

Certificate of Analysis

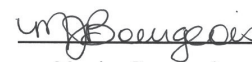
EPA Method 6020A**Internal Standard Solution****Catalog Number: ICM-637****Lot Number: CR-3621****Lot Issue Date: 08/08/2017****Expiration Date: 09/30/2021**

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
bismuth	10.0	±	0.1	µg/mL	ICP / ICP-MS	3106
germanium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3120a
holmium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3123a
indium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3124a
lithium (VI)	10.0	±	0.1	µg/mL	ICP / ICP-MS	second source
rhodium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3144
scandium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3148a
terbium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3157a
yttrium	10.0	±	0.1	µg/mL	ICP / ICP-MS	3167a

Matrix: 5% nitric acid, trace hydrochloric acid, 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.


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