



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.

**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%