

Solubility rules for inorganic compounds

<u>Soluble compounds</u>	<u>Insoluble compounds</u>
Compounds of GROUP 1 elements	Carbonates (CO_3^{2-}), chromates (CrO_4^{2-}), oxalates ($\text{C}_2\text{O}_4^{2-}$), and phosphates (PO_4^{3-}), except those of the Group 1 elements and NH_4^+
Ammonium (NH_4^+) compounds	Sulfides (S^{2-}), except those of the Group 1 and 2 elements and NH_4^+
Chlorides (Cl^-), bromides (Br^-), and iodides (I^-), except those of Ag^+ , Hg_2^{2+} , and Pb^{2+} *	Hydroxides (OH^-) and oxides (O^{2-}), except those of the Group 1 and 2 elements***
Nitrates (NO_3^-), acetates (CH_3CO_2^-), chlorates (ClO_3^-), and perchlorates (ClO_4^-)	
Sulfates (SO_4^{2-}), except those of Ca^{2+} , Sr^{2+} , Ba^{2+} , Pb^{2+} , Hg_2^{2+} , and Ag^{+} **	

* PbCl_2 is slightly soluble.

** $\text{Ca}(\text{OH})_2$ and $\text{Sr}(\text{OH})_2$ are sparingly (slightly) soluble

*** Ag_2SO_4 is slightly soluble