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Nestlé Quality Assurance Center  
Dublin

# Technical Datasheet

**Analysis Name:** Carbohydrates in Coffee

**Method Number:** LI-21.057

**Scope of Application:** A high-performance anion exchange chromatographic (HPAEC) method for the determination of free and total carbohydrate in coffee (e.g. soluble coffee, instant coffee, roast and ground coffee, green coffee and coffee husks).

**Description:** Extraction of carbohydrates with water. Separation by ion chromatography on an anion exchange column. Electrochemical detection of the eluted compounds by means of a pulsed amperometric detector and quantification by comparison with the peak areas of the carbohydrates in the standard solution.

**Sample Weight Required:** 50 g

**Analytical Platform:** High Performance Anion Exchange Chromatography (HPAEC)

**Special Information:** Free and Total Sugars methods are available.

Analyte Reported	Unit of Measure	Limit of Quantification	Reproducibility
Mannitol	g/100 g	0.03	<0.1 g/100 g, 60% 0.1-0.25 g/100 g, 35% 0.25-0.5 g/100 g, 30% 0.5-5 g/100 g, 15% >5 g/100 g, 15%
Fucose	g/100 g	0.04	<0.1 g/100 g, 60% 0.1-0.25 g/100 g, 35% 0.25-0.5 g/100 g, 30% 0.5-5 g/100 g, 15% >5 g/100 g, 15%
Arabinose+Rhamnose	g/100 g	0.03	<0.1 g/100 g, 60% 0.1-0.25 g/100 g, 35% 0.25-0.5 g/100 g, 30% 0.5-5 g/100 g, 15% >5 g/100 g, 15%



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Galactose	g/100 g	0.03	<0.1 g/100 g, 60% 0.1-0.25 g/100 g, 35% 0.25-0.5 g/100 g, 30% 0.5-5 g/100 g, 15% >5 g/100 g, 15%
Glucose	g/100 g	0.2	0.1-0.25 g/100 g, 35% 0.25-0.5 g/100 g, 30% 0.5-5 g/100 g, 15% >5 g/100 g, 15%
Sucrose	g/100 g	0.2	0.1-0.25 g/100 g, 35% 0.25-0.5 g/100 g, 30% 0.5-5 g/100 g, 15% >5 g/100 g, 15%
Xylose	g/100 g	0.2	0.1-0.25 g/100 g, 35% 0.25-0.5 g/100 g, 30% 0.5-5 g/100 g, 15% >5 g/100 g, 15%
Mannose	g/100 g	0.2	0.1-0.25 g/100 g, 35% 0.25-0.5 g/100 g, 30% 0.5-5 g/100 g, 15% >5 g/100 g, 15%
Fructose	g/100 g	0.2	0.1-0.25 g/100 g, 35% 0.25-0.5 g/100 g, 30% 0.5-5 g/100 g, 15% >5 g/100 g, 15%
Ribose	g/100 g	0.2	0.1-0.25 g/100 g, 35% 0.25-0.5 g/100 g, 30% 0.5-5 g/100 g, 15% >5 g/100 g, 15%