

Certificate of Analysis

EPA Method 6020A Calibration Standard
Catalog Number: ICM-630
Lot Number: CS-2649
Lot Issue Date: 05/15/2018
Expiration Date: 06/30/2022

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	20.0	±	0.1	µg/mL	ICP / ICP-MS	3101a
antimony	20.0	±	0.1	µg/mL	ICP / ICP-MS	3102a
arsenic	20.0	±	0.1	µg/mL	ICP / ICP-MS	3103a
barium	20.0	±	0.1	µg/mL	ICP / ICP-MS	3104a
beryllium	20.0	±	0.1	µg/mL	ICP / ICP-MS	3105a
cadmium	20.0	±	0.1	µg/mL	ICP / ICP-MS	3108
calcium	20.0	±	0.1	µg/mL	ICP / ICP-MS	3109a
chromium	20.0	±	0.1	µg/mL	ICP / ICP-MS	3112a
cobalt	20.0	±	0.1	µg/mL	ICP / ICP-MS	3113
copper	20.0	±	0.1	µg/mL	ICP / ICP-MS	3114
iron	20.0	±	0.1	µg/mL	ICP / ICP-MS	3126a
lead	20.0	±	0.1	µg/mL	ICP / ICP-MS	3128
magnesium	20.0	±	0.1	µg/mL	ICP / ICP-MS	3131a
manganese	20.0	±	0.1	µg/mL	ICP / ICP-MS	3132
nickel	20.0	±	0.1	µg/mL	ICP / ICP-MS	3136
potassium	20.0	±	0.1	µg/mL	ICP / ICP-MS	3141a
selenium	20.0	±	0.1	µg/mL	ICP / ICP-MS	3149
* silver	20.0	±	0.1	µg/mL	ICP / ICP-MS	3151
sodium	20.0	±	0.1	µg/mL	ICP / ICP-MS	3152a
thallium	20.0	±	0.1	µg/mL	ICP / ICP-MS	3158
* vanadium	20.0	±	0.1	µg/mL	ICP / ICP-MS	3165
zinc	20.0	±	0.1	µg/mL	ICP / ICP-MS	3168a

Matrix: 5% nitric acid with trace tartaric and hydrofluoric 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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