

Certificate of Analysis

ICP Tuning Standard

Catalog Number: ICM-120

Lot Number: CS-0298

Lot Issue Date: 01/23/2018

Expiration Date: 02/28/2022

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
aluminum	50.1	±	0.3 µg/mL	ICP / ICP-MS	3101
arsenic	50.0	±	0.3 µg/mL	ICP / ICP-MS	3103
barium	50.0	±	0.3 µg/mL	ICP / ICP-MS	3104
cadmium	50.1	±	0.3 µg/mL	ICP / ICP-MS	3108
chromium	50.0	±	0.3 µg/mL	ICP / ICP-MS	3112
cobalt	50.1	±	0.3 µg/mL	ICP / ICP-MS	3113
copper	50.1	±	0.3 µg/mL	ICP / ICP-MS	3114
lead	50.1	±	0.3 µg/mL	ICP / ICP-MS	3128
manganese	50.1	±	0.3 µg/mL	ICP / ICP-MS	3132
molybdenum	50.1	±	0.3 µg/mL	ICP / ICP-MS	3134
nickel	50.1	±	0.3 µg/mL	ICP / ICP-MS	3136
potassium	500.7	±	2.5 µg/mL	ICP / ICP-MS	3141
selenium	50.1	±	0.3 µg/mL	ICP / ICP-MS	3149
strontium	50.1	±	0.3 µg/mL	ICP / ICP-MS	3153
zinc	50.1	±	0.3 µg/mL	ICP / ICP-MS	3168

Matrix: 2% nitric 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 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.


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ISO 9001 Registered Quality System – TUV USA