

104.5 - Spectrometry, Single Element Standard Solutions

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- Instructions: http://www.nist.gov/mml/csd/inorganic/upload/SRM-3100_Version-1-2-Instructions.pdf
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SRM	Description	Unit of Issue	Nominal Acid Concentration of Matrix	Nominal Mass Fraction (mg/g)	NRC License or Equivalent Required*
3030	Monomethylarsonic Acid Standard Solution	2 x 5 mL	H ₂ O	0.01746	
3031	Dimethylarsinic Acid Standard SRM Solution	2 x 5 mL	H ₂ O	0.02047	
3033	Arsenobetaine Standard Solution	2 x 5 mL	H ₂ O	0.01906	
3034	Arsenocholine Standard Solution	2 x 5 mL	H ₂ O	0.01977	
3036	Arsenic Acid (AsV) Standard Solution	2 x 10 mL	HNO ₃ 1%	1	--
3037	Arsenous Acid (AsIII) Standard Solution	2 x 10 mL	HCl 1%	1	--
3101a	Aluminum (Al) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3102a	Antimony (Sb) Standard Solution	50 mL	HNO ₃ 10% + HF 2%	10	--
3103a	Arsenic (As) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3104a	Barium (Ba) Standard Solution	50 mL	HNO ₃ 1%	7	--
3105a	Beryllium (Be) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3106	Bismuth (Bi) Standard Solution	5 x 10 mL	HNO ₃ 13%	10	--
3107	Boron (B) Standard Solution	50 mL	H ₂ O	5	--
3108	Cadmium (Cd) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3109a	Calcium (Ca) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3110	Cerium (Ce) Standard Solution	5 x 10 mL	HNO ₃ 16%	10	--
3111a	Cesium (Cs) Standard Solution	5 x 10 mL	HNO ₃ 1%	10	--
3112a	Chromium (Cr) Standard Solution	5 x 10 mL	HNO ₃ 15%	10	--
3113	Cobalt (Co) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3114	Copper (Cu) Standard Solution	50 mL	HNO ₃ 10%	10	--
3115a	Dysprosium (Dy) Standard Solution	5 x 10 mL	HNO ₃ 14%	10	--
3116a	Erbium (Er) Standard Solution	5 x 10 mL	HNO ₃ 12%	10	--
3117a	Europium (Eu) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3118a	Gadolinium (Gd) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3119a	Gallium (Ga) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3120a	Germanium (Ge) Standard Solution	50 mL	HNO ₃ 10% + HF 2%	10	--
3121	Gold (Au) Standard Solution	5 x 10 mL	HCl 9%	10	--
3122	Hafnium (Hf) Standard Solution	50 mL	HNO ₃ 10% + HF 2%	10	--
3123a	Holmium (Ho) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3124a	Indium (In) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--

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3126a	Iron (Fe) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3127a	Lanthanum (La) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3128	Lead (Pb) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3129a	Lithium (Li) Standard Solution	5 x 10 mL	HNO ₃ 1%	10	--

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3130a	Lutetium (Lu) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3131a	Magnesium (Mg) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3132	Manganese (Mn) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3133	Mercury (Hg) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3134	Molybdenum (Mo) Standard Solution	5 x 10 mL	HCl 10%	10	--
3135a	Neodymium (Nd) Standard Solution	5 x 10 mL	HNO ₃ 10%	9	--
3136	Nickel (Ni) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3137	Niobium (Nb) Standard Solution	50 mL	HNO ₃ 10% + HF 3%	10	--
3138	Palladium (Pd) Standard Solution	5 x 10 mL	HCl 8%	10	--
3139a	Phosphorus (P) Standard Solution	5 x 10 mL	HNO ₃ 0.8%	10	--
3140	Platinum (Pt) Standard Solution	5 x 10 mL	HCl 10%	10	--
3141a	Potassium (K) Standard Solution	5 x 10 mL	HNO ₃ 1%	10	--
3142a	Praseodymium (Pr) Standard Solution	5 x 10 mL	HNO ₃ 17%	10	--
3143	Rhenium (Re) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3144	Rhodium (Rh) Standard Solution	5 x 10 mL	HCl 6%	1	--
3145a	Rubidium (Rb) Standard Solution	5 x 10 mL	HNO ₃ 1%	10	--
3147a	Samarium (Sm) Standard Solution	5 x 10 mL	HNO ₃ 10%	9	--
3148a	Scandium (Sc) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3149	Selenium (Se) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3150	Silicon (Si) Standard Solution	50 mL	H ₂ O	10	--
3151	Silver (Ag) Standard Solution	5 x 10 mL	HNO ₃ 14%	10	--
3152a	Sodium (Na) Standard Solution	50 mL	HNO ₃ 1%	10	--
3153a	Strontium (Sr) Standard Solution	5 x 10 mL	HNO ₃ 10%	9	--
3154	Sulfur (S) Standard Solution	5 x 10 mL	H ₂ SO ₄ 0.1%	10	--
3155	Tantalum (Ta) Standard Solution	50 mL	HNO ₃ 13% + HF 1%	10	--
3156	Tellurium (Te) Standard Solution	5 x 10 mL	HCl 10%	10	--
3157a	Terbium (Tb) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--

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3158	Thallium (Tl) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3160a	Thulium (Tm) Standard Solution	5 x 10 mL	HNO ₃ 10%	13	--
3161a	Tin (Sn) Standard Solution	50 mL	HNO ₃ 5% + HF 1%	10	--
3162a	Titanium (Ti) Standard Solution	50 mL	HNO ₃ 10% + HF 2%	10	--
3163	Tungsten (W) Standard Solution	50 mL	HNO ₃ 7% + HF 4%	10	--
3164	Uranium (U) Standard Solution (Radioactive)	5 x 10 mL	HNO ₃ 10%	10	X
3165	Vanadium (V) Standard Solution	5 x 10 mL	HNO ₃ 10%	5	--

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3166a	Ytterbium (Yb) Standard Solution	5 x 10 mL	HNO ₃ 10%	9	--
3167a	Yttrium (Y) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3168a	Zinc (Zn) Standard Solution	5 x 10 mL	HNO ₃ 10%	10	--
3169	Zirconium (Zr) Standard Solution	50 mL	HNO ₃ 10% + HF 2%	10	--
3177	Mercuric Chloride (HgCl ₂) Standard Solution	5 x 10 mL	HNO ₃ 3% + HCl 4 %	10	--

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