



Product Specification

Tungsten ICP Standard, 1000 ppm W in H₂O/tr NH₄OH

Lot Number: SAMPLE

Product Number: PW1KW

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 3163. All trace level elements were determined by ICP or ICP-MS.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Ammonium Tungstate	11120-25-5	
Ammonium Hydroxide	1336-21-6	Trace Metals

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	N/A	
Tungsten (W)	995-1005 ppm	N/A	3163

Trace Elements by ICP or ICP - MS

I=Spectral Interference N=Not Tested

All values reported 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	Tantalum (Ta)	N/A
Beryllium (Be)	N/A	Magnesium (Mg)	N/A	Tellurium (Te)	N/A
Bismuth (Bi)	N/A	Manganese (Mn)	N/A	Terbium (Tb)	N/A
Boron (B)	N/A	Mercury (Hg)	N/A	Thallium (Tl)	N/A
Cadmium (Cd)	N/A	Molybdenum (Mo)	N/A	Thorium (Th)	N/A
Calcium (Ca)	N/A	Neodymium (Nd)	N/A	Thulium (Tm)	N/A
Cerium (Ce)	N/A	Nickel (Ni)	N/A	Tin (Sn)	N/A
Cesium (Cs)	N/A	Niobium (Nb)	N/A	Titanium (Ti)	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		

Specification	Reference	
Tungsten ICP Standard, 1 mL = 1 mg W (1,000 ppm W) in Water / t Ammonium Hydroxide	EPA (200.7)	
Part Number	Size / Package Type	Shelf Life (Unopened Container)
PW1KW-100	100 mL natural LDPE	18 months
PW1KW-500	500 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

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