Arlington, TX 76012
Pocomoke City, MD 21851
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Product Specification

Tantalum ICP Standard, 10,000 ppm Ta in 2% HF

Lot Number: SAMPLE Product Number: PTA10KW

Manufacture Date: N/A
Expiration Date: N/A

This is a single element solution that was prepared volumetrically to contain the certified value reported. The uncertainty associated with the certified value is the sum of the estimated errors due to the purity of the raw material, the volumetric preparation of the solution, and transpiration of the solution through the container wall.

The final solution concentration is confirmed by AA, ICP, or ICP-MS, and is traceable to NIST Standard Reference Material 3155. All trace level elements were determined by ICP or ICP-MS.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Ammonium Heptafluorotantalate	12022-02-5	High Purity
Hydrofluoric Acid	7664-39-3	Trace Metals

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	N/A	
Tantalum (Ta)	9950-10050 ppm	N/A	3155

Tantalum (Ta)		9950	9950-10050 ppm			3155
		Trace Elements by		I=Spectral	Interference	N=Not Tested
		All values reporte	ed in mg/L (ppm)			
Aluminum (Al)	N/A	Lanthanum (La)	N/A	Sodium (Na)	N/A	
Antimony (Sb)	N/A	Lead (Pb)	N/A	Strontium (Sr)	N/A	
Arsenic (As)	N/A	Lithium (Li)	N/A	Sulfur (S)	N/A	
Barium (Ba)	N/A	Lutetium (Lu)	N/A	Tellurium (Te)	N/A	
Beryllium (Be)	N/A	Magnesium (Mg)	N/A	Terbium (Tb)	N/A	
Bismuth (Bi)	N/A	Manganese (Mn)	N/A	Thallium (Tl)	N/A	
Boron (B)	N/A	Mercury (Hg)	N/A	Thorium (Th)	N/A	
Cadmium (Cd)	N/A	Molybdenum (Mo)	N/A	Thulium (Tm)	N/A	
Calcium (Ca)	N/A	Neodymium (Nd)	N/A	Tin (Sn)	N/A	
Cerium (Ce)	N/A	Nickel (Ni)	N/A	Titanium (Ti)	N/A	
Cesium (Cs)	N/A	Niobium (Nb)	N/A	Tungsten (W)	N/A	
Chromium (Cr)	N/A	Osmium (Os)	N/A	Uranium (U)	N/A	
Cobalt (Co)	N/A	Palladium (Pd)	N/A	Vanadium (V)	N/A	
Copper (Cu)	N/A	Phosphorus (P)	N/A	Ytterbium (Yb)	N/A	
Dysprosium (Dy)	N/A	Platinum (Pt)	N/A	Yttrium (Y)	N/A	
Erbium (Er)	N/A	Potassium (K)	N/A	Zinc (Zn)	N/A	
Europium (Eu)	N/A	Praseodymium (Pr)	N/A	Zirconium (Zr)	N/A	
Gadolinium (Gd)	N/A	Rhenium (Re)	N/A			
Gallium (Ga)	N/A	Rhodium (Rh)	N/A			
Germanium (Ge)	N/A	Rubidium (Rb)	N/A			
Gold (Au)	N/A	Ruthenium (Ru)	N/A			
Hafnium (Hf)	N/A	Samarium (Sm)	N/A			
Holmium (Ho)	N/A	Scandium (Sc)	N/A			
Indium (In)	N/A	Selenium (Se)	N/A			
Iridium (Ir)	N/A	Silicon (Si)	N/A			
Iron (Fe)	N/A	Silver (Ag)	N/A			

Version: 1.3 Lot Number: SAMPLE Product Number: PTA10KW Page 1 of 2

Specification	Reference
Tantalum ICP, 10K ppm in H2O	EPA (200.7)

This standard is guaranteed to be stable and accurate provided the product is kept tightly capped and stored under normal laboratory conditions. Balances are calibrated using NIST traceable weights whose verification of maintenance and recalibration is documented per in-house Standard Operating Procedures. Class A glassware is also calibrated and routinely rechecked per in-house Standard Operating Procedures. Trace metal analyzed acids and Trace Metals Analyzed Water are used in the manufacture of this product. Triple cleaned containers are used in the manufacture of this product.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
PTA10KW-100	100 mL natural LDPE	18 months
PTA10KW-50	50 mL natural poly	18 months

Recommended Storage: $15^{\circ}\text{C} - 30^{\circ}\text{C} (59^{\circ}\text{F} - 86^{\circ}\text{F})$

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Version: 1.3 Lot Number: SAMPLE Product Number: PTA10KW Page 2 of 2