

Product Specification

Manganese ICP Standard, 1000 ppm Mn in 3% HNO₃

Lot Number: SAMPLE

Product Number: PMN1KN

Manufacture Date: N/A

Expiration Date: N/A

The final solution concentration is confirmed by AA, ICP, or ICP-MS, and is traceable to NIST Standard Reference Material 3132. 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
Manganese Acetate Tetrahydrate	6156-78-1	High Purity

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	N/A	
Assay (vs. EDTA/Eriochrome Black T)	995-1005 ppm Mn	N/A	915

Trace Elements by ICP or ICP - MS

I=Spectral Interference N=Not Tested

All values reported in mg/L (ppm)

Aluminum (Al)	N/A	Lutetium (Lu)	N/A	Thorium (Th)	N/A
Antimony (Sb)	N/A	Magnesium (Mg)	N/A	Thulium (Tm)	N/A
Arsenic (As)	N/A	Mercury (Hg)	N/A	Tin (Sn)	N/A
Barium (Ba)	N/A	Molybdenum (Mo)	N/A	Titanium (Ti)	N/A
Beryllium (Be)	N/A	Neodymium (Nd)	N/A	Tungsten (W)	N/A
Bismuth (Bi)	N/A	Nickel (Ni)	N/A	Uranium (U)	N/A
Boron (B)	N/A	Niobium (Nb)	N/A	Vanadium (V)	N/A
Cadmium (Cd)	N/A	Osmium (Os)	N/A	Ytterbium (Yb)	N/A
Calcium (Ca)	N/A	Palladium (Pd)	N/A	Yttrium (Y)	N/A
Cerium (Ce)	N/A	Phosphorus (P)	N/A	Zinc (Zn)	N/A
Cesium (Cs)	N/A	Platinum (Pt)	N/A	Zirconium (Zr)	N/A
Chromium (Cr)	N/A	Potassium (K)	N/A		
Cobalt (Co)	N/A	Praseodymium (Pr)	N/A		
Copper (Cu)	N/A	Rhenium (Re)	N/A		
Dysprosium (Dy)	N/A	Rhodium (Rh)	N/A		
Erbium (Er)	N/A	Rubidium (Rb)	N/A		
Europium (Eu)	N/A	Ruthenium (Ru)	N/A		
Gadolinium (Gd)	N/A	Samarium (Sm)	N/A		
Gallium (Ga)	N/A	Scandium (Sc)	N/A		
Germanium (Ge)	N/A	Selenium (Se)	N/A		
Gold (Au)	N/A	Silicon (Si)	N/A		
Hafnium (Hf)	N/A	Silver (Ag)	N/A		
Holmium (Ho)	N/A	Sodium (Na)	N/A		
Indium (In)	N/A	Strontium (Sr)	N/A		
Iridium (Ir)	N/A	Sulfur (S)	N/A		
Iron (Fe)	N/A	Tantalum (Ta)	N/A		
Lanthanum (La)	N/A	Tellurium (Te)	N/A		
Lead (Pb)	N/A	Terbium (Tb)	N/A		
Lithium (Li)	N/A	Thallium (Tl)	N/A		

Specification	Reference
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Manganese ICP Standard, 1 mL = 1 mg Mn (1,000 ppm Mn) 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)
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PMN1KN-100 100 mL natural LDPE 18 months

PMN1KN-500 500 mL natural poly 18 months

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

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