

Important Solubility Rules for CHM 4, 1A and 1B

(for CHM 4, you do NOT need to memorize the rules; they will be provided on tests)

Soluble salts include:

- All Li^+ , Na^+ , K^+ , and NH_4^+ → no exceptions
- All NO_3^- and $\text{C}_2\text{H}_3\text{O}_2^-$ → no exceptions
- All SO_4^{2-} → except: Ca^{2+} , Sr^{2+} , Ba^{2+} , Pb^{2+}
- All Cl^- , Br^- , and I^- → except: Ag^+ , Pb^{2+} , Hg_2^{2+}

Insoluble salts include:

- All PO_4^{3-} and CO_3^{2-} → except: Li^+ , Na^+ , K^+ , and NH_4^+
- All OH^- and S^{2-} → except: Li^+ , Na^+ , K^+ , NH_4^+ , Ca^{2+} , Sr^{2+} , and Ba^{2+}