

Marks
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- Zinc sulfate (8.07 g) is dissolved in 1.00 L of a 1.00 M solution of KCN. Write the chemical equation for the formation of the aqueous ion $[\text{Zn}(\text{CN})_4]^{2-}$.

Calculate the concentration of $\text{Zn}^{2+}(\text{aq})$ in solution at equilibrium. Ignore any change in volume upon addition of the salt. K_{stab} of $[\text{Zn}(\text{CN})_4]^{2-} = 4.2 \times 10^{19} \text{ M}^{-4}$.

Answer:

Name the complex ion.