



# ICP-MS Standards

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## ICP-MS Standards

All ICP-MS Standards produced by CPAchem use high-purity metals or salts in sub-boiling distilled acids. The Standards are produced and calibrated under CPAchem's quality system that is:

- ISO 9001 certified
- accredited according to ISO/IEC 17025 - Testing
- accredited according to ISO/IEC 17034 - Reference Material Producer

## ICP-MS Single-Element Standards

10 mg/l

Ref. Number	Description	Volume	Msr. Unit	Shelf-life (months)	ISO 17034 ISO 17025
M401.2NP.L1	Silver Ag - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Ag 99.999%)	100	ml	12	Yes
M402.2NP.L1	Aluminium Al - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Al(NO <sub>3</sub> ) <sub>3</sub> - 99.999%)	100	ml	12	Yes
M403.2NP.L1	Arsenic As - 10 mg/l in HNO <sub>3</sub> for ICP-MS (As 99.9995%)	100	ml	12	Yes
M404.2CP.L1	Gold Au - 10 mg/l in HCl for ICP-MS (Au 99.999%)	100	ml	12	Yes
M405.W.L1	Boron B - 10 mg/l in H <sub>2</sub> O for ICP-MS ((NH <sub>4</sub> ) <sub>2</sub> B <sub>4</sub> O <sub>7</sub> 99.999%)	100	ml	12	Yes
M406.2NP.L1	Barium Ba - 10 mg/l in HNO <sub>3</sub> for ICP-MS (BaCO <sub>3</sub> 99.999%)	100	ml	12	Yes
M407.2NP.L1	Beryllium Be - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Be <sub>4</sub> O(C <sub>2</sub> H <sub>3</sub> O <sub>2</sub> ) <sub>6</sub> , 99.999%)	100	ml	12	Yes
M408.2NP.L1	Bismuth Bi - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Bi 99.999%)	100	ml	12	Yes
M409.2NP.L1	Calcium Ca - 10 mg/l in HNO <sub>3</sub> for ICP-MS (CaCO <sub>3</sub> 99.999%)	100	ml	12	Yes
M410.2NP.L1	Cadmium Cd - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Cd 99.9999%)	100	ml	12	Yes
M411.2NP.L1	Cerium Ce - 10 mg/l in 2% HNO <sub>3</sub> for ICP-MS (Ce(NO <sub>3</sub> ) <sub>3</sub> 99.999%)	100	ml	12	Yes
M412.2NP.L1	Cobalt Co - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Co 99.999%)	100	ml	12	Yes
M413.2NP.L1	Chromium Cr - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Cr(NO <sub>3</sub> ) <sub>3</sub> 99.999%)	100	ml	12	Yes
M414.2NP.L1	Cesium Cs - 10 mg/l in HNO <sub>3</sub> for ICP-MS (CsNO <sub>3</sub> 99.999%)	100	ml	12	Yes
M415.2NP.L1	Copper Cu - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Cu 99.999%)	100	ml	12	Yes
M416.2NP.L1	Dysprosium Dy - 10 mg/l in 2% HNO <sub>3</sub> for ICP-MS (Dy <sub>2</sub> O <sub>3</sub> 99.999%)	100	ml	12	Yes
M417.2NP.L1	Erbium Er - 10 mg/l in 2% HNO <sub>3</sub> for ICP-MS (Er <sub>2</sub> O <sub>3</sub> 99.999%)	100	ml	12	Yes
M418.2NP.L1	Europium Eu - 10 mg/l in 2% HNO <sub>3</sub> for ICP-MS (Eu <sub>2</sub> O <sub>3</sub> 99.999%)	100	ml	12	Yes
M419.2NP.L1	Iron Fe - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Fe(NO <sub>3</sub> ) <sub>3</sub> , 99.9995%)	100	ml	12	Yes
M420.2NP.L1	Gallium Ga - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Ga 99.999%)	100	ml	12	Yes
M421.2NP.L1	Gadolinium Gd - 10 mg/l in 2% HNO <sub>3</sub> for ICP-MS (Gd <sub>2</sub> O <sub>3</sub> 99.999%)	100	ml	12	Yes
M422.2N02FP.L1	Germanium Ge - 10 mg/l in HNO <sub>3</sub> /tr.HF for ICP-MS (Ge 99.999%)	100	ml	12	Yes
M423.2N05FP.L1	Hafnium Hf - 10 mg/l in 2% HNO <sub>3</sub> /0.5% HF for ICP-MS (HfO <sub>2</sub> 99.995%)	100	ml	12	Yes
M424.5NP.L1	Mercury Hg - 10 mg/l in 5% HNO <sub>3</sub> for ICP-MS (HgO 99.999+%)	100	ml	12	Yes
M425.2NP.L1	Holmium Ho - 10 mg/l in HNO <sub>3</sub> for ICP-MS (HoO <sub>3</sub> 99.99%)	100	ml	12	Yes
M426.2NP.L1	Indium In - 10 mg/l in HNO <sub>3</sub> for ICP-MS (In 99.999%)	100	ml	12	Yes

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M427.2CP.L1	Iridium Ir - 10 mg/l in 2% HCl for ICP-MS ((NH <sub>4</sub> ) <sub>2</sub> IrCl <sub>6</sub> 99.99%)	100	ml	12	Yes
M428.2NP.L1	Potassium K - 10 mg/l in HNO <sub>3</sub> for ICP-MS (KNO <sub>3</sub> 99.999%)	100	ml	12	Yes
M429.2NP.L1	Lanthanum La - 10 mg/l in HNO <sub>3</sub> for ICP-MS (La <sub>2</sub> O <sub>3</sub> 99.999%)	100	ml	12	Yes
M430.2NP.L1	Lithium Li - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Li <sub>2</sub> CO <sub>3</sub> 99.999%)	100	ml	12	Yes
M431.2NP.L1	Lutetium Lu - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Lu <sub>2</sub> O <sub>3</sub> 99.99%)	100	ml	12	Yes
M432.2NP.L1	Magnesium Mg - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Mg(NO <sub>3</sub> ) <sub>2</sub> , 99.999%)	100	ml	12	Yes
M433.2NP.L1	Manganese Mn - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Mn(NO <sub>3</sub> ) <sub>2</sub> , 99.999%)	100	ml	12	Yes
M434.W.L1	Molybdenum Mo - 10 mg/l in H <sub>2</sub> O for ICP-MS ((NH <sub>4</sub> ) <sub>2</sub> MoO <sub>4</sub> , 99.999%)	100	ml	12	Yes
M435.2NP.L1	Sodium Na - 10 mg/l in HNO <sub>3</sub> for ICP-MS (NaNO <sub>3</sub> 99.999%)	100	ml	12	Yes
M436.2N05FP.L1	Niobium Nb - 10 mg/l in 2% HNO <sub>3</sub> / 0.5% HF for ICP-MS (Nb 99.9+%)	100	ml	12	Yes
M437.2NP.L1	Neodymium Nd - 10 mg/l in 2% HNO <sub>3</sub> for ICP-MS (Nd <sub>2</sub> O <sub>3</sub> 99.999%)	100	ml	12	Yes
M438.2NP.L1	Nickel Ni - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Ni(NO <sub>3</sub> ) <sub>2</sub> 99.9998%)	100	ml	12	Yes
M440.W.L1	Phosphorus P - 10 mg/l in H <sub>2</sub> O for ICP-MS (NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> 99.999%)	100	ml	12	Yes
M441.2NP.L1	Lead Pb - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Pb(NO <sub>3</sub> ) <sub>2</sub> 99.9995%)	100	ml	12	Yes
M442.2NP.L1	Palladium Pd - 10 mg/l in 2% HNO <sub>3</sub> for ICP-MS (Pd 99.999%)	100	ml	12	Yes
M443.2NP.L1	Praseodymium Pr - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Pr <sub>6</sub> O <sub>11</sub> 99.999%)	100	ml	12	Yes
M444.2CP.L1	Platinum Pt - 10 mg/l in HCl for ICP-MS (Pt 99.999%)	100	ml	12	Yes
M445.2NP.L1	Rubidium Rb - 10 mg/l in 2% HNO <sub>3</sub> for ICP-MS (RbNO <sub>3</sub> 99.99%)	100	ml	12	Yes
M446.2NP.L1	Rhenium Re - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Re 99.995+%)	100	ml	12	Yes
M447.2CP.L1	Rhodium Rh - 10 mg/l in 2% HCl for ICP-MS (RhCl <sub>3</sub> 99.99%)	100	ml	12	Yes
M448.2CP.L1	Ruthenium Ru - 10 mg/l in 2% HCl for ICP-MS (RuCl <sub>3</sub> 99.99%)	100	ml	12	Yes
M449.W.L1	Sulphur S - 10 mg/l in H <sub>2</sub> O for ICP-MS ((NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> 99.999%)	100	ml	12	Yes
M450.2N05FP.L1	Antimony Sb - 10 mg/l in HNO <sub>3</sub> /tr.HF for ICP-MS (Sb 99.999%)	100	ml	12	Yes
M451.2NP.L1	Scandium Sc - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Sc(NO <sub>3</sub> ) <sub>3</sub> 99.999%)	100	ml	12	Yes
M452.2NP.L1	Selenium Se - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Se 99.999%)	100	ml	12	Yes
M453.W.L1	Silicon Si - 10 mg/l in H <sub>2</sub> O for ICP-MS ((NH <sub>4</sub> ) <sub>2</sub> SiF <sub>6</sub> 99.999%)	100	ml	12	Yes
M454.2NP.L1	Samarium Sm - 10 mg/l in 2% HNO <sub>3</sub> for ICP-MS (Sm <sub>2</sub> O <sub>3</sub> 99.999%)	100	ml	12	Yes
M455.1N05FP.L1	Tin Sn - 10 mg/l in HNO <sub>3</sub> /tr.HF for ICP-MS (Sn 99.9999%)	100	ml	12	Yes
M456.2NP.L1	Strontium Sr - 10 mg/l in HNO <sub>3</sub> for ICP-MS (SrCO <sub>3</sub> 99.999%)	100	ml	12	Yes
M457.2N05FP.L1	Tantalum Ta - 10 mg/l in 2% HNO <sub>3</sub> /0.5% HF for ICP-MS (Ta 99.99+%)	100	ml	12	Yes
M458.2NP.L1	Terbium Tb - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Tb(NO <sub>3</sub> ) <sub>3</sub> 99.999%)	100	ml	12	Yes
M459.2NP.L1	Tellurium Te - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Te 99.999%)	100	ml	12	Yes
M461.2N02FP.L1	Titanium Ti - 10 mg/l in HNO <sub>3</sub> /tr.HF for ICP-MS ((NH <sub>4</sub> ) <sub>2</sub> TiF <sub>6</sub> , 99.998%)	100	ml	12	Yes
M462.2NP.L1	Thallium Tl - 10 mg/l in HNO <sub>3</sub> for ICP-MS (TlNO <sub>3</sub> 99.999%)	100	ml	12	Yes
M463.2NP.L1	Thulium Tm - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Tm <sub>2</sub> O <sub>3</sub> 99.999%)	100	ml	12	Yes
M464.2NP.L1	Uranium U - 10 mg/l in HNO <sub>3</sub> for ICP-MS (UO <sub>2</sub> (OOCCH <sub>3</sub> ) <sub>2</sub> 99.99%)	100	ml	12	Yes
M465.2NP.L1	Vanadium V - 10 mg/l in HNO <sub>3</sub> for ICP-MS (NH <sub>4</sub> VO <sub>3</sub> 99.999%)	100	ml	12	Yes
M466.W.L1	Tungsten W - 10 mg/l in 0.05% NH <sub>3</sub> for ICP-MS (WO <sub>3</sub> 99.999%)	100	ml	12	Yes
M467.2NP.L1	Yttrium Y - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Y <sub>2</sub> O <sub>3</sub> 99.999%)	100	ml	12	Yes
M468.2NP.L1	Ytterbium Yb - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Yb <sub>2</sub> O <sub>3</sub> 99.999%)	100	ml	12	Yes

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M469.2NP.L1	Zinc Zn - 10 mg/l in HNO <sub>3</sub> for ICP-MS (Zn 99.999%)	100	ml	12	Yes
M470.2N05FP.L1	Zirconium Zr - 10 mg/l in HNO <sub>3</sub> /HF for ICP-MS (ZrO(NO <sub>3</sub> ) <sub>2</sub> 99.99%)	100	ml	12	Yes