Agilent Technologies

Certificate of Analysis

ICP-MS Checkout Solutions for T-Mode

Agilent Part Number: 5184-3563 **Lot Number:** 10-183GS

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
Fe	7439-89-6	10.0 µg/L	10.0 µg/L	3126a*	Fe	99.99+	Se	7782-49-2	10.0 µg/L	10.0 µg/L	3149*	Se	99.99+
Pb	7439-92-1	10.0 µg/L	9.99 µg/L	3128*	PbO	99.99+							

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

Purity grades:

Starting Materials: Shown above

Matrix:

0.2wt% 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. 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: all 8.

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

Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.	Element	Conc.
Ag	<0.01	Co	<0.01	Hg	<0.01	Na	0.05	Ru	<0.01	Ti	<0.01
Al	0.04	Cr	<0.01	Ho	<0.01	Nb	<0.01	Sb	<0.01	Tl	<0.01
As	<0.01	Cs	<0.01	In	<0.01	Nd	<0.01	Sc	<0.01	Tm	<0.01
Au	<0.01	Cu	<0.01	Ir	<0.01	Ni	<0.01	Si	<5	U	<0.01
B	<0.02	Dy	<0.01	K	<0.1	P	<10	Sm	<0.01	V	<0.01
Ba	<0.01	Er	<0.01	La	<0.01	Pd	<0.01	Sn	<0.01	W	<0.01
Be	<0.01	Eu	<0.01	Li	<0.01	Pr	<0.01	Sr	<0.01	Y	<0.01
Bi	<0.01	Ga	<0.01	Lu	<0.01	Pt	<0.01	Ta	<0.01	Yb	<0.01
Ca	<0.1	Gd	<0.01	Mg	<0.01	Rb	<0.01	Tb	<0.01	Zn	<0.03
Cd	<0.01	Ge	<0.01	Mn	<0.01	Re	<0.01	Te	<0.01	Zr	<0.01
Ce	<0.01	Hf	<0.01	Mo	<0.01	Rh	<0.01	Th	<0.01		

Balances are calibrated regularly with weight sets traceable to NIST.

Agilent reference standards are guaranteed stable and accurate to ±1% 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.

Date of release: October 15, 2010

Date of expiration: January 31, 2012

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