EXPERIMENT NO -3

OBJECT: - Determination of the concentration (strong) of a given NaOH solution by titrating it against a standard (M/20) solution of $C_2H_2O_4$ using phenolphthalein indicator.

REFERENCE

Parle A. ,"Pharmaceutical Chemistry 1 Laboratory Manual", CBS Publishers and Distributors Pvt. Ltd., Ed Ist, 2008, pp 59.

REQUIREMENTS: -

Chemical required: NaOH Solution, HCl solution, phenolphthalein indicator, $C_2H_2O_4$

Apparatus required: - burette, conical flask, and beaker.

PROCEDURE:-

(a) Take a burette and wash it with distilled water.

(b) Rinse and fill the solution HCl N/10 with the help of a conical funnel and set the initial burette reading as zero. Clamp it vertically to the burette stand.

(c) Rinse the pipette with water and then with the given NaOH solution.

(d) Pipette out 10ml of given NaOH (N/10) solution into a conical flask and add one or two drops of methyl orange.

(e) Titrate it against the HCl(N/10) solution taken in the burette till the color of the solution in the conical flask changes from a yellowish color to pink color

(f) Note down the final burette reading.

(g) Repeat the titration until concordant values are obtained.

OBSERVATION:

No of observation	Volume of NaOH solution in mL	Burette reading		Different	Constant	Indicator used
		Initial	Final			

Calculation:

$$N_1V_1=N_2V_2$$

RESULT:- The strength of a given unknown solution of strong NaOH is