

## Water-soluble ionic compounds

1. All compounds of alkali metals are soluble.
2. All salts containing  $\text{NH}_4^+$ ,  $\text{NO}_3^-$ ,  $\text{ClO}_4^-$ ,  $\text{ClO}_3^-$  and  $\text{C}_2\text{H}_3\text{O}_2^-$  are soluble.
3. All chlorides, bromides and iodides ( $\text{Cl}^-$ ,  $\text{Br}^-$  and  $\text{I}^-$ ) are soluble except when combined with  $\text{Ag}^+$ ,  $\text{Hg}_2^{2+}$ , and  $\text{Pb}^{2+}$ .
4. All sulfates ( $\text{SO}_4^{2-}$ ) are soluble except those of  $\text{Ca}^{2+}$ ,  $\text{Sr}^{2+}$ ,  $\text{Ba}^{2+}$ ,  $\text{Hg}_2^{2+}$  and  $\text{Pb}^{2+}$ .
5.  $\text{Ca}(\text{OH})_2$ ,  $\text{Sr}(\text{OH})_2$  and  $\text{Ba}(\text{OH})_2$  are soluble.

If ions are not mentioned in this list, we assume compounds of them are insoluble.