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Nestlé Quality Assurance Center
Dublin

Technical Datasheet

Analysis Name: Total Oligosaccharides by HPLC

Method Number: LI-00.590

Scope of Application: This method applies to infant formula, BMOS, whey permeates, GOS

Description: Oligosaccharides present in the samples are extracted in a water bath. Extracted OS are fluorescently labeled by reaction of the 2-anthranilic acid amide with the OS. The OS is treated with amyloglucosidase to avoid interferences of maltooligosaccharides and maltodextrin present in some finished infant formulae on the chromatogram. Labeled extracts are diluted with ACN prior to injection on a UHPLC system equipped with Glycan trapping and analytical columns. Labeled OS are detected by a fluorimeter on the UHPLC.

Sample Weight Required: 50 g for whey permeate (liquid), 25 g for GOS ingredient, 25 g for WOS powder, 100 g for infant formula

Analytical Platform: UHPLC

Special Information: Indication of all sources of fiber upon submission aids in selecting matrix during sample preparation. Communication of GOS concentrates and BMOS samples is important during sample submission.

Analyte Reported	Alias	Unit of Measure	Limit of Quantification	Reproducibility
Galactooligosaccharides	GOS (Vivinal Profile)	g/100 g	0.1	10%
Galactooligosaccharides	GOS (BMOS Profile)	g/100 g	0.1	10%
Galactooligosaccharides	GOS (Clasado Profile)	g/100 g	0.1	10%



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Galactooligosaccharides	GOS (BMOS excluding 2FL, 6SL, LNT, LNnT)	g/100 g	0.1	10%
GOS Disaccharides	DP-2	g/100 g	0.1	10%
Total GOS excluding disaccharides	≥ DP-3	g/100 g	0.1	10%