

**Strong Acids:** HCl, HBr, HI, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, HClO<sub>3</sub>, HClO<sub>4</sub>

**Activity Series**

Li	K	Ba	Ca	Na	Mg	Al	Zn	Fe	Ni	Sn	Pb	H <sub>2</sub>	Cu	Ag	Au
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Most reactive Least reactive

**Some Polyatomic Ions**

NO <sub>3</sub> <sup>-</sup> Nitrate	C <sub>2</sub> O <sub>4</sub> <sup>2-</sup> Oxalate	NH <sub>4</sub> <sup>+</sup> Ammonium
CO <sub>3</sub> <sup>2-</sup> Carbonate	CH <sub>3</sub> COO <sup>-</sup> Acetate	OH <sup>-</sup> Hydroxide
SO <sub>4</sub> <sup>2-</sup> Sulfate	MnO <sub>4</sub> <sup>-</sup> Permanganate	
PO <sub>4</sub> <sup>3-</sup> Phosphate	CrO <sub>4</sub> <sup>2-</sup> Chromate	
ClO <sub>3</sub> <sup>-</sup> Chlorate	CN <sup>-</sup> Cyanide	

**Solubility Chart** ✓ = Soluble, × = Insoluble.

	Ag	Al	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	H	Hg	K	Mg	Mn	Na	NH <sub>4</sub>	Ni	Pb	Sn	Sr	Zn
Acetate	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bromide	×	✓	✓		✓	✓	✓	✓	✓	✓	✓	×	✓	✓	✓	✓	✓	✓	×	✓	✓	✓
Carbonate	×	×	×	×	×	×	×	×	×	×	✓	×	✓	×	×	✓	✓	×	×	×	×	×
Chlorate	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Chloride	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	✓	✓	✓	✓	×	✓	✓	✓
Chromate	×	✓	×	✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	✓	✓	✓	✓	×	✓	×	✓
Cyanide	×		✓	×	×	✓	×	×	×	×	✓	✓	✓			✓	✓	×	×		✓	×
Fluoride	✓	✓	×	✓	×	✓	✓	✓	×	×	✓		✓	×	×	✓	✓	×	×	✓	×	×
Hydroxide	×	×	✓	×	×	×	×	×	×	×	✓	×	✓	×	×	✓	✓	×	×	×	×	×
Iodide	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	✓	✓	✓	✓	×	✓	✓	✓
Nitrate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Oxide	×	×	✓	×	×	×	×	×	×	×	✓	×	✓	×	×			×	×	×	✓	×
Phosphate	×	×	×	×	×	×	×	×	×	×	✓	×	✓	×	×	✓	✓	×	×	×	×	×
Sulfate	×	✓	×	✓	×	✓	✓	✓	✓	✓	✓	×	✓	✓	✓	✓	✓	✓	×	✓	×	✓
Sulfide	×	×	×	×	×	×	×	×	×	×	✓	×	✓	×	×	✓	✓	×	×	×	×	×
Sulfite	×	×	×	×	×	×	×	×	×	×	✓	×	✓	×	×	✓	✓	×	×	×	×	×