

Expiration Date: 7/11/2010

Certificate of Analysis

Catalog No: 060073-01-01

Lot No: 1014462

Storage: Ambient

Quality System Audited & Registered by NSF-ISR to ISO 9001:2000

Specific Gravity: 1.0475

Matrix: $5\% \text{ HNO}_3 + 2\% \text{ HF}$

Description: Tantalum 10,000 mg/L \pm 0.3% in 5% HNO₃ Date Received: _

+2% HF 100 ml

			Source		Concentration		
Element	Symbol	CAS No	Lot No	Purity %	mg/L		
Tantalum	Ta	7440-25-7	7068.46.1	99.99	9998		

This standard has been prepared gravimetrically using balances calibrated with NIST traceable weights. Only Class-A volumetric glassware was used to prepare this product. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been certified by ICP against an independant source which is directly traceable to NIST SRM 3155

This standard was analyzed by ICP-MS for trace impurities. A = Major component, INT = Interferent from the major component.

Trace impurity analysis in µg/L

Li	<0.1	Ca	<1.0	Cu	<0.1	Y	<0.1	Cd	<0.1	Ce	<0.1	Но	<0.1	Re	<0.1	Bi	<0.1
Be	<0.1	Ti	<0.1	Zn	<0.1	Zr	<0.1	In	<0.1	Pr	<0.1	Er	<0.1	Os	<0.1	Th	<0.1
В	<1.0	V	<0.1	Ga	<0.1	Nb	<0.1	Sn	<0.1	Nd	<0.1	Tm	<0.1	Ir	<0.1	U	<0.1
Na	<1.0	Cr	<0.1	Ge	<0.1	Мо	20	Sb	<0.1	Sm	<0.1	Yb	<0.1	Pt	<0.1		
Mg	<1.0	Mn	<0.1	As	<0.1	Ru	<0.1	Те	<0.1	Eu	<0.1	Lu	<0.1	Au	<0.1		
Al	50	Fe	<1.0	Se	<0.1	Rh	<0.1	Cs	<0.1	Gd	<0.1	Hf	40	Hg	<0.1		
P	<1.0	Co	<0.1	Rb	<0.1	Pd	<0.1	Ba	<0.1	ТЪ	<0.1	Ta	Α	Tl	<0.1		
K	<1.0	Ni	< 0.1	Sr	<0.1	Ag	<0.1	La	<0.1	Dy	<0.1	W	20	Pb	<0.1		

Certified By:	Mark	Fille	Mark Filla
Cortifica by.			

This standard was prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only calibrated Class A volumetric glassware was used to prepare this standard. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been spectrometrically certified by an independent source, which is directly traceable to NIST.