NQAC
Nestlé Quality Assurance Center
Dublin

Technical Datasheet

Analysis Name: Sugar Alcohols by HPAEC-PAD

Method Number: NQA-52.0003_SA

Scope of Application: This method is applicable for the determination of sugar alcohols (glycerol, xylitol, sorbitol, mannitol, lactitol, and maltitol) in food products and raw materials.

Description: Extraction of sugar alcohols in water using sonication and injection on the HPAEC-PAD system. Neutral sugars being weak acids are partially ionized at high pH and can be separated by anion-exchange chromatography on a base stable polymeric column. Sugar alcohols are detected by measuring the electrical current generated by their oxidation at the surface of a gold electrode and quantified by comparison with an external standard. Results are expressed in g per 100 g of product.

Sample Weight Required: 50 g

Analytical Platform: High Performance Anion Exchange (HPAE) Chromatography

Analyte Reported	Alias	Unit of Measure	Limit of Quantification	Reproducibility
Glycerol		g/100 g	0.1	20%
Xylitol		g/100 g	0.1	20%
Sorbitol		g/100 g	0.1	20%
Mannitol		g/100 g	0.1	20%
Lactitol		g/100 g	0.1	20%
Maltitol		g/100 g	0.1	20%