

Certificate of Analysis

6020 Interference Check Solution B 100mL

Agilent Part Number: 5188-6527

Lot Number: 3-112MKBY2

Analyte	CAS#	Labeled Conc.	Measured Conc.	SRM	Start Mat'l Formula	Start Mat'l Purity	Analyte	CAS#	Labeled Conc.	Measured Conc.	SRM	Start Mat'l Formula	Start Mat'l Purity
Co	7440-48-4	20.0 µg/mL	20.1 µg/mL	3113*	Co	99.99*	As	7440-38-2	10.0 µg/mL	9.91 µg/mL	3103a*	As	99.99*
Cr	7440-47-3	20.0 µg/mL	19.9 µg/mL	3112a*	Cr(NO ₃) ₃ ·9H ₂ O	99.99*	Cd	7440-43-9	10.0 µg/mL	10.0 µg/mL	3106*	CdO	99.99*
Cu	7440-50-8	20.0 µg/mL	19.8 µg/mL	3114*	Cu	99.99*	Se	7782-49-2	10.0 µg/mL	10.0 µg/mL	3149*	Se	99.99*
Mn	7439-96-5	20.0 µg/mL	19.9 µg/mL	3132*	Mn	99.99*	Zn	7440-66-8	10.0 µg/mL	10.1 µg/mL	3168a*	Zn	99.99*
Ni	7440-02-0	20.0 µg/mL	20.0 µg/mL	3136*	Ni	99.99*	Ag	7440-22-4	5.00 µg/mL	5.01 µg/mL	3151*	Ag	99.99*
V	7440-82-2	20.0 µg/mL	19.9 µg/mL	3185*	NH ₄ VO ₃	99.99*							

* - indicates NIST SRM

† - indicates CRM (when NIST SRM is not available)

Purity grades:

Starting Materials: Shown above

Matrix:

5% HNO₃: HNO₃ (CAS No. 7697-37-2) high purity grade

Traceability:

This standard has been produced gravimetrically and volumetrically using ISO 9001 quality procedures. Agilent ICP / ICP-MS Spectrometer was used to determine the concentration of the main elements via NIST SRMs shown above, as well as the impurities. Other reference standards used: 23-120VY, 23-173VY.

Trace Metallic Impurities in the Actual Solution, in µg/L, via Agilent ICP-MS Analysis, results are accurate to ±10%:

Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.
Al	<1	Er	<0.04	Ir	<0.1	P	<200	Sb	0.8	Th	<0.03
Au	<0.2	Eu	<0.03	K	<100	Pb	0.3	Sc	<0.4	Ti	<1
B	<2	Fe	<8	La	<0.08	Pd	<0.4	Si	<100	Tl	<0.1
Ba	0.3	Ga	<0.3	Li	<0.9	Pr	<0.01	Sm	<0.02	Tm	<0.03
Be	<0.1	Gd	<0.03	Lu	<0.04	Pt	<0.2	Sr	<0.2	U	<0.05
Bi	<0.3	Ge	<1	Mg	2	Rb	<0.3	Sr	<0.06	W	<0.4
Ca	<20	Hf	<0.04	Mo	<0.3	Ra	<0.02	Ta	<0.08	Y	<0.02
Ce	<0.01	Hg	<0.8	Na	<5	Rh	<0.1	Tb	<0.01	Yb	<0.06
Cs	<0.1	Ho	<0.03	Nb	<0.1	Ru	0.2	Te	<0.5	Zr	<0.08
Dy	<0.02	In	<0.04	Nd	<0.05						

Balances are calibrated regularly with weight sets traceable to NIST.

Agilent reference standards are guaranteed stable and accurate to ±0.5% of measured analyte concentration. This uncertainty is at 95% confidence interval, a coverage factor of 2. For these solutions we use the highest purity acids applicable, 18 megohm double deionized water and acid-leached, triple rinsed bottles. All glassware used is class A. This standard was manufactured following the guidelines set forth under ISO 17025 and ISO Guide 34 regulations.

Date of release: February 15, 2017

Date of expiration: August 31, 2018

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QC Coordinator