



NQAC

Nestlé Quality Assurance Center  
Dublin

# Technical Datasheet

**Analysis Name:** Packaging Elements by ICP-MS

**Method Number:** NQA-00.3660

**Scope of Application:** This instruction describes a leaching method for preparing samples from packaging matrices for analysis of Chromium, Cadmium, Mercury, and Lead via LI-00.848 heavy metals testing.

**Description:** Packaging samples are placed in a bottle of leaching solution of diluted Nitric acid. The bottles with samples are placed in a hot water bath at just under boiling temperature for several hours to promote removal of heavy metals from the packaging material and into the leaching solution. Final leaching solution is transferred to an analysis centrifuge tube with filtering as necessary before transfer and is then analyzed by ICP-MS via LI-00.848.

**Sample Weight Required:** 25 g of Original packaging material

**Analytical Platform:** ICP-MS

Analyte Reported	Unit of Measure	Limit of Quantification	Reproducibility
Cadmium	µg/kg	4.0	35%
Chromium	µg/kg	20.0	35%
Lead	µg/kg	4.0	35%
Mercury	µg/kg	2.0	35%