

Certificate of Analysis

Graphite Furnace AA Calibration Standard

Catalog Number: ICM-150

Lot Number: CR-2784

Lot Issue Date: 06/15/2017

Expiration Date: 07/31/2021

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.

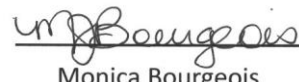
Analyte	True Value			Analytical Method		NIST SRM
aluminum	100.1	±	0.5	µg/mL	ICP / ICP-MS	3101a
antimony	100.0	±	0.5	µg/mL	ICP / ICP-MS	3102a
arsenic	100.1	±	0.5	µg/mL	ICP / ICP-MS	3103a
barium	50.1	±	0.3	µg/mL	ICP / ICP-MS	3104a
beryllium	5.0	±	0.03	µg/mL	ICP / ICP-MS	3105a
cadmium	5.01	±	0.03	µg/mL	ICP / ICP-MS	3108
chromium	20.0	±	0.1	µg/mL	ICP / ICP-MS	3112a
cobalt	50.0	±	0.3	µg/mL	ICP / ICP-MS	3113
copper	50.1	±	0.3	µg/mL	ICP / ICP-MS	3114
iron	20.0	±	0.1	µg/mL	ICP / ICP-MS	3126a
lead	100.2	±	0.5	µg/mL	ICP / ICP-MS	3128
manganese	20.0	±	0.1	µg/mL	ICP / ICP-MS	3132
nickel	50.1	±	0.3	µg/mL	ICP / ICP-MS	3136
selenium	100.2	±	0.5	µg/mL	ICP / ICP-MS	3149
* silver	10.0	±	0.1	µg/mL	ICP / ICP-MS	3151
thallium	100.1	±	0.5	µg/mL	ICP / ICP-MS	3158

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

*** Light Sensitive**

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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