NQAC
Nestlé Quality Assurance Center
Dublin

Technical Datasheet

Analysis Name: Total Iodine and Bromine Analysis by ICP-MS

Method Number: LI-00.849

Scope of Application: This instruction describes the quantification of total iodine and bromine by ICP-MS in foods, beverages (finished, concentrates, and powders), health products, pet foods, gummy-based vitamins, and raw materials such as premixes, food grade oils, salts, and tastemakers.

Description: Iodine and bromine are extracted from the test portion of the sample with a strong alkaline reagent in a closed vessel microwave digestion system. Digested samples are ionized through inductively coupled argon plasma. The ions of iodine are extracted from the plasma, separated in the mass spectrometer, and determined using a pulse counting detector system.

Sample Weight Required: 50 g

Method Reference: CEN EN 15111-2007. Foodstuffs. Determination of iodine by ICP-MS
LMBG, Analysis of foods. Determination of iodine in dietetic foods by ICP-MS (MS with inductively coupled plasma). Amtliche-Sammlung-von-Untersuchungsverfahren-nach-Paragraph-35-LMBG; L 49.00-6, (1998).

Analytical Platform: ICP-MS

Special Information: Include Certificate of Analysis or estimated levels for premix samples.

Analyte Reported	Matrix	Unit of Measure	Limit of Quantification	Reproducibility	Repeatability
Iodine	Liquid	µg/100 g	5	25%	14%
Iodine	Powder, Fats/Oils	µg/100 g	20	25%	14%
Iodine	Premixes	µg/100 g	2000	25%	14%
Bromine	Liquid	µg/100 g	25	25%	14%
Bromine	Powder, Fats/Oils	µg/100 g	100	25%	14%
Bromine	Premixes	µg/100 g	10000	25%	14%