

Experiment no.1:

Preparation of approximately 0.1N HCl(hydrochloric acid) Solution 250 mL

Theory:

HCl is not primary standard substance because HCl gas is vaporized during opening the bottle

Procedure •

1- By using this rule:

$$N_{\text{HCl}} = \frac{\text{sp.gr} \times \% \times 1000}{\text{eq.mass}_{\text{HCl}}}$$

We can determine the concentration(N) of HCl in the bottle

2- By using the diluting rule:

$$N_1 V_1 = N_2 V_2$$

We can determine the volume of HCl required for preparation \cong 0.1 N HCl solution.