



Certificate of Analysis

Bismuth Internal Standard Stock Solution

Agilent Part Number: 8500-6936

Lot Number: 9-107BIY2

Analyte	CAS#	Labeled Conc.	Measured Conc.	SRM	Start Mat'l Formula	Start Mat'l Purity
Bi	7440-69-0	10.0 µg/mL	9.99 µg/mL	3108*	Bi	99.99+

* - indicates NIST SRM

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

Purity grades:

Starting Materials: Shown above

Matrix:

2% 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.

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	<0.03	Ca	<0.01	Ho	<0.01	Nb	<0.04	Ru	<0.01	Th	<0.01
Al	<0.1	Cu	0.01	In	<0.01	Nd	<0.01	Sb	<0.01	Tl	<0.04
As	<0.1	Dy	<0.01	Ir	<0.01	Ni	0.04	Se	<0.01	Ti	<0.03
Au	<0.01	Er	<0.01	K	<0.4	P	<20	Se	<0.2	Tm	<0.01
B	<0.2	Eu	<0.01	La	<0.01	Pb	<0.01	Si	<30	U	<0.01
Ba	<0.01	Fe	0.2	Li	<0.03	Pd	<0.03	Sm	<0.01	V	<0.02
Be	<0.03	Ga	<0.01	Lu	<0.01	Pr	<0.01	Sn	<0.01	W	<0.2
Ce	<0.3	Gd	<0.01	Mg	<0.01	Pt	<0.01	Sr	<0.01	Y	<0.01
Cd	<0.01	Ge	<0.1	Mn	<0.04	Rb	<0.01	Ta	<0.02	Yb	<0.01
Ce	<0.01	Hf	<0.01	Mo	<0.06	Re	<0.01	Tb	<0.01	Zn	0.1
Co	<0.02	Hg	<0.06	Na	4	Rh	<0.01	Te	<0.09	Zr	<0.01
Cr	0.01										

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. This standard was manufactured following the guidelines set forth under ISO 17025 and ISO Guide 34 regulations.

Date of release: January 15, 2017

Date of expiration: July 31, 2018

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