

Experiment no.2:

Preparation of 0.1N Sodium carbonate(Na_2CO_3) solution 250 mL

Theory:

Sodium carbonate is primary standard substance so the solution which is prepared from it , is standard solution.

Procedure:

1- Determine the mass of Na_2CO_3 from this rule:

$$N = \frac{\text{mass} \times 1000}{\text{eq.mass} \times V}$$

$$\text{Mass} = \frac{N \times \text{eq.mass} \times V}{1000}$$

$$\begin{aligned} \text{Eq.mass}(\text{Na}_2\text{CO}_3) &= \text{M.mass} \div 2 \\ &= 106 \div 2 = 53 \end{aligned}$$

$$\text{Mass} = 0.1 \times 53 \times 250 \div 1000 = 1.325\text{g}$$

2- weight 1.325g Na_2CO_3 on sensitive balance and dissolve in the beaker in 100 mL distilled water to volumetric flask and shake well.