

Periodensystem der Elemente
 Periodic table of the elements
 Tableau périodique des éléments
 Tabla periódica de los elementos



1 45 102.91 3 2 Rh 1966 4 3 3727 5 4 1.5 7 1 2 3 4 5 6 7 1 2											
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Inorganic salts

Designation	Chemical formula	Package size	Order-No.
Aluminium nitrate nonahydrate GR for Analysis	Al(NO ₃) ₃ · 9 H ₂ O	500 g	1.01063.0500
Antimon(III)-chloride GR for analysis	SbCl ₃	250 g	1.07838.0250
Arsenic lumps GR for analysis	As	25 g	1.00115.0025
Barium chloride dihydrate GR for analysis ACS, ISO	BaCl ₂ · 2 H ₂ O	500 g	1.01719.0500
Bismuth(III)-nitrate basic GR for analysis	Bi ₂ O(OH) ₂ (NO ₃) ₄	100 g	1.01878.0100
di-Boron trioxide for silicate analysis	B ₂ O ₃	250 g	1.00163.0250
Bromine GR for analysis ISO	Br ₂	250 ml	1.01948.0250
Cadmium nitrate tetrahydrate GR for analysis	Cd(NO ₃) ₂ · 4H ₂ O	250 g	1.02019.0250
Calcium hydroxide GR for analysis	Ca(OH) ₂	500 g	1.02047.0500
Cerium(IV) sulfate tetrahydrate GR for analysis	Ce(SO ₄) ₂ · 4H ₂ O	100 g	1.02274.0100
Cesium chloride GR for analysis	CsCl	25 g	1.02038.0025
Chromium(VI)-oxide GR for analysis	CrO ₃	250 g	1.00229.0250
Cobalt(II) nitrate hexahydrate GR for analysis	Co(NO ₃) ₂ · 6H ₂ O	100 g	1.02536.0100
Copper(II) sulfate pentahydrate GR for analysis ACS, ISO	CuSO ₄ · 5H ₂ O	250 g	1.02790.0250
Iron(II)-chloride GR for analysis	FeCl ₂ · 4H ₂ O	500 g	1.03861.0500
Gallium(III) nitrate octahydrate 99+	Gal(NO ₃) ₃ · 8H ₂ O	5 g	1.12171.0005
Germanium(IV) oxide 99+	GeO ₂	5 g	1.12177.0005
Gold powder 99+	Au	5 g	1.19212.0002
Holmium(III) oxide LAB	Ho ₂ O ₃	5 g	1.12469.0005
di-Iodine pentoxide GR for analysis granular 0.5–2.5 mm	I ₂ O ₅	100 g	1.00358.0100
Indium(III) sulfate LAB	In ₂ (SO ₄) ₃ · xH ₂ O	25 g	1.12202.0025
Iridium(III) chloride 99+	IrCl ₃	5 g	1.19216.0005
Lanthanum nitrate hexahydrate GR for analysis	La(NO ₃) ₃ · 6H ₂ O	100 g	1.05326.0100
Lead (II) carbonate GR for analysis ACS	PbCO ₃	250 g	1.07381.0250
Lithium chloride GR for analysis	LiCl	100 g	1.05679.0100
Magnesium chloride hexahydrate GR for analysis ACS, ISO	MgCl ₂ · 6H ₂ O	250 g	1.05833.0250
Manganese(II) chloride tetrahydrate GR for analysis ACS	MnCl ₂ · 4H ₂ O	100 g	1.05927.0100
Mercury(II) sulfate GR for analysis	HgSO ₄	50 g	1.04480.0050
Molybdenum(VI) oxide GR for analysis	MoO ₃	100 g	1.00403.0100
Nickel chloride hexahydrate GR for analysis	NiCl ₂ · 6H ₂ O	250 g	1.06717.0250
Niobium(V) oxide 99+	Nb ₂ O ₅	100 g	1.06868.0100
Osmium powder 99+	Os	1 g	1.19222.0001
Palladium(II) sulfate dihydrate 99+	PdSO ₄ · 2H ₂ O	1 g	1.19226.0001
di-Phosphorus pentoxide GR	P ₂ O ₅	100 g	1.00570.0100
Platin	Pt	1 g	1.19232.0001
Potassium carbonate GR for analysis ACS, ISO	K ₂ CO ₃	500 g	1.04928.0500
Rhodium	Rh	1 g	1.19240.0001
Rubidium chloride GR for analysis	RbCl	25 g	1.07615.0025
Ruthenium(III) chloride hydrate	RuCl ₃ · xH ₂ O	5 g	1.19247.0005
Samarium	Sm ₂ O ₃	10 g	1.12321.0100
Scandium dioxide	Sc ₂ O ₃	1 g	1.13139.0001
Selenium black 99+	Se	50 g	1.07714.0050
Silicium dioxide	SiO ₂	500 g	1.13126.0500
Silver nitrate GR for analysis	AgNO ₃	25 g	1.01512.0025
Sodium chloride GR for analysis ACS, ISO	NaCl	500 g	1.06404.0500
Strontium nitrate GR for analysis	Sr(NO ₃) ₂	250 g	1.07872.0250
Sulfur extra pure Ph Eur, BP	S	2,5 kg	1.07983.2500
Tantalum(V) chloride 99+	TaCl ₅	100 g	1.12352.0100
Tellur dioxide	TeO ₂	25 g	1.12356.0025
Terbium oxide	TbOx	1 g	1.12509.0001
Thallium(I) nitrate GR for analysis	TlNO ₃	50 g	1.08144.0050
Tin(II) chloride dihydrate GR for analysis ACS	SnCl ₂ · 2H ₂ O	100 g	1.07814.0100
Titanium(IV) oxide LAB	TiO ₂	500 g	1.00080.0500
Tungsten	W	100 g	1.12406.0100
Vanadium(V) oxide extra pure	V ₂ O ₅	250 g	1.00824.0250
Yttrium(III) nitrate hexahydrate 99+	Y(NO ₃) ₃ · 6H ₂ O	25 g	1.12516.0025
Zinc chloride GR for analysis ACS, ISO	ZnCl ₂	250 g	1.08816.0250
Zirconium(IV) oxide chloride octahydrate GR for analysis	ZrOCl ₂ · 8H ₂ O	100 g	1.08917.0100

Metal indicators

Designation	For complexometric determination of	Indicator solution (preparation)	Package size	Order No.
Alizarin-3-methylamine-N, N-diacetic acid dihydrate	Ba,Cd, Co, In, Hg, Pb, Sn, Zn	0.5% in water or ammonium acetate solution 1 mol/l	1 g	1.01010.0001
Alizarin red S (C. I. 58005)	Al, lanthanides, Mo, Sc, Th, Y, Zr	0.05–0.2% in water	25 g	1.06279.0025
Arsenazo III	Lanthanides, Th, Y	0.1% in water	5 g	1.10107.0005
Aurin tricarboxylic acid ammonium salt (C. I. 43810)	Al, Cu, Fe, Mg	0.2% in water	25 g	1.00128.0025
Calcein	Ba, Ca, Cr, Cu, Mg, Sr	1:100 with KCl or KNO ₃	5 g	1.02315.0005
Calcon® (C. I. 15705)	Ca, Cd, Mg, Zn	0.5% in ethanol (96%) or methanol	50 g	1.04594.0050
Calconcarboxylic acid	Ca	0.4% in methanol or 1:100 with Na ₂ SO ₄ resp. NaCl	5 g	1.04595.0005
Carminic acid (C. I. 75470)	Tl, Zn	0.3% in water	5 g	1.00211.0005
Chromazurol S (C. I. 43825)	Al, Ca, Cu, Fe, lanthanides, Mg, Ni, Th, U, V, Y, Zr	0.1–0.4% in water	25 g	1.02477.0025
1,8-Dihydroxy-2-(4-sulfophenylazo) naphthalene-3,6-disulfonic acid trisodium salt	Th, Zr	0.02–0.4% in water	25 g	1.07998.0025
3,3'-Dimethylnaphthidine	Cd, Zn	1% in glacial acetic acid	1 g	1.03122.0001
1,5-Diphenylcarbazine	Hg, Ni, Pb, V	1% + 0.2% o-phenanthroline in ethanol (96%)	25 g	1.03091.0025
1,5-Diphenylcarbazon		0.2% in ethanol (96%)	5 g	1.03087.0005
Dithizone	Ag, Au, Bi, Cd, Co, Cu, Fe, Hg, In, Mn, Ni, Pb, Sn, Zn	0.025–0.05% in ethanol (96%) or methanol	5 g	1.03092.0005
Eriochrome black T (C. I. 14645)	Ba, Ca, Cd, Hg, In, lanthanides, Mg, Mn, Pb, Zn, Zr	0.05–0.5 in ethanol (96%) or 1:100 with NaCl or 1:200 with saccharose	25 g	1.03170.0025
Eriochrome blue SE (C. I. 16680)	Ca, Cd, Mg, Mn, Ni, Pb, Zn	0.1–0.4% in methanol (25%) or 1:200 with KCl	5 g	1.03340.0005
Eriochrome blue-black B (C. I. 14640)	Ca, Cd, Mg, U, Zn, Zr	0.5% in water or ethanol (96%) or alkaline 2-propanol - solution (33%)	25 g	1.03168.0025
Eriochrome cyanine R (C. I. 43820)	Al, Ca, Cu, Fe, Mg, Th, Zr	0.1–0.4% in water or 0.1% in ethanol	25 g	1.03164.0025
Hydroxynaphthol blue	Ca	1 spatula tip	25 g	1.04593.0025
Indicator buffer tablets	Ca, Zn	1 tablet in 100 ml water	500 x	1.08430.0500
Magnesium reagent acc. to Mann and Yoe (Xylidyl blue)	Mg	0.01% in water	5 g	1.08712.0005
Methylthymol blue sodium salt	Ba, Bi, Ca, Cd, Cu, Fe, Hg, In, lanthanides, Mg, Mn, Pb, Sc, Sn, Th, Ti, Zn, Zr	1% in ethanol (96%) or 1:100 KNO ₃	1 g	1.06084.0001
Morin dihydrate (C. I. 75660)	Al	0.1% in ethanol	5 g	1.06098.0005
Murexide	Ag, Ca, Co, Cu, Mn, Ni, Sc, Th, Zn	1% in water or 1:100 with NaCl or 1:500 with saccharose	5 g	1.06161.0005
Phthalein purple (metal phthalein)	Ba, Ca, Cd, Mg, Sr	0.1% in water or sodium acetate solution 1 mol/l	1 g	1.07297.0001
1-(2-Pyridylazo)-2-naphthol (PAN)	Al, Bi, Cd, Co, Cu, Fe, Ga, Hg, In, Mn, Ni, Pb, Th, Ti, U, V, Zn	0.01–0.1% in ethanol (96%)	1 g	1.07531.0001
4-(2-Pyridylazo)resorcinol monosodium salt monohydrate (PAR)	Al, Bi, Cd, Cu, Fe, Ga, Hg, In, lanthanides, Mn, Ni, Pb, Sr, Th, Ti, Zn	0.05–2% in water	1 g	1.07533.0001
3,5-Pyrocatecholdisulfonic acid disodium salt monohydrate (Tiron)	Fe	2% in water	100 g	1.01922.0100
Pyrocatechol violet	Bi, Cd, Co, Cu, Fe, Ga, In, Mg, Mn, Ni, Pb, Th, Zn	0.1% in water	5 g	1.01919.0005
Pyrogallol red	Bi, Co, Ni, Pb	0.05% in ethanol (50%)	1 g	1.07534.0001
Rhodizonic acid disodium salt	Ba	1% in water	5 g	1.06595.0005
Salicylic acid	Fe, Ti	2% in methanol	25 g	1.59409.0025
Sulfonazo III	Ba	0.1% in water	5 g	1.07995.0005
5-Sulfosalicylic acid dihydrate	Fe, Ti, Ti, V	1–5% in water	100 g	1.00691.0100
Thorin (octahydrate)	Bi, Li, Sc, Th, U, Y	0.5% in water	5 g	1.08294.0005
Thymolphthalexone	Ag, Ba, Ca, Cr, Mn, Sr	1:100 with KNO ₃	5 g	1.08459.0005
Xylenol orange tetrasodium salt	Bi, Ca, Cd, Co, Cu, Fe, Hg, In, lanthanides, Mg, Mn, Pb, Sc, Th, Ti, U, V, Y, Zn, Zr	0.1% in ethanol (50%) or 1:100 with KNO ₃	1 g	1.08677.0001
Zincon	Cd, Hg, Pb, Zn	0.1% in ethanol (96%)	1 g	1.08739.0001

Element Standards for ICP (Concentration 1000 mg/l)

Element	Composition	Package size	Order No.
Aluminium	Al(NO ₃) ₃ in HNO ₃ 2–3%	100 ml	1.70301.0100
Antimony	Sb ₂ O ₃ in HCl 7%	100 ml	1.70302.0100
Arsen	H ₃ AsO ₄ in HNO ₃ 2–3%	100 ml	1.70303.0100
Barium	Ba(NO ₃) ₂ in HNO ₃ 2–3%	100 ml	1.70304.0100
Beryllium	Be ₂ O(C ₂ H ₃ O ₂) ₄ in HNO ₃ 2–3%	100 ml	1.70305.0100
Bismuth	Bi(NO ₃) ₃ in HNO ₃ 2–3%	100 ml	1.70306.0100
Boron	H ₃ BO ₃ in water	100 ml	1.70307.0100
Cadmium	Cd(NO ₃) ₂ in HNO ₃ 2–3%	100 ml	1.70309.0100
Calcium	Ca(NO ₃) ₂ in HNO ₃ 2–3%	100 ml	1.70308.0100
Cerium	Ce(NO ₃) ₃ in HNO ₃ 2–3%	100 ml	1.70311.0100
Cesium	CsNO ₃ in HNO ₃ 2–3%	100 ml	1.70310.0100
Chromium	Cr(NO ₃) ₃ in HNO ₃ 2–3%	100 ml	1.70312.0100
Cobalt	Co(NO ₃) ₂ in HNO ₃ 2–3%	100 ml	1.70313.0100
Copper	Cu(NO ₃) ₂ in HNO ₃ 2–3%	100 ml	1.70314.0100
Dysprosium	Dy ₂ O ₃ in HNO ₃ 2–3%	100 ml	1.70315.0100
Erbium	Er ₂ O ₃ in HNO ₃ 2–3%	100 ml	1.70316.0100
Europium	Eu ₂ O ₃ in HNO ₃ 2–3%	100 ml	1.70317.0100
Gadolinium	Gd ₂ O ₃ in HNO ₃ 2–3%	100 ml	1.70318.0100
Gallium	Gal(NO ₃) ₃ in HNO ₃ 2–3%	100 ml	1.70319.0100
Germanium	(NH ₄) ₂ GeF ₆ in water	100 ml	1.70320.0100
Gold	H[AuCl ₄] in HCl 7%	100 ml	1.70321.0100
Hafnium	HfOCl ₃ in HCl 7%	100 ml	1.70322.0100
Holmium	Ho ₂ O ₃ in HNO ₃ 2–3%	100 ml	1.70323.0100
Indium	In(NO ₃) ₃ in HNO ₃ 2–3%	100 ml	1.70324.0100
Iridium	IrCl ₃ in HCl 7%	100 ml	1.70325.0100
Iron	Fe(NO ₃) ₃ in HNO ₃ 2–3%	100 ml	1.70326.0100
Lanthanum	La(NO ₃) ₃ in HNO ₃ 2–3%	100 ml	1.70327.0100
Lead	Pb(NO ₃) ₂ in HNO ₃ 2–3%	100 ml	1.70328.0100
Lithium	LiNO ₃ in HNO ₃ 2–3%	100 ml	1.70329.0100
Lutetium	Lu ₂ O ₃ in HNO ₃ 2–3%	100 ml	1.70330.0100
Magnesium	Mg(NO ₃) ₂ in HNO ₃ 2–3%	100 ml	1.70331.0100
Manganese	Mn(NO ₃) ₂ in HNO ₃ 2–3%	100 ml	1.70332.0100
Mercury	Hg(NO ₃) ₂ in HNO ₃ 10%	100 ml	1.70333.0100
Molybdenum	(NH ₄) ₂ MoO ₄ in water	100 ml	1.70334.0100
Neodymium	Nd ₂ O ₃ in HNO ₃ 2–3%	100 ml	1.70335.0100
Nickel	Ni(NO ₃) ₂ in HNO ₃ 2–3%	100 ml	1.70336.0100
Niobium	NH ₄ NbF ₆ in water	100 ml	1.70337.0100
Osmium	(NH ₄) ₂ OsCl ₆ in HCl 7%	100 ml	1.70338.0100
Palladium	Pd(NO ₃) ₂ in HNO ₃ 2–3%	100 ml	1.70339.0100
Phosphorus	H ₃ PO ₄ in water	100 ml	1.70340.0100
Platinum	H ₂ PtCl ₆ in HCl 7%	100 ml	1.70341.0100
Potassium	KNO ₃ in HNO ₃ 2–3%	100 ml	1.70342.0100
Praseodymium	Pr ₂ O ₃ in HNO ₃ 2–3%	100 ml	1.70343.0100
Rhenium	NH ₄ ReO ₄ in water	100 ml	1.70344.0100
Rhodium	Rh(NO ₃) ₃ in HNO ₃ 2–3%	100 ml	1.70345.0100
Rubidium	RbNO ₃ in HNO ₃ 2–3%	100 ml	1.70346.0100
Ruthenium	RuCl ₃ in HCl 7%	100 ml	1.70347.0100
Samarium	Sm ₂ O ₃ in HNO ₃ 2–3%	100 ml	1.70348.0100
Scandium	Sc ₂ O ₃ in HNO ₃ 2–3%	100 ml	1.70349.0100
Selenium	SeO ₂ in HNO ₃ 2–3%	100 ml	1.70350.0100
Silicon	SiO ₂ in NaOH 2%	100 ml	1.70365.0100
Silver	AgNO ₃ in HNO ₃ 2–3%	100 ml	1.70352.0100
Sodium	NaNO ₃ in HNO ₃ 2–3%	100 ml	1.70353.0100
Strontium	Sr(NO ₃) ₂ in HNO ₃ 2–3%	100 ml	1.70354.0100
Sulfur	H ₂ SO ₄ in water	100 ml	1.70355.0100
Tantalum	(NH ₄) ₂ TaF ₇ in water	100 ml	1.70356.0100
Tellurium	H ₂ TeO ₆ in HNO ₃ 2–3%	100 ml	1.70357.0100
Terbium	Tb(NO ₃) ₃ in HNO ₃ 2–3%	100 ml	1.70358.0100
Thallium	TlNO ₃ in HNO ₃ 2–3%	100 ml	1.70359.0100
Thulium	Tm(NO ₃) ₃ in HNO ₃ 2–3%	100 ml	1.70361.0100
Tin	SnCl ₄ in HCl 7%	100 ml	1.70362.0100
Titanium	(NH ₄) ₂ TiF ₆ in water	100 ml	1.70363.0100
Tungsten	(NH ₄) ₂ WO ₄ in water	100 ml	1.70364.0100
Vanadium	NH ₄ VO ₃ in HNO ₃ 2–3%	100 ml	1.70366.0100
Ytterbium	Yb ₂ O ₃ in HNO ₃ 2–3%	100 ml	1.70367.0100
Yttrium	Y(NO ₃) ₃ in HNO ₃ 2–3%	100 ml	1.70368.0100
Zinc	Zn(NO ₃) ₂ in HNO ₃ 2–3%	100 ml	1.70369.0100
Zirconium	ZrOCl ₂ in HCl 7%	100 ml	1.70370.0100

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