

Certificate of Analysis

ICP-MS Internal Std Mix

Agilent Part Number: 5188-6525
Lot Number: 22-205VYY2

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
Bi	7440-69-9	100 µg/mL	98.4 µg/mL	3106*	Bi	99.99+	Lu	7439-94-3	100 µg/mL	99.3 µg/mL	3130a*	Lu ₂ O ₃	99.99+
Ge	7440-56-4	100 µg/mL	99.5 µg/mL	3120a	GeO ₂	99.99+	Rh	7440-16-6	100 µg/mL	99.9 µg/mL	3144*	Rh(NO ₃) ₃ ·H ₂ O	99.99+
In	7440-74-6	100 µg/mL	99.3 µg/mL	3124a*	In	99.99+	Sc	7440-20-2	100 µg/mL	100 µg/mL	3148a*	Sc(NO ₃) ₃ ·4H ₂ O	99.99+
Li*	7439-93-2	100 µg/mL	100 µg/mL	3129a*	⁶ Li ₂ CO ₃	99.99+	Tb	7440-27-9	100 µg/mL	99.6 µg/mL	3157a*	Tb ₂ O ₃	99.99+

* - indicates NIST SRM

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

Purity grades:

Starting Materials: Shown above

Matrix:

 10% 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: all 8,22-51VY,22-52VY.

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

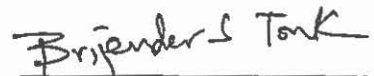
Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.
Ag	<1	Co	<2	Hf	<0.01	Nb	<0.7	Ru	<2	Ti	<3
Al	5	Cr	2	Hg	<1	Nd	<0.2	Sb	<1	Tl	<0.2
As	<10	Cs	<0.6	Ho	0.02	Ni	<30	Se	<50	Tm	0.5
Au	<0.5	Cu	1	Ir	0.7	P	<100	Si	800	U	<0.05
B	6	Dy	0.3	K	30	Pb	2	Sm	<0.1	V	<0.4
Ba	3	Er	0.5	La	0.5	Pd	<2	Sn	<0.9	W	<6
Be	<2	Eu	<0.09	Mg	<3	Pr	<0.1	Sr	<4	Y	1
Ca	80	Fe	20	Mn	<3	Pt	<0.3	Ta	<0.5	Yb	<2
Cd	<0.5	Ga	<1	Mo	<3	Rb	<2	Te	<7	Zn	2
Ce	0.2	Gd	<0.2	Na	250	Ra	<0.08	Th	<0.3	Zr	<3

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. 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.

Date of release: February 15, 2016

Date of expiration: August 31, 2017



 QC Coordinator