

## SOLUBILITY RULES

ION	Rules
Group IA $\text{NH}_4^+$	1. All ionic compounds in which the cation is a Group IA element or $\text{NH}_4^+$ are soluble.
$\text{NO}_3^-$	2. All nitrates are soluble.
$\text{Cl}^-$ , $\text{Br}^-$ , $\text{I}^-$	3. All chlorides, bromides, and iodides are soluble, except $\text{Ag}^+$ and $\text{Pb}^{2+}$ .
$\text{SO}_4^{2-}$	4. All sulfates are soluble except for $\text{CaSO}_4$ , $\text{BaSO}_4$ , $\text{PbSO}_4$ , $\text{SrSO}_4$ , and $\text{Ag}_2\text{SO}_4$ .
$\text{S}^{2-}$	5. All sulfides are insoluble except those of the Group IA or IIA elements or $\text{NH}_4^+$ .
	6. All other compounds are insoluble.

## ACTIVITY SERIES OF THE ELEMENTS

Li K Ba Na Mg Al Zn Fe Cd Ni Sn Pb (H) Cu Hg Ag Au

Most reactive

Least reactive