

Certificate of Analysis

7500 Series PA Tuning 2

Agilent Part Number: 5188-6524
Lot Number: 3-75MKBY2

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 ₄) ₂ GeF ₆	99.99+	Sb	7440-38-0	10.0 µg/mL	9.94 µg/mL	3102a*	Sb	99.99+
Mo	7439-98-7	10.0 µg/mL	9.94 µg/mL	3134*	MoO ₃	99.99+	Sn	7440-31-5	10.0 µg/mL	10.0 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	4.98 µg/mL	1112A†	IrCl ₃ ·3H ₂ O	99.99+
Ru	7440-18-8	10.0 µg/mL	10.0 µg/mL	5012A†	RuCl ₃ ·3H ₂ O	99.99+	Tl	7440-32-8	5.00 µg/mL	5.02 µg/mL	3162a*	(NH ₄) ₂ TlF 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: 23-51VY, 22-224VY.

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

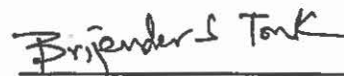
Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.
Ag	0.1	Ce	0.1	Gd	<0.05	Mn	<0.5	Re	0.1	Th	0.4
Al	4	Co	0.2	Hf	0.07	Na	7	Rh	0.3	Tl	<0.03
As	<0.7	Cr	<0.9	Hg	2	Nb	0.3	Sc	<0.4	Tm	<0.04
Au	7	Cs	0.1	Ho	<0.02	Nd	<0.03	Se	<10	U	<0.04
B	0.4	Cu	2	In	<3	Ni	4	Si	<100	V	<2
Ba	0.06	Dy	<0.01	K	<100	P	<100	Sm	<0.04	W	1
Be	<0.2	Er	<0.05	La	2	Pb	1	Sr	<0.2	Y	0.08
Bi	<1	Eu	<0.03	Li	<1	Pr	<0.02	Ta	3	Yb	<0.05
Ca	20	Fe	10	Lu	<0.02	Pt	1	Tb	0.09	Zn	1
Cd	<0.5	Ga	<0.2	Mg	0.8	Rb	<0.1	Te	<0.8	Zr	0.8

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 Guide 34 regulations.

Date of release: February 15, 2017

Date of expiration: August 31, 2018



 QC Coordinator