

Technical Datasheet

Analysis Name: Determination of Heavy Metals by ICP-MS
Method Number: LIBR 005
Scope Application: This method describes the determination of Lead, Cadmium, Mercury, Aluminum Arsenic, Selenium, Chromium, Cobalt, Molybdenum and Tin by ICP-MS in foods, beverages (finished, concentrates, and powders), health products, pet foods, and raw materials such as premixes, food grade oils, salts, and tastemakers.

Description: Test portion is heated at 200°C with nitric acid in a closed vessel microwave digestion system. Digested samples are ionized through inductively coupled argon plasma and the mass spectrum of sample is measured.

Sample Weight Required: 50 g
Method Reference: -
Analytical Platform: ICP-MS
Special Information: LOQ are dependent of matrix. Method accredited ABNT ISO 17025: 2017.

Analyte Reported	Alias	Unit of Measure	Typical Limit of Quantification	Uncertainty
Lead	Pb	mg/kg	0.010	< 15 %
Cadmium	Cd	mg/kg	0.005	< 15 %
Mercury	Hg	mg/kg	0.005	< 15 %
Aluminum	Al	mg/kg	0.100	< 15 %
Arsenic	As	mg/kg	0.010	< 15 %
Selenium	Se	mg/kg	0.030	< 15 %
Chromium	Cr	mg/kg	0.020	< 15 %
Cobalt	Co	mg/kg	0.010	< 15 %
Molibdenium	Mo	mg/kg	0.015	< 15 %
Tin	Sn	mg/kg	0.035	< 15 %