

Table 15.4 -  $K_{sp}$  Values at 25°C for Common Ionic Solids

Ionic Solid	$K_{sp}$ (at 25°C)	Ionic Solid	$K_{sp}$ (at 25°C)	Ionic Solid	$K_{sp}$ (at 25°C)
Fluorides		Carbonates		Hydroxides (continued)	
BaF <sub>2</sub>	$2.4 \times 10^{-5}$	NiCO <sub>3</sub>	$1.4 \times 10^{-7}$	Cr(OH) <sub>3</sub>	$6.7 \times 10^{-31}$
MgF <sub>2</sub>	$6.4 \times 10^{-9}$	CaCO <sub>3</sub>	$8.7 \times 10^{-9}$	Al(OH) <sub>3</sub>	$2 \times 10^{-32}$
PbF <sub>2</sub>	$4 \times 10^{-8}$	BaCO <sub>3</sub>	$1.6 \times 10^{-9}$	Fe(OH) <sub>3</sub>	$4 \times 10^{-38}$
SrF <sub>2</sub>	$7.9 \times 10^{-10}$	SrCO <sub>3</sub>	$7 \times 10^{-10}$	Co(OH) <sub>3</sub>	$2.5 \times 10^{-43}$
CaF <sub>2</sub>	$4.0 \times 10^{-11}$	CuCO <sub>3</sub>	$2.5 \times 10^{-10}$	Sulfides	
Chlorides		ZnCO <sub>3</sub>	$2 \times 10^{-10}$	MnS	$2.3 \times 10^{-13}$
PbCl <sub>2</sub>	$1.6 \times 10^{-5}$	MnCO <sub>3</sub>	$8.8 \times 10^{-11}$	FeS	$3.7 \times 10^{-19}$
AgCl	$1.6 \times 10^{-10}$	FeCO <sub>3</sub>	$2.1 \times 10^{-11}$	NiS	$3 \times 10^{-21}$
Hg <sub>2</sub> Cl <sub>2</sub> *	$1.1 \times 10^{-18}$	Ag <sub>2</sub> CO <sub>3</sub>	$8.1 \times 10^{-12}$	CoS	$5 \times 10^{-22}$
Bromides		CdCO <sub>3</sub>	$5.2 \times 10^{-12}$	ZnS	$2.5 \times 10^{-22}$
PbBr <sub>2</sub>	$4.6 \times 10^{-6}$	PbCO <sub>3</sub>	$1.5 \times 10^{-15}$	SnS	$1 \times 10^{-26}$
AgBr	$5.0 \times 10^{-13}$	MgCO <sub>3</sub>	$6.8 \times 10^{-6}$	CdS	$1.0 \times 10^{-28}$
Hg <sub>2</sub> Br <sub>2</sub> *	$1.3 \times 10^{-22}$	Hg <sub>2</sub> CO <sub>3</sub> *	$9.0 \times 10^{-15}$	PbS	$7 \times 10^{-29}$
Iodides		Hydroxides		CuS	$8.5 \times 10^{-45}$
PbI <sub>2</sub>	$1.4 \times 10^{-8}$	Ba(OH) <sub>2</sub>	$5.0 \times 10^{-3}$	Ag <sub>2</sub> S	$1.6 \times 10^{-49}$
AgI	$1.5 \times 10^{-16}$	Sr(OH) <sub>2</sub>	$3.2 \times 10^{-4}$	HgS	$1.6 \times 10^{-54}$
Hg <sub>2</sub> I <sub>2</sub> *	$4.5 \times 10^{-29}$	Ca(OH) <sub>2</sub>	$1.3 \times 10^{-6}$	Phosphates	
Sulfates		AgOH	$2.0 \times 10^{-8}$	Ag <sub>3</sub> (PO <sub>4</sub> )	$1.8 \times 10^{-18}$
CaSO <sub>4</sub>	$6.1 \times 10^{-5}$	Mg(OH) <sub>2</sub>	$8.9 \times 10^{-12}$	Sr <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>	$1 \times 10^{-31}$
Ag <sub>2</sub> SO <sub>4</sub>	$1.2 \times 10^{-5}$	Mn(OH) <sub>2</sub>	$2 \times 10^{-13}$	Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>	$1.3 \times 10^{-32}$
SrSO <sub>4</sub>	$3.2 \times 10^{-7}$	Cd(OH) <sub>2</sub>	$5.9 \times 10^{-15}$	Ba <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>	$6 \times 10^{-39}$
PbSO <sub>4</sub>	$1.3 \times 10^{-8}$	Pb(OH) <sub>2</sub>	$1.2 \times 10^{-15}$	Pb <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>	$1 \times 10^{-54}$
BaSO <sub>4</sub>	$1.5 \times 10^{-9}$	Fe(OH) <sub>2</sub>	$1.8 \times 10^{-15}$	*Contains Hg <sub>2</sub> <sup>2+</sup> ions.	
Chromates		Co(OH) <sub>2</sub>	$2.5 \times 10^{-16}$		
SrCrO <sub>4</sub>	$3.6 \times 10^{-5}$	Ni(OH) <sub>2</sub>	$1.6 \times 10^{-16}$	EX: $K = [\text{Hg}_2^{2+}][\text{X}^-]^2$ for Hg <sub>2</sub> X <sub>2</sub> salts	
Hg <sub>2</sub> CrO <sub>4</sub> *	$2 \times 10^{-9}$	Zn(OH) <sub>2</sub>	$4.5 \times 10^{-17}$		
BaCrO <sub>4</sub>	$8.5 \times 10^{-11}$	Cu(OH) <sub>2</sub>	$1.6 \times 10^{-19}$		
Ag <sub>2</sub> CrO <sub>4</sub>	$9.0 \times 10^{-12}$	Hg(OH) <sub>2</sub>	$3 \times 10^{-26}$		
PbCrO <sub>4</sub>	$2 \times 10^{-16}$	Sn(OH) <sub>2</sub>	$3 \times 10^{-27}$		