

Certificate of Analysis

ICP/MS Calibration Standard #3

Catalog Number: IMS-103

Lot Number: CP-1324

Lot Issue Date: 03/24/2016

Expiration Date: 04/30/2020

This Reference Material (RM) 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
antimony	10.0	±	0.1	µg/mL	ICP / ICP-MS	3102a
gold	10.0	±	0.1	µg/mL	ICP / ICP-MS	3121
hafnium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3122
iridium	10.0	±	0.1	µg/mL	ICP / ICP-MS	second source
* palladium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3138
platinum	10.0	±	0.1	µg/mL	ICP / ICP-MS	3140
rhodium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3144
ruthenium	10.0	±	0.1	µg/mL	ICP / ICP-MS	second source
tellurium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3156
tin	10.0	±	0.1	µg/mL	ICP / ICP-MS	3161a

Matrix: 10% hydrochloric acid with trace nitric, hydrofluoric, and tartaric acids in low TOC water (< 50 ppb)

** light sensitive*

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