

Objective: (a) To familiarize with the titration method of analysis (b) To estimate the molarity of acid solution using volumetrically by titrating it against a base. An acid–base titration is a quantitative analysis of acids and bases; through this process, an acid or base of known concentration neutralizes an acid or base of unknown concentration. This allows for quantitative analysis of the concentration of an unknown acid or base solution. INTRODUCTION An acid–base titration is the determination of the concentration of an acid or base by exactly neutralizing the acid or base with an acid or base of known concentration. $\text{NaOH} + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O}$ base acid salt water Indicator A substance used to show the end point of the titration. A solution of known concentration used in the titration is called a standard solution.