

## Ways of writing chemical reactions in aqueous solutions

## Reactions of Aqueous Solutions

Reaction	
1	<p>Complete ionic equation</p> $2 \text{Na}^+_{(\text{aq})} + \text{CO}_3^{2-}_{(\text{aq})} + \text{Pb}^{2+}_{(\text{aq})} + 2 \text{NO}_3^-_{(\text{aq})} \rightarrow \text{PbCO}_3(\text{s}) + 2 \text{NO}_3^-_{(\text{aq})} + 2 \text{Na}^+_{(\text{aq})}$ <p>Net ionic equation</p> $\text{Pb}^{2+}_{(\text{aq})} + \text{CO}_3^{2-}_{(\text{aq})} \rightarrow \text{PbCO}_3(\text{s})$
2	<p>Complete ionic equation</p> <p>NVR</p> <p>Net ionic equation</p>
3	<p>Complete ionic equation</p> $2 \text{Ag}^+_{(\text{aq})} + \cancel{2 \text{NO}_3^-_{(\text{aq})}} + \cancel{2 \text{NO}_3^-_{(\text{aq})}} + \text{CO}_3^{2-}_{(\text{aq})} \rightarrow \text{Ag}_2\text{CO}_3(\text{s}) + \cancel{2 \text{NO}_3^-_{(\text{aq})}} + \cancel{2 \text{NO}_3^-_{(\text{aq})}}$ <p>Net ionic equation</p> $2 \text{Ag}^+_{(\text{aq})} + \text{CO}_3^{2-}_{(\text{aq})} \rightarrow \text{Ag}_2\text{CO}_3(\text{s})$
4	<p>Complete ionic equation</p> $\text{Cu}^{+2}_{(\text{aq})} + \cancel{\text{SO}_4^{2-}_{(\text{aq})}} + \cancel{2 \text{Na}^+_{(\text{aq})}} + \text{CO}_3^{2-}_{(\text{aq})} \rightarrow \text{CuCO}_3(\text{s}) + \cancel{2 \text{Na}^+_{(\text{aq})}} + \cancel{\text{SO}_4^{2-}_{(\text{aq})}}$ <p>Net ionic equation</p> $\text{Cu}^{+2}_{(\text{aq})} + \text{CO}_3^{2-}_{(\text{aq})} \rightarrow \text{CuCO}_3(\text{s})$
5	<p>Complete ionic equation</p> $\text{Pb}^{+2}_{(\text{aq})} + \cancel{2 \text{NO}_3^-_{(\text{aq})}} + \cancel{2 \text{K}^+_{(\text{aq})}} + 2 \text{I}^-_{(\text{aq})} \rightarrow \text{PbI}_2(\text{s}) + \cancel{2 \text{K}^+_{(\text{aq})}} + \cancel{2 \text{NO}_3^-_{(\text{aq})}}$ <p>Net ionic equation</p> $\text{Pb}^{+2}_{(\text{aq})} + 2 \text{I}^-_{(\text{aq})} \rightarrow \text{PbI}_2(\text{s})$
6	<p>Complete ionic equation</p> <p>NVR</p> <p>Net ionic equation</p>
7	<p>Complete ionic equation</p> $\text{Ag}^+_{(\text{aq})} + \cancel{\text{NO}_3^-_{(\text{aq})}} + \cancel{\text{K}^+_{(\text{aq})}} + \text{I}^-_{(\text{aq})} \rightarrow \text{AgI}(\text{s}) + \cancel{\text{K}^+_{(\text{aq})}} + \cancel{\text{NO}_3^-_{(\text{aq})}}$ <p>Net ionic equation</p> $\text{Ag}^+_{(\text{aq})} + \text{I}^-_{(\text{aq})} \rightarrow \text{AgI}(\text{s})$

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2	<p>Complete ionic equation</p> <p>NVR</p> <p>Net ionic equation</p>
3	<p>Complete ionic equation</p> $2 \text{Ag}^+_{(aq)} + \cancel{2 \text{NO}_3^-_{(aq)}} + \cancel{2 \text{NO}_3^-_{(aq)}} + \text{CO}_3^{2-}_{(aq)} \rightarrow \text{Ag}_2\text{CO}_3(s) + \cancel{2 \text{NO}_3^-_{(aq)}} + \cancel{2 \text{NO}_3^-_{(aq)}}$ <p>Net ionic equation</p> $2 \text{Ag}^+_{(aq)} + \text{CO}_3^{2-}_{(aq)} \rightarrow \text{Ag}_2\text{CO}_3(s)$
4	<p>Complete ionic equation</p> $\text{Cu}^{+2}_{(aq)} + \cancel{2 \text{SO}_4^{2-}_{(aq)}} + \cancel{2 \text{Na}^+_{(aq)}} + \text{CO}_3^{2-}_{(aq)} \rightarrow \text{CuCO}_3(s) + \cancel{2 \text{Na}^+_{(aq)}} + \cancel{2 \text{SO}_4^{2-}_{(aq)}}$ <p>Net ionic equation</p> $\text{Cu}^{+2}_{(aq)} + \text{CO}_3^{2-}_{(aq)} \rightarrow \text{CuCO}_3(s)$
5	<p>Complete ionic equation</p> $\text{Pb}^{+2}_{(aq)} + \cancel{2 \text{NO}_3^-_{(aq)}} + \cancel{2 \text{K}^+_{(aq)}} + 2 \text{I}^-_{(aq)} \rightarrow \text{PbI}_2(s) + \cancel{2 \text{K}^+_{(aq)}} + \cancel{2 \text{NO}_3^-_{(aq)}}$ <p>Net ionic equation</p> $\text{Pb}^{+2}_{(aq)} + 2 \text{I}^-_{(aq)} \rightarrow \text{PbI}_2(s)$
6	<p>Complete ionic equation</p> <p>NVR</p> <p>Net ionic equation</p>
7	<p>Complete ionic equation</p> $\text{Ag}^+_{(aq)} + \cancel{\text{NO}_3^-_{(aq)}} + \cancel{\text{K}^+_{(aq)}} + \text{I}^-_{(aq)} \rightarrow \text{AgI}(s) + \cancel{\text{K}^+_{(aq)}} + \cancel{\text{NO}_3^-_{(aq)}}$ <p>Net ionic equation</p> $\text{Ag}^+_{(aq)} + \text{I}^-_{(aq)} \rightarrow \text{AgI}(s)$

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8	<p>Complete ionic equation</p> <p>NVR</p> <p>Net ionic equation</p>
9	<p>Complete ionic equation</p> $\text{Pb}_{(aq)}^{2+} + 2\text{NO}_{3(aq)}^{-} + \text{Cu}_{(aq)}^{2+} + \text{SO}_{4(aq)}^{2-} \rightarrow \text{PbSO}_{4(s)} + \text{Cu}_{(aq)}^{2+} + 2\text{NO}_{3(aq)}^{-}$ <p>Net ionic equation</p> $\text{Pb}_{(aq)}^{2+} + \text{SO}_{4(aq)}^{2-} \rightarrow \text{PbSO}_{4(s)}$
10	<p>Complete ionic equation</p> $3\text{Cu}_{(aq)}^{+2} + 3\text{SO}_{4(aq)}^{2-} + 6\text{Na}_{(aq)}^{+} + 2\text{PO}_{4(aq)}^{3-} \rightarrow \text{Cu}_3(\text{PO}_4)_2(s) + 6\text{Na}_{(aq)}^{+} + 3\text{SO}_{4(aq)}^{2-}$ <p>Net ionic equation</p> $3\text{Cu}_{(aq)}^{+2} + 2\text{PO}_{4(aq)}^{3-} \rightarrow \text{Cu}_3(\text{PO}_4)_2(s)$
11	<p>Complete ionic equation</p> $\text{Cu}_{(aq)}^{+2} + \text{SO}_{4(aq)}^{2-} + 2\text{Ag}_{(aq)}^{+1} + 2\text{NO}_{3(aq)}^{-} \rightarrow \text{Ag}_2\text{SO}_{4(s)} + \text{Cu}_{(aq)}^{+2} + 2\text{NO}_{3(aq)}^{-}$ <p>Net ionic equation</p> $2\text{Ag}_{(aq)}^{+1} + \text{SO}_{4(aq)}^{2-} \rightarrow \text{Ag}_2\text{SO}_{4(s)}$
12	<p>Complete ionic equation</p> <p>NVR</p> <p>Net ionic equation</p>
13	<p>Complete ionic equation</p> $3\text{Ag}_{(aq)}^{+} + 3\text{NO}_{3(aq)}^{-} + 3\text{Na}_{(aq)}^{+} + \text{PO}_{4(aq)}^{3-} \rightarrow \text{Ag}_3\text{PO}_4(s) + 3\text{Na}_{(aq)}^{+} + 3\text{NO}_{3(aq)}^{-}$ <p>Net ionic equation</p> $3\text{Ag}_{(aq)}^{+} + \text{PO}_{4(aq)}^{3-} \rightarrow \text{Ag}_3\text{PO}_4(s)$
14	<p>Complete ionic equation</p> $\text{Pb}_{(aq)}^{+2} + 2\text{NO}_{3(aq)}^{-} + 3\text{Na}_{(aq)}^{+} + 2\text{PO}_{4(aq)}^{3-} \rightarrow \text{Pb}_3(\text{PO}_4)_2(s)$ <p>Net ionic equation</p> $3\text{Pb}_{(aq)}^{+2} + 2\text{PO}_{4(aq)}^{3-} \rightarrow \text{Pb}_3(\text{PO}_4)_2(s)$