



Quality System Audited & Registered
by NSF-ISR to ISO 9001:2008

Certificate of Analysis

Rev 0

Catalog No.: 161361-01-03

Lot No.: 1066177

Storage: Ambient store out of direct sun light

Matrix: 2% HNO₃ + Tr HF

Description: Custom 29 Element Mix #361, 500 mL (5 x 100 mL)
mg/L in 2% HNO₃+ Tr HF



ISO 17025 Accredited Chemical Testing Lab
Cert. No. 3031.01

Date Received: 10/9/2014

Expiration Date: 1-Nov-2015

Comment: Platinum and Sulfur Shipped Separately

Element	Symbol	CAS No.	Source Lot No.	Purity %	Concentration mg/L
Silver	Ag	7440-22-4	7000.29.1	99.999	10 +/- .03
Arsenic	As	7440-38-2	7002.46.5	99.9999	10 +/- .03
Boron	B	7440-42-8	7003.46.5	99.999	10 +/- .03
Barium	Ba	7440-39-3	7004.29.3	99.997	10 +/- .03
Beryllium	Be	7440-41-7	7005.46.5	99.999	10 +/- .03
Cadmium	Cd	7440-43-9	7007.46.3	99.9999	10 +/- .03
Cobalt	Co	7440-48-4	7008.46.8	99.995	10 +/- .03
Chromium	Cr	7440-47-3	7009.46.3	99.998	10 +/- .04
Copper	Cu	7440-50-8	7011.46.5	99.9995	10 +/- .03
Manganese	Mn	7439-96-5	7017.46.5	99.95	10 +/- .03
Molybdenum	Mo	7439-98-7	7018.29.3	99.999	10 +/- .03
Nickel	Ni	7440-02-0	7021.46.8	99.995	10 +/- .03
Lead	Pb	7439-92-1	7023.29.3	99.999	10 +/- .03
Antimony	Sb	7440-36-0	7026.46.3	99.999	10 +/- .03
Selenium	Se	7782-49-2	7027.46.4	99.999	10 +/- .03
Tin	Sn	7440-31-5	7029.46.4	99.999	10 +/- .03
Titanium	Ti	7440-32-6	7033.343.1	99.995	10 +/- .03
Thallium	Tl	7440-28-0	7034.29.4	99.99	10 +/- .03
Vanadium	V	7440-62-2	7036.46.5	99.99	10 +/- .03
Zinc	Zn	7440-66-6	7037.46.5	99.9995	10 +/- .03
Zirconium	Zr	7440-67-7	7038.29.2	99.95	10 +/- .03
Aluminum	Al	7429-90-5	7001.46.7	99.9995	50 +/- .2
Calcium	Ca	7440-70-2	7006.29.2	99.999	50 +/- .15
Iron	Fe	7439-89-6	7012.46.14	99.99	50 +/- .15
Magnesium	Mg	7439-95-4	7016.46.5	99.99	50 +/- .15
Sodium	Na	7440-23-5	7020.46.7	99.999	100 +/- .3
Potassium	K	7440-09-7	7013.46.10	99.999	100 +/- .3
Platinum	Pt	7440-06-4	7060.46.1	99.999	10 +/- .03
Sulfur	S	7704-34-9	7025.43.5	95.9	10 +/- .04

Certified By: _____

Tiffany Kwasigroch

This standard was prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only calibrated Class A volumetric glassware was used to prepare this standard. The concentration and uncertainty of this standard are calculated based on the weight and volumes used in the manufacturing process. The uncertainty value is calculated for a 95% confidence interval with a k value of 2. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been spectrometrically certified by an independent source, which is directly traceable to NIST.

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