

●Solubility Equilibria

The solubility of silver dichromate at 15°C is 0.0083 g/100mL. What is the K_{sp} of silver dichromate?

What is the solubility (g/L) of calcium iodate at room temperature?

$$K_{sp} = 7.1 \times 10^{-7}$$

What is the molar solubility of aluminum hydroxide?

$$K_{sp} = 4.6 \times 10^{-33}$$

What is the molar solubility of calcium iodate in 0.060 M calcium nitrate?

$$K_{sp} = 7.1 \times 10^{-7}$$

Exactly 0.400 L of 0.50 M Pb^{2+} and 1.60 L of 2.50×10^{-2} M Cl^{-} are mixed together to form 2.00 L of solution. Predict whether $PbCl_2$ will precipitate. $K_{sp}=1.6 \times 10^{-5}$

One form of kidney stones is calcium phosphate. If a sample of urine contains 1.0×10^{-3} M calcium ion and 1.0×10^{-8} M phosphate ion, predict whether calcium phosphate will precipitate. $K_{sp}=1 \times 10^{-26}$

A solution of $AgNO_3$ containing 0.0010 mol Ag^{1+} and a solution containing 0.021 mol HCl are mixed, precipitating AgCl from 1.00 L of the final solution. Calculate the molar concentration of Ag^{1+} after AgCl precipitates. Is the precipitation considered to be complete? $K_{sp}=1.8 \times 10^{-10}$