

Certificate of Analysis

Custom Standard**Catalog Number: ICUS-4296****Lot Number: CM-3760****Lot Issue Date: 07/13/2015****Expiration Date: 08/31/2017**

This Certified Reference Material (CRM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system. The analyte concentration(s) were prepared and verified by an ISO Guide 34 / ISO 17025 accredited laboratory, and 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
lithium (isotope 6)	10.0	±	0.1	µg/mL	ICP / ICP-MS	second source
scandium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3148a
germanium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3120a
yttrium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3167a
indium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3124a
terbium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3157a
bismuth	10.0	±	0.1	µg/mL	ICP / ICP-MS	3106

Matrix: 2% nitric acid and trace hydrofluoric acid in low TOC water (< 50 ppb)

ULTRA uses purified acids, 18 megaohm double deionized water, calibrated Class A glassware, and meticulously cleaned bottles in the manufacturing of ULTRA grade 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.