

## Solubility Chart

Negative Ions	Positive Ions	Solubility
Essentially All	Alkali ions ( $\text{Li}^+$ , $\text{Na}^+$ , $\text{K}^+$ , $\text{Rb}^+$ , $\text{Cs}^+$ )	Soluble, (aq)
Essentially All	Hydrogen ion, $\text{H}^+$	Soluble, (aq)
Essentially All	Ammonium ion, $\text{NH}_4^+$	Soluble, (aq)
Nitrate, $\text{NO}_3^-$	Essentially All	Soluble, (aq)
Acetate, $\text{CH}_3\text{COO}^-$	Essentially All, EXCEPT $\text{Ag}^+$	Soluble, (aq)
Chloride, $\text{Cl}^-$ Bromide, $\text{Br}^-$ Iodide, $\text{I}^-$	$\text{Ag}^+$ , $\text{Pb}^{2+}$ , $\text{Hg}_2^{2+}$ , $\text{Cu}^+$ , $\text{Tl}^+$	Low Solubility, (s)
	All others	Soluble, (aq)
Sulfate, $\text{SO}_4^{2-}$	$\text{Ag}^+$ , $\text{Ca}^{2+}$ , $\text{Sr}^{2+}$ , $\text{Ba}^{2+}$ , $\text{Pb}^{2+}$ , $\text{Ra}^{2+}$	Low Solubility, (s)
	All others	Soluble, (aq)
Sulfide, $\text{S}^{2-}$	Alkali ions and $\text{H}^+$ , $\text{NH}_4^+$ , $\text{Be}^{2+}$ , $\text{Mg}^{2+}$ , $\text{Ca}^{2+}$ , $\text{Sr}^{2+}$ , $\text{Ba}^{2+}$ , $\text{Ra}^{2+}$	Soluble, (aq)
	All others	Low Solubility, (s)
Hydroxide, $\text{OH}^-$	Alkali ions and $\text{H}^+$ , $\text{NH}_4^+$ , $\text{Sr}^{2+}$ , $\text{Ba}^{2+}$ , $\text{Ra}^{2+}$ , $\text{Tl}^+$	Soluble, (aq)
	All others	Low Solubility, (s)
Phosphate, $\text{PO}_4^{3-}$ Carbonate, $\text{CO}_3^{2-}$ Sulfite, $\text{SO}_3^{2-}$	Alkali ions and $\text{H}^+$ , $\text{NH}_4^+$	Soluble, (aq)
	All others	Low Solubility, (s)
Chromate, $\text{CrO}_4^{2-}$	$\text{Ba}^{2+}$ , $\text{Sr}^{2+}$ , $\text{Pb}^{2+}$ , $\text{Ag}^+$	Low Solubility, (s)
	All others	Soluble, (aq)