

# Certificate of Analysis

**IC Cations Mixture #3**

**Catalog Number: ICC-320**

**Lot Number: G00191Z**

**Job Number: J00005585**

**Lot Issue Date: 04/28/2011**

**Expiration Date: 05/31/2015**

This Certified Reference Material (CRM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system. The analyte concentrations were verified by our ISO 17025 accredited laboratory to be within  $\pm 5.0\%$ , when compared to calibration standards independently prepared using NIST SRM(s). The certified value and uncertainty value at the 95% confidence level for each analyte is determined gravimetrically.

Analyte	True Value				Analytical Method	NIST SRM
barium	1600	$\pm$	8	$\mu\text{g/mL}$	ICP / ICP-MS	3104a
calcium	400.0	$\pm$	2.0	$\mu\text{g/mL}$	ICP / ICP-MS	3109a
magnesium	200.0	$\pm$	1.0	$\mu\text{g/mL}$	ICP / ICP-MS	3131a
strontium	600.0	$\pm$	3.0	$\mu\text{g/mL}$	ICP / ICP-MS	3153a

Matrix: 0.2% nitric acid in low TOC water (< 50 ppb)

ULTRA uses purified acids, 18 megohm double deionized water, calibrated Class A glassware & meticulously cleaned bottles in the manufacturing of ULTRAgrade standards. Balances used in the manufacturing of this standard are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001



ISO 17025:2005  
Accredited  
A2LA  
Cert. No. 0851.01

ISO 9001:2000  
Registered  
TUV USA, Inc.  
Cert. No. 06-1004



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