

Solubility of Some Ionic Compounds in Water

<p><i>Always Soluble</i></p> <p>Alkali metals (Li^+, Na^+, K^+, Rb^+, Cs^+), NH_4^+ Nitrate = NO_3^-, Chlorate = ClO_3^-, Perchlorate = ClO_4^-, Acetate = $\text{C}_2\text{H}_3\text{O}_2^-$</p>	mnemonics
<p><i>Generally soluble</i></p> <p>Cl^-, Br^-, I^- Soluble except: Ag^+, Pb^{2+}, Hg_2^{2+} F^- Soluble except: Ca^{2+}, Sr^{2+}, Ba^{2+}, Pb^{2+}, Mg^{2+}</p>	AP/H CBS-PM
<p>SO_4^{2-} Soluble except: Ca^{2+}, Sr^{2+}, Ba^{2+}, Pb^{2+}</p>	CBS-PBS
<p><i>Generally Insoluble</i></p> <p>O^{2-}, OH^- Insoluble except: Alkali metals and NH_4^+ Ca^{2+}, Sr^{2+}, Ba^{2+} somewhat soluble</p> <p>CO_3^{2-}, PO_4^{3-}, S^{2-}, SO_3^{2-}, $\text{C}_2\text{O}_4^{2-}$, CrO_4^{2-} Insoluble except: Alkali metals and NH_4^+</p>	CBS

Not Soluble = forms precipitate

Soluble = dissolves in water (aqueous)