

Experiment No. (10)

Identification of Oxalate in their Complex as Below:

Take (1 ml) of the complex solution in taste tube for each detection using several indicators.

1. $\text{C}_2\text{O}_4^{=}$ + $\text{AgNO}_3 \longrightarrow ?$
2. $\text{C}_2\text{O}_4^{=}$ + $\text{BaCl}_2 \longrightarrow ?$
3. $\text{C}_2\text{O}_4^{=}$ + $\text{CaCl}_2 \longrightarrow ?$
4. $\text{C}_2\text{O}_4^{=}$ + $\text{KMnO}_4 \longrightarrow ? \xrightarrow{\Delta} ?$

(15) drops of KMnO_4 + (10) drops of Dil. H_2SO_4

Questions:

1. Give equation for:
 - a. $\text{C}_2\text{O}_4^{=}$ with BaCl_2
 - b. $\text{C}_2\text{O}_4^{=}$ with CaCl_2
2. Give the characteristic detection of $\text{C}_2\text{O}_4^{2-}$.
3. Can we use dil. HCl instead of H_2SO_4 ?
4. Give the equation of KMnO_4 treated with water.
5. Give the properties of KMnO_4 .