

SOLUBILITY PRODUCT CONSTANTS

Compound	Formula	K_{sp} (25 °C)
Aluminium hydroxide	$\text{Al}(\text{OH})_3$	3×10^{-34}
Aluminium phosphate	AlPO_4	9.84×10^{-21}
Barium bromate	$\text{Ba}(\text{BrO}_3)_2$	2.43×10^{-4}
Barium carbonate	BaCO_3	2.58×10^{-9}
Barium chromate	BaCrO_4	1.17×10^{-10}
Barium fluoride	BaF_2	1.84×10^{-7}
Barium hydroxide octahydrate	$\text{Ba}(\text{OH})_2 \times 8\text{H}_2\text{O}$	2.55×10^{-4}
Barium iodate	$\text{Ba}(\text{IO}_3)_2$	4.01×10^{-9}
Barium iodate monohydrate	$\text{Ba}(\text{IO}_3)_2 \times \text{H}_2\text{O}$	1.67×10^{-9}
Barium molybdate	BaMoO_4	3.54×10^{-8}
Barium nitrate	$\text{Ba}(\text{NO}_3)_2$	4.64×10^{-3}
Barium selenate	BaSeO_4	3.40×10^{-8}
Barium sulfate	BaSO_4	1.08×10^{-10}
Barium sulfite	BaSO_3	5.0×10^{-10}
Beryllium hydroxide	$\text{Be}(\text{OH})_2$	6.92×10^{-22}
Bismuth arsenate	BiAsO_4	4.43×10^{-10}
Bismuth iodide	BiI_3	7.71×10^{-19}
Cadmium arsenate	$\text{Cd}_3(\text{AsO}_4)_2$	2.2×10^{-33}
Cadmium carbonate	CdCO_3	1.0×10^{-12}
Cadmium fluoride	CdF_2	6.44×10^{-3}
Cadmium hydroxide	$\text{Cd}(\text{OH})_2$	7.2×10^{-15}
Cadmium iodate	$\text{Cd}(\text{IO}_3)_2$	2.5×10^{-8}
Cadmium oxalate trihydrate	$\text{CdC}_2\text{O}_4 \times 3\text{H}_2\text{O}$	1.42×10^{-8}
Cadmium phosphate	$\text{Cd}_3(\text{PO}_4)_2$	2.53×10^{-33}
Cadmium sulfide	CdS	1×10^{-27}
Caesium perchlorate	CsClO_4	3.95×10^{-3}
Caesium periodate	CsIO_4	5.16×10^{-6}
Calcium carbonate (calcite)	CaCO_3	3.36×10^{-9}
Calcium carbonate (aragonite)	CaCO_3	6.0×10^{-9}

Calcium fluoride	CaF_2	3.45×10^{-11}
Calcium hydroxide	Ca(OH)_2	5.02×10^{-6}
Calcium iodate	$\text{Ca(IO}_3)_2$	6.47×10^{-6}
Calcium iodate hexahydrate	$\text{Ca(IO}_3)_2 \times 6\text{H}_2\text{O}$	7.10×10^{-7}
Calcium molybdate	CaMoO_4	1.46×10^{-8}
Calcium oxalate monohydrate	$\text{CaC}_2\text{O}_4 \times \text{H}_2\text{O}$	2.32×10^{-9}
Calcium phosphate	$\text{Ca}_3(\text{PO}_4)_2$	2.07×10^{-33}
Calcium sulfate	CaSO_4	4.93×10^{-5}
Calcium sulfate dihydrate	$\text{CaSO}_4 \times 2\text{H}_2\text{O}$	3.14×10^{-5}
Calcium sulfate hemihydrate	$\text{CaSO}_4 \times 0.5\text{H}_2\text{O}$	3.1×10^{-7}
Cobalt(II) arsenate	$\text{Co}_3(\text{AsO}_4)_2$	6.80×10^{-29}
Cobalt(II) carbonate	CoCO_3	1.0×10^{-10}
Cobalt(II) hydroxide (blue)	Co(OH)_2	5.92×10^{-15}
Cobalt(II) iodate dihydrate	$\text{Co(IO}_3)_2 \times 2\text{H}_2\text{O}$	1.21×10^{-2}
Cobalt(II) phosphate	$\text{Co}_3(\text{PO}_4)_2$	2.05×10^{-35}
Cobalt(II) sulfide (alpha)	CoS	5×10^{-22}
Cobalt(II) sulfide (beta)	CoS	3×10^{-26}
Copper(I) bromide	CuBr	6.27×10^{-9}
Copper(I) chloride	CuCl	1.72×10^{-7}
Copper(I) cyanide	CuCN	3.47×10^{-20}
Copper(I) hydroxide *	Cu_2O	2×10^{-15}
Copper(I) iodide	CuI	1.27×10^{-12}
Copper(I) thiocyanate	CuSCN	1.77×10^{-13}
Copper(II) arsenate	$\text{Cu}_3(\text{AsO}_4)_2$	7.95×10^{-36}
Copper(II) hydroxide	Cu(OH)_2	4.8×10^{-20}
Copper(II) iodate monohydrate	$\text{Cu(IO}_3)_2 \times \text{H}_2\text{O}$	6.94×10^{-8}
Copper(II) oxalate	CuC_2O_4	4.43×10^{-10}
Copper(II) phosphate	$\text{Cu}_3(\text{PO}_4)_2$	1.40×10^{-37}
Copper(II) sulfide	CuS	8×10^{-37}
Europium(III) hydroxide	Eu(OH)_3	9.38×10^{-27}
Gallium(III) hydroxide	Ga(OH)_3	7.28×10^{-36}
Iron(II) carbonate	FeCO_3	3.13×10^{-11}
Iron(II) fluoride	FeF_2	2.36×10^{-6}
Iron(II) hydroxide	Fe(OH)_2	4.87×10^{-17}

Iron(II) sulfide	FeS	8×10^{-19}
Iron(III) hydroxide	Fe(OH) ₃	2.79×10^{-39}
Iron(III) phosphate dihydrate	FePO ₄ ×2H ₂ O	9.91×10^{-16}
Lanthanum iodate	La(IO ₃) ₃	7.50×10^{-12}
Lead(II) bromide	PbBr ₂	6.60×10^{-6}
Lead(II) carbonate	PbCO ₃	7.40×10^{-14}
Lead(II) chloride	PbCl ₂	1.70×10^{-5}
Lead(II) chromate	PbCrO ₄	3×10^{-13}
Lead(II) fluoride	PbF ₂	3.3×10^{-8}
Lead(II) hydroxide	Pb(OH) ₂	1.43×10^{-20}
Lead(II) iodate	Pb(IO ₃) ₂	3.69×10^{-13}
Lead(II) iodide	PbI ₂	9.8×10^{-9}
Lead(II) oxalate	PbC ₂ O ₄	8.5×10^{-9}
Lead(II) selenate	PbSeO ₄	1.37×10^{-7}
Lead(II) sulfate	PbSO ₄	2.53×10^{-8}
Lead(II) sulfide	PbS	3×10^{-28}
Lithium carbonate	Li ₂ CO ₃	8.15×10^{-4}
Lithium fluoride	LiF	1.84×10^{-3}
Lithium phosphate	Li ₃ PO ₄	2.37×10^{-4}
Magnesium ammonium phosphate	MgNH ₄ PO ₄	3×10^{-13}
Magnesium carbonate	MgCO ₃	6.82×10^{-6}
Magnesium carbonate trihydrate	MgCO ₃ ×3H ₂ O	2.38×10^{-6}
Magnesium carbonate pentahydrate	MgCO ₃ ×5H ₂ O	3.79×10^{-6}
Magnesium fluoride	MgF ₂	5.16×10^{-11}
Magnesium hydroxide	Mg(OH) ₂	5.61×10^{-12}
Magnesium oxalate dihydrate	MgC ₂ O ₄ ×2H ₂ O	4.83×10^{-6}
Magnesium phosphate	Mg ₃ (PO ₄) ₂	1.04×10^{-24}
Manganese(II) carbonate	MnCO ₃	2.24×10^{-11}
Manganese(II) iodate	Mn(IO ₃) ₂	4.37×10^{-7}
Manganese(II) hydroxide	Mn(OH) ₂	2×10^{-13}
Manganese(II) oxalate dihydrate	MnC ₂ O ₄ ×2H ₂ O	1.70×10^{-7}
Manganese(II) sulfide (pink)	MnS	3×10^{-11}
Manganese(II) sulfide (green)	MnS	3×10^{-14}
Mercury(I) bromide	Hg ₂ Br ₂	6.40×10^{-23}

Mercury(I) carbonate	Hg_2CO_3	3.6×10^{-17}
Mercury(I) chloride	Hg_2Cl_2	1.43×10^{-18}
Mercury(I) fluoride	Hg_2F_2	3.10×10^{-6}
Mercury(I) iodide	Hg_2I_2	5.2×10^{-29}
Mercury(I) oxalate	$\text{Hg}_2\text{C}_2\text{O}_4$	1.75×10^{-13}
Mercury(I) sulfate	Hg_2SO_4	6.5×10^{-7}
Mercury(I) thiocyanate	$\text{Hg}_2(\text{SCN})_2$	3.2×10^{-20}
Mercury(II) bromide	HgBr_2	6.2×10^{-20}
Mercury(II) hydroxide <u>**</u>	HgO	3.6×10^{-26}
Mercury(II) iodide	HgI_2	2.9×10^{-29}
Mercury(II) sulfide (black)	HgS	2×10^{-53}
Mercury(II) sulfide (red)	HgS	2×10^{-54}
Neodymium carbonate	$\text{Nd}_2(\text{CO}_3)_3$	1.08×10^{-33}
Nickel(II) carbonate	NiCO_3	1.42×10^{-7}
Nickel(II) hydroxide	$\text{Ni}(\text{OH})_2$	5.48×10^{-16}
Nickel(II) iodate	$\text{Ni}(\text{IO}_3)_2$	4.71×10^{-5}
Nickel(II) phosphate	$\text{Ni}_3(\text{PO}_4)_2$	4.74×10^{-32}
Nickel(II) sulfide (alpha)	NiS	4×10^{-20}
Nickel(II) sulfide (beta)	NiS	1.3×10^{-25}
Palladium(II) thiocyanate	$\text{Pd}(\text{SCN})_2$	4.39×10^{-23}
Potassium hexachloroplatinate	K_2PtCl_6	7.48×10^{-6}
Potassium perchlorate	KClO_4	1.05×10^{-2}
Potassium periodate	KIO_4	3.71×10^{-4}
Praseodymium hydroxide	$\text{Pr}(\text{OH})_3$	3.39×10^{-24}
Radium iodate	$\text{Ra}(\text{IO}_3)_2$	1.16×10^{-9}
Radium sulfate	RaSO_4	3.66×10^{-11}
Rubidium perchlorate	RuClO_4	3.00×10^{-3}
Scandium fluoride	ScF_3	5.81×10^{-24}
Scandium hydroxide	$\text{Sc}(\text{OH})_3$	2.22×10^{-31}
Silver(I) acetate	AgCH_3COO	1.94×10^{-3}
Silver(I) arsenate	Ag_3AsO_4	1.03×10^{-22}
Silver(I) bromate	AgBrO_3	5.38×10^{-5}
Silver(I) bromide	AgBr	5.35×10^{-13}
Silver(I) carbonate	Ag_2CO_3	8.46×10^{-12}

Silver(I) chloride	AgCl	1.77×10^{-10}
Silver(I) chromate	Ag ₂ CrO ₄	1.12×10^{-12}
Silver(I) cyanide	AgCN	5.97×10^{-17}
Silver(I) iodate	AgIO ₃	3.17×10^{-8}
Silver(I) iodide	AgI	8.52×10^{-17}
Silver(I) oxalate	Ag ₂ C ₂ O ₄	5.40×10^{-12}
Silver(I) phosphate	Ag ₃ PO ₄	8.89×10^{-17}
Silver(I) sulfate	Ag ₂ SO ₄	1.20×10^{-5}
Silver(I) sulfite	Ag ₂ SO ₃	1.50×10^{-14}
Silver(I) sulfide	Ag ₂ S	8×10^{-51}
Silver(I) thiocyanate	AgSCN	1.03×10^{-12}
Strontium arsenate	Sr ₃ (AsO ₄) ₂	4.29×10^{-19}
Strontium carbonate	SrCO ₃	5.60×10^{-10}
Strontium fluoride	SrF ₂	4.33×10^{-9}
Strontium iodate	Sr(IO ₃) ₂	1.14×10^{-7}
Strontium iodate monohydrate	Sr(IO ₃) ₂ ×H ₂ O	3.77×10^{-7}
Strontium iodate hexahydrate	Sr(IO ₃) ₂ ×6H ₂ O	4.55×10^{-7}
Strontium oxalate	SrC ₂ O ₄	5×10^{-8}
Strontium sulfate	SrSO ₄	3.44×10^{-7}
Thallium(I) bromate	TlBrO ₃	1.10×10^{-4}
Thallium(I) bromide	TlBr	3.71×10^{-6}
Thallium(I) chloride	TlCl	1.86×10^{-4}
Thallium(I) chromate	Tl ₂ CrO ₄	8.67×10^{-13}
Thallium(I) hydroxide	Tl(OH) ₃	1.68×10^{-44}
Thallium(I) iodate	TlIO ₃	3.12×10^{-6}
Thallium(I) iodide	TlI	5.54×10^{-8}
Thallium(I) thiocyanate	TlSCN	1.57×10^{-4}
Thallium(I) sulfide	Tl ₂ S	6×10^{-22}
Tin(II) hydroxide	Sn(OH) ₂	5.45×10^{-27}
Yttrium carbonate	Y ₂ (CO ₃) ₃	1.03×10^{-31}
Yttrium fluoride	YF ₃	8.62×10^{-21}
Yttrium hydroxide	Y(OH) ₃	1.00×10^{-22}
Yttrium iodate	Y(IO ₃) ₃	1.12×10^{-10}
Zinc arsenate	Zn ₃ (AsO ₄) ₂	2.8×10^{-28}

Zinc carbonate	ZnCO_3	1.46×10^{-10}
Zinc carbonate monohydrate	$\text{ZnCO}_3 \times \text{H}_2\text{O}$	5.42×10^{-11}
Zinc fluoride	ZnF	3.04×10^{-2}
Zinc hydroxide	Zn(OH)_2	3×10^{-17}
Zinc iodate dihydrate	$\text{Zn(IO}_3)_2 \times 2\text{H}_2\text{O}$	4.1×10^{-6}
Zinc oxalate dihydrate	$\text{ZnC}_2\text{O}_4 \times 2\text{H}_2\text{O}$	1.38×10^{-9}
Zinc selenide	ZnSe	3.6×10^{-26}
Zinc selenite monohydrate	$\text{ZnSe} \times \text{H}_2\text{O}$	1.59×10^{-7}
Zinc sulfide (alpha)	ZnS	2×10^{-25}
Zinc sulfide (beta)	ZnS	3×10^{-23}