Agilent Technologies

Certificate of Analysis

Abundance Sensitivity (2)

Agilent Part Number: ZHP-19-100 **Lot Number:** 41-68GSY2

Analyte	CAS#	Labeled Conc.	Measured Conc.	SRM	Start Mat'l Formula	Start Mat'l Purity
Cs	7440-46-2	20.0 µg/mL	20.0 µg/mL	3111a*	CsNO3	99.99+

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

Purity grades:

Starting Materials: Shown above

Matrix:

0.5% HNO_3: HNO_3 (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	<0.01	Cr	<0.01	Ho	<0.01	Nb	<0.01	Ru	<0.01	Th	<0.01
Al	0.06	Cu	<0.01	In	<0.01	Nd	<0.01	Sb	<0.01	Ti	<0.01
As	<0.01	Dy	<0.01	Ir	<0.01	Ni	<0.01	Sc	<0.01	Tl	0.2
Au	<0.01	Er	<0.01	K	0.2	P	<50	Se	<0.01	Tm	<0.01
B	<1	Eu	<0.01	La	0.03	Pb	<0.01	Si	<30	U	<0.01
Ba	0.01	Fe	<0.1	Li	<0.01	Pd	<0.01	Sm	<0.01	V	<0.01
Be	<0.01	Ga	<0.01	Lu	<0.01	Pr	<0.01	Sn	<0.03	W	<0.01
Bi	<0.01	Gd	<0.01	Mg	0.1	Pt	<0.01	Sr	<0.01	Y	<0.01
Ca	0.7	Ge	<0.01	Mn	0.2	Rb	0.06	Ta	<0.01	Yb	<0.01
Cd	<0.01	Hf	<0.01	Mo	<0.01	Re	<0.01	Tb	<0.01	Zn	0.3
Ce	<0.01	Hg	<0.01	Na	0.2	Rh	<0.01	Te	<0.01	Zr	<0.01
Co	<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 17034 regulations.

Date of release: September 15, 2022

Date of expiration: December 31, 2023

Brijender S Tonk

QC Coordinator

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