

Marks
2

- Calcium oxalate is a major constituent of kidney stones. Calculate the solubility product constant for calcium oxalate given that a saturated solution of the salt can be made by dissolving 0.0061 g of $\text{CaC}_2\text{O}_4 \cdot \text{H}_2\text{O}(\text{s})$ in 1.0 L of water.

Answer:

3

- A sample of 2.0 mg of $\text{Cu}(\text{OH})_2$ is added to 1.0 L of a solution buffered at a pH of 8.00. Will all of the $\text{Cu}(\text{OH})_2$ dissolve? Show all working. (The K_{sp} of $\text{Cu}(\text{OH})_2$ is $4.8 \times 10^{-20} \text{ M}^3$.)

Answer: