

Question # 81043, answer

Dear expert, please provide an answer to the question below within 12 hours.

Write balanced net ionic equations for the reactions that occur in each of the following cases. Identify the spectator ion or ions in each reaction.

Always put the cation first and the anion second. For the net ionic equations type your answer using the format $\text{Ga}^{3+}(\text{aq}) + 3\text{OH}^{-}(\text{aq}) \rightarrow \text{Ga}(\text{OH})_3(\text{s})$ for $\text{Ga}^{3+}(\text{aq}) + 3\text{OH}^{-}(\text{aq}) \rightarrow \text{Ga}(\text{OH})_3(\text{s})$. Note: The "arrow" is made with the minus "-" and greater than ">" key. You must put the states of matter (s), (l), (g), or (aq). Do not add any spaces to your equation. For listing the spectator ions, use the format Ca^{2+} , SO_4^{2-} for the pair of ions Ca^{2+} , SO_4^{2-} .

(a) $\text{Pb}(\text{NO}_3)_2(\text{aq}) + \text{Na}_2\text{SO}_4(\text{aq})$
net ionic equation

(b) $\text{CuBr}_2(\text{aq}) + \text{NaOH}(\text{aq})$
net ionic equation

(c) $\text{AgNO}_3(\text{aq}) + \text{KI}(\text{aq})$
net ionic equation

Answer:

- (a) Net ionic equation: $\text{Pb}^{2+}(\text{aq}) + \text{SO}_4^{2-}(\text{aq}) \rightarrow \text{PbSO}_4(\text{s})$. Spectator ions: cation $\text{Na}^{+}(\text{aq})$, anion $\text{NO}_3^{-}(\text{aq})$,
- (b) Net ionic equation: $\text{Cu}^{2+}(\text{aq}) + 2\text{OH}^{-}(\text{aq}) \rightarrow \text{Cu}(\text{OH})_2(\text{s})$. Spectator ions: cation $\text{Na}^{+}(\text{aq})$, anion $\text{Br}^{-}(\text{aq})$,
- (c) Net ionic equation: $\text{Ag}^{+}(\text{aq}) + \text{I}^{-}(\text{aq}) \rightarrow \text{AgI}(\text{s})$. Spectator ions: cation $\text{K}^{+}(\text{aq})$, anion $\text{NO}_3^{-}(\text{aq})$,