General Ksp and Solubility → Ksp Problems

Write the equilibrium equation and solubility product Ksp for each salt. The first one is done.

$Ca(OH)_{2(s)} \Leftrightarrow Ca^{2+} + 2\ OH^-$ $\quad\quad$ $Ksp = [Ca^{2+}][OH^-]^2$

$AgCl_{(s)}$

$Na_3PO_{4\ (s)}$

$(NH_4)_3PO_{4\ (s)}$

$Cu_2SO_{4\ (s)}$

$Al(CH_3COO)_{3\ (s)}$

$Ca_3(PO_4)_{2\ (s)}$

The solubility of SrF_2 is 2.83×10^{-5} M. Calculate the Ksp.

Calculate the Ksp for $CaCl_2$ if 200.0g of $CaCl_2$ is required to saturate 100.0 mL of solution.

Calculate the Ksp for $AlCl_3$ if 100.0g is required to saturate 150.0 mL of a solution.

The solubility of $GaBr_3$ is 15.8 g per 100.0 mL. Calculate the Ksp.

The solubility of Ag_2SO_4 is 1.33×10^{-7} g per 100.0 mL. Calculate the Ksp.

If 2.9×10^{-3} g $Ca(OH)_2$ is needed to saturate 250.0 mL of solution, what is the Ksp?

Calculate the Ksp of $CuSO_4 \cdot H_2O$ if 63.5g is required to saturate 100.0 mL of solution.

$Co(OH)_2$ Solubility = 3.0×10^{-3} g/L Ksp=?

$Ag_2C_2O_4$ Solubility = 8.3×10^{-4} M Ksp=?