

Preparation of a copper compound

The reaction is:



Q1: Calculate formula masses of $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ and $\text{K}_2\text{Cu}(\text{C}_2\text{O}_4)_2 \cdot 2\text{H}_2\text{O}$

(note $5\text{H}_2\text{O}$ means 5 x formula mass of H_2O ; etc.)

Q2. Calculate theoretical yield of product $\text{K}_2\text{Cu}(\text{C}_2\text{O}_4)_2 \cdot 2\text{H}_2\text{O}$

$$\text{theoretical yield} = 3.1 \times \frac{\text{formula mass of } \text{K}_2\text{Cu}(\text{C}_2\text{O}_4)_2 \cdot 2\text{H}_2\text{O}}{\text{formula mass of } \text{CuSO}_4 \cdot 5\text{H}_2\text{O}}$$

$$\text{Q3. Percent yield} = \frac{\text{actual yield}}{\text{theoretical yield}} \times 100$$