligosaccharides, Vivinal GOS Powder WPC also contains whey protein concentrate.

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

Packaging

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

References

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DOMO®

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

Vivinal® GOS Powder WPC

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Typical analysis*

Chemical	
Dry matter (dm)	97%
Galacto-oligosaccharides	28.5%
Protein	17.5%
Fat	1.5%
Ash	3.5%
Lactose	36.0%
Glucose and Galactose	10.0%
Nitrite	Max. 1 ppm

Microbiological	
Total plate count 30°C	Max. 10,000 cfu/g
Enterobacteriaceae	Absent in 10 x 10g
E. coli	Absent in 10g
Yeasts	Max. 10 cfu/g
Moulds	Max. 10 cfu/g
Staphylococci coagulase-positive	Absent in 1g
Salmonella	Absent in 1,500g
Cronobacter	Absent in 300g
Bacillus cereus	Max. 100 cfu/g

Sensoric	
Appearance	White homogeneous powder
Taste	Slightly sweet

Minerals (mg/100g)	
Calcium	330
Sodium	220
Magnesium	50
Potassium	900
Chloride	530
Phosphorus	280

Nutritional	
Energy (kcal/100g)**	342
Total fat (g/100g)	1.5
Saturated (g/100g)	1.4
Trans (g/100g)	0.1
Cholesterol (mg/100g)	0

Nutritional	
Total carbohydrate (g/100g)	74.5
Galacto-oligosaccharides (g/100g)	28.5
Lactose (g/100g)	36
Glucose (g/100g)	9.5
Galactose (g/100g)	0.5
Fibre (g/100g)**	19.7
Total Protein (g/100g)	17.5

DP composition (on weight percentage of oligosaccharide)	
DP2 (other than lactose) (%)	31
DP3 (%)	38
DP4 (%)	18
DP5 (%)	8
DP6 and higher (%)	5
Total (%)	100

Amino acid composition (g/100g protein)	
Arginine	2.4
Alanine	5.0
Aspartic acid	10.6
Cystine	2.3
Glutamic acid	17.4
Glycine	1.8
Histidine	1.8
Iso-leucine	6.4
Leucine	10.4
Lysine	9.2
Methionine	2.0
Phenylalanine	3.2
Proline	5.8
Serine	4.7
Threonine	6.9
Tryptophan	1.8
Tyrosine	2.6
Valine	5.9

* 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.

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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