

Solubility Product Worksheet #1

1. Write the expression for the solubility product constant for SrSO_4 .
2. Write the expression for the solubility product constant for $\text{Al}_2(\text{SO}_4)_3$.
3. A sample of $\text{Ba}(\text{OH})_2(\text{s})$ is added to pure water and allowed to come to equilibrium at 25°C . The concentration of Ba^{2+} is found to be 0.108 mol/L and that of OH^- 0.216 mol/L . What is the value of K_{sp} for $\text{Ba}(\text{OH})_2(\text{s})$?
4. What is the molar solubility of a saturated solution of AgCl ? $K_{\text{sp}} = 1.6 \times 10^{-10}$
5. What will be the equilibrium concentrations of Ca^{2+} and OH^- in a saturated solution of $\text{Ca}(\text{OH})_2$, if its K_{sp} value is 1.3×10^{-6} ?
6. Calculate the molar solubility of $\text{Ca}(\text{IO}_3)_2$ in $0.060 \text{ mol/L NaIO}_3$. The K_{sp} of $\text{Ca}(\text{IO}_3)_2$ is 7.1×10^{-7} .