

Certificate of Analysis

CLP ICP Interference Check Standard #2

Catalog Number: ICM-442

Lot Number: R00034A

Lot Issue Date: 09/01/2016

Expiration Date: 10/31/2019

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	
barium	50.0	±	0.25	µg/mL	ICP / ICP-MS	3104a
beryllium	50.0	±	0.25	µg/mL	ICP / ICP-MS	3105a
cadmium	100.0	±	0.5	µg/mL	ICP / ICP-MS	3108
chromium	50.0	±	0.25	µg/mL	ICP / ICP-MS	3112a
cobalt	50.0	±	0.25	µg/mL	ICP / ICP-MS	3113
copper	50.0	±	0.25	µg/mL	ICP / ICP-MS	3114
lead	100.0	±	0.5	µg/mL	ICP / ICP-MS	3128
manganese	50.0	±	0.25	µg/mL	ICP / ICP-MS	3132
nickel	100.0	±	0.5	µg/mL	ICP / ICP-MS	3136
* silver	100.0	±	0.5	µg/mL	ICP / ICP-MS	3151
* vanadium	50.0	±	0.25	µg/mL	ICP / ICP-MS	3165
zinc	100.0	±	0.5	µg/mL	ICP / ICP-MS	3168a


Matrix: 5% nitric 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 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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