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

Product Specification

Selenium ICP Standard, 10,000 ppm Se in 5% HNO₃

Lot Number: SAMPLE Product Number: PSE10KN

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 3149. All trace level elements were determined by ICP or ICP-MS.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Nitric Acid	7697-37-2	Trace Metals
Selenium	7782-49-2	High Purity

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	N/A	
Selenium (Se)	9950-10050 ppm	N/A	3149

Selenium (Se)		995	0-10050 ppm	N/A		3149
			y ICP or ICP - MS	I=Spectral	Interference	N=Not Tested
		·	ted in mg/L (ppm)			
Aluminum (Al)	N/A	Lanthanum (La)	N/A	Strontium (Sr)	N/A	
Antimony (Sb)	N/A	Lead (Pb)	N/A	Sulfur (S)	N/A	
Arsenic (As)	N/A	Lithium (Li)	N/A	Tantalum (Ta)	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 (P	r) 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	Silicon (Si)	N/A			
Iridium (Ir)	N/A	Silver (Ag)	N/A			
Iron (Fe)	N/A	Sodium (Na)	N/A			

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Specification	Reference
Selenium ICP Standard, 1 mL = 10 mg Se (10,000 ppm Se)	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)
PSE10KN-100	100 mL natural LDPE	18 months
PSE10KN-50	50 mL natural poly	18 months
PSE10KN-500	500 mL natural poly	18 months

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

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