

Experimental Results for Lab 14C

Part I: Preliminary Investigation of KMnO_4 as an Oxidizing Agent

Table 1 Preliminary Investigation of KMnO_4 as an Oxidizing Agent

Type of Solution	Colour	Ion or Molecule Present
Acidic ($3M \text{H}_2\text{SO}_4$)		
Neutral (water)		
Basic ($6M \text{NaOH}$)		

Part II: Determining the Concentration of a Solution of Fe^{2+}

Table 2 Volume of KMnO_4 to React with 25.00mL OF Fe^{2+} Solution

Unknown # ____, [KMnO_4]= __M	Trial 1	Trial 2	Trial 3
Initial volume of KMnO_4 (mL)			
Final volume of KMnO_4 (mL)			
Volume of KMnO_4 required (mL)			
Average volume (mL)			

Part III: Determining the Concentration of an H_2O_2 Solution

Table 3 Volume of KMnO_4 to React with H_2O_2 Solution

[KMnO_4]= __M	Trial 1	Trial 2	Trial 3
Mass of empty flask (g)			
Mass of flask + H_2O_2 (g)			
Mass of H_2O_2 (g)			
Initial volume of KMnO_4 (mL)			
Final volume of KMnO_4 (mL)			
Volume of KMnO_4 used (mL)			