

Certificate of Analysis

7500 Series PA Tuning 2

Agilent Part Number: 5188-6524
Lot Number: 58-153CRY2

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	10.1 µg/mL	3120a*	(NH ₂) ₂ GeF ₆	99.99+	Sb	7440-36-0	10.0 µg/mL	10.1 µg/mL	3102a*	Sb	99.99+
Mo	7439-98-7	10.0 µg/mL	10.1 µg/mL	3134*	MoO ₃	99.99+	Sn	7440-31-5	10.0 µg/mL	10.1 µg/mL	3161a*	Sn	99.99+
Pd	7440-05-3	10.0 µg/mL	10.1 µg/mL	3138*	Pd	99.99+	Ir	7439-88-5	5.00 µg/mL	5.03 µg/mL	1112A†	IrCl ₃ ·3H ₂ O	99.99+
Ru	7440-18-8	10.0 µg/mL	10.0 µg/mL	0512A†	RuCl ₃ ·3H ₂ O	99.99+	Ti	7440-32-6	5.00 µg/mL	5.07 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: 56-074CR, 56-242CR, 57-146CR.

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

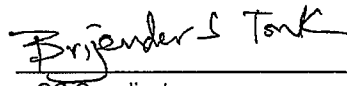
Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.
Ag	0.8	Ce	<0.05	Gd	<0.09	Mn	<1	Re	<0.05	Th	<0.03
Al	4	Co	<0.3	Hf	<0.03	Na	4	Rh	<0.2	Tl	0.7
As	<1	Cr	<1	Hg	0.5	Nb	<0.07	Sc	<2	Tm	<0.04
Au	<1	Cs	0.09	Ho	<0.01	Nd	<0.03	Se	<5	U	<0.04
B	1	Cu	2	In	<0.4	Ni	<0.4	Si	<100	V	4
Ba	<0.1	Dy	<0.01	K	<50	P	<100	Sm	<0.01	W	0.6
Be	<0.3	Er	<0.07	La	0.4	Pb	<0.2	Sr	<0.1	Y	<0.07
Bi	0.8	Eu	<0.01	Li	<2	Pr	0.02	Ta	0.1	Yb	<0.04
Ca	<9	Fe	2	Lu	<0.01	Pt	0.3	Tb	<0.1	Zn	3
Cd	<0.9	Ga	<0.2	Mg	2	Rb	<0.3	Te	<0.2	Zr	9

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: May 15, 2022

Date of expiration: November 30, 2023



 QC Coordinator