

Certificate of Analysis

7500 Series PA Tuning 2

Agilent Part Number: 5188-6524
Lot Number: 59-101CRY2

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
Ge	7440-56-4	10.0 µg/mL	10.0 µg/mL	3120a*	(NH ₂) ₂ GeF ₆	99.99+	Sb	7440-36-0	10.0 µg/mL	9.99 µg/mL	3102a*	Sb	99.99+
Mo	7439-98-7	10.0 µg/mL	9.91 µg/mL	3134*	MoO ₃	99.99+	Sn	7440-31-5	10.0 µg/mL	9.94 µg/mL	3161a*	Sn	99.99+
Pd	7440-05-3	10.0 µg/mL	9.88 µg/mL	3138*	Pd	99.99+	Ir	7439-88-5	5.00 µg/mL	5.00 µg/mL	1112A†	IrCl ₃ ·3H ₂ O	99.99+
Ru	7440-18-8	10.0 µg/mL	9.88 µg/mL	0512A†	RuCl ₃ ·3H ₂ O	99.99+	Ti	7440-32-6	5.00 µg/mL	4.95 µg/mL	3162a*	(NH ₄) ₂ TiF ₆	99.99+

* - indicates NIST SRM

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

Purity grades:

Starting Materials: Shown above

Matrix:

10% HCl: HCl (CAS No. 7647-01-0) high purity grade

 1% HNO₃: HNO₃ (CAS No. 7697-37-2) high purity grade

0.1% (v/v) HF: HF (CAS No. 7664-39-3) 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: 58-238CR, 59-056CR, 57-146CR, 56-242CR.

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

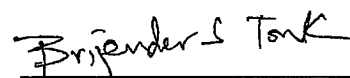
Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.
Ag	3	Ce	0.03	Gd	<0.02	Mn	<0.3	Re	0.2	Th	<0.02
Al	10	Co	<0.2	Hf	<0.02	Na	3	Rh	0.2	Tl	<0.2
As	<1	Cr	0.9	Hg	1	Nb	0.06	Sc	<0.1	Tm	<0.01
Au	0.7	Cs	0.1	Ho	<0.01	Nd	<0.03	Se	<4	U	<0.04
B	<0.4	Cu	<0.3	In	<1	Ni	0.7	Si	<100	V	2
Ba	<0.2	Dy	<0.02	K	1	P	<200	Sm	<0.01	W	1
Be	<0.2	Er	<0.01	La	0.6	Pb	<0.09	Sr	0.1	Y	0.1
Bi	1	Eu	<0.01	Li	5	Pr	0.02	Ta	0.2	Yb	<0.02
Ca	10	Fe	<2	Lu	0.09	Pt	0.2	Tb	<0.1	Zn	<2
Cd	<2	Ga	<0.3	Mg	<2	Rb	<0.3	Te	<0.6	Zr	10

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 17034 regulations.

Date of release: December 31, 2022

Date of expiration: June 30, 2024



 QC Coordinator