



NQAC

Nestlé Quality Assurance Center
Dublin

Technical Datasheet

Analysis Name: Vitamins B₁, B₂, B₆ & PP by UHPLC-MS/MS, Biotin by UHPLC-MS/MS

Method Number: LI-00.610

Scope of Application: Infant formula, healthcare products, nutritional bars, culinary products, cereals, cocoa beverages, and gummy-based vitamins.

Description: The method consists of:
Acid hydrolysis in hydrochloric acid (100°C, 35 min)
pH adjustment (except for cocoa containing samples), filtration
Addition of internal standard, dilution
Analysis by UHPLC-MS/MS (using positive electrospray ionization)
Quantification using peak area ratio "Vitamin/IS"

Sample Weight Required: 50 g

Analytical Platform: UPLC – LC/MS/MS

Special information: Provide Certificate of Analysis (COA) or estimated levels for premixes – Biotin testing.

Analyte Reported	Alias	Unit of Measure	LOQ powders, nutrition bars, culinary	LOQ Concentrates, adult nutritionals, enterals	LOQ RTF liquids, baby foods and fruit/vegetable purees	Reproducibility
Vitamin B ₁	Thiamine hydrochloride	mg/100 g	0.13	0.038	0.025	12%
Vitamin B ₁	Thiamine base	mg/100 g	0.1	0.03	0.02	12%
Vitamin B ₂	Riboflavin	mg/100 g	0.1	0.03	0.02	20%
Vitamin B ₃	Niacin	mg/100 g	0.5	0.18	0.12	15%
Vitamin B ₆	Pyridoxine base	mg/100 g	0.1	0.03	0.02	15%
Biotin		µg/100 g	6.4	2.4	1.6	15%