
Solubility guidelines for ionic compounds in water at room temperature

Usually Soluble	Exceptions
Group 1 cations (Li^+ , Na^+ , K^+ , Rb^+ , Cs^+), ammonium (NH_4^+)	No common exceptions
Nitrates (NO_3^-), nitrites (NO_2^-)	Moderately soluble: AgNO_2
Chlorides, bromides, iodides (Cl^- , Br^- , I^-)	Insoluble: AgCl , Hg_2Cl_2 , PbCl_2 , AgBr , Hg_2Br_2 , PbBr_2 , AgI , Hg_2I_2 , and PbI_2
Fluorides (F^-)	Insoluble: MgF_2 , CaF_2 , SrF_2 , BaF_2 , PbF_2
Sulfates (SO_4^{2-})	Insoluble: BaSO_4 , PbSO_4 , HgSO_4 Moderately soluble: CaSO_4 , SrSO_4 , Ag_2SO_4
Chlorates (ClO_3^-), perchlorates (ClO_4^-)	No common exceptions
Acetates (CH_3COO^-)	Moderately soluble: AgCH_3COO
Usually Insoluble	Exceptions
Phosphates (PO_4^{3-})	Soluble: $(\text{NH}_4)_3\text{PO}_4$, Na_3PO_4 , K_3PO_4
Carbonates (CO_3^{2-})	Soluble: $(\text{NH}_4)_2\text{CO}_3$, Na_2CO_3 , K_2CO_3
Hydroxides (OH^-)	Soluble: LiOH , NaOH , KOH , $\text{Ba}(\text{OH})_2$ Moderately soluble: $\text{Ca}(\text{OH})_2$, $\text{Sr}(\text{OH})_2$
Sulfides (S^{2-})	Soluble: $(\text{NH}_4)_2\text{S}$, Na_2S , K_2S , MgS , CaS