

Description:

## **Technical Datasheet**

Analysis Name: Determination of Reducing and Non-Reducing Sugars by HPAEC

Method Number: LIBR 054

Scope Application: Description of an in-house method for the

quantitative determination of maltotriose sugars; glucose, sucrose, fructose, lactose and maltose by high performance anion exchange chromatography with pulsed

amperometric detection (HPAEC-PAD)...

Extraction of sugars in hot water and injection in 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 (CarboPac PA20). Sugars are detected by measuring the electrical current generated by their oxidation at the surface of a gold electrode. Post-column addition of NaOH is used to optimize baseline stability,

detector sensitivity and linear range.

Sample Weight Required: 50 g

Method Reference:

Analytical Platform: IC

Special Information: Total sugar content is expressed as sum of

individual components determined. Method

accredited ABNT ISO 17025: 2017.

Analyte Reported	Alias	Unit of Measure	Typical Limit of Quantification	Uncertainty
Sucrose	-	g/100g	0.03	< 20 %
Maltose	-	g/100g	0.03	< 20 %
Fructose	-	g/100g	0.03	< 20 %
Glucose	-	g/100g	0.03	< 20 %
Lactose	-	g/100g	0.03	< 20 %
Maltotriose	-	g/100g	0.03	< 20 %