Data and Results Entry Form-2

**EXP.2: STANDARDIZATION OF HYDROCHLORIC ACID (HCl) SOLUTION WITH STANDARD SODIUM HYDROXIDE (NaOH) SOLUTION.**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, Section: \_\_\_\_\_\_\_\_\_**

**EXPERIMENTAL DATA:**

*The strength of oxalic acid solution* =  (N) = ……………….(N)

**Table 1:** *Standardization of supplied NaOH solution against standard oxalic acid solution­ by acid-base titration.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***No. of reading*** | ***Vol. of NaOH ( in mL.)*** | ***Vol. of Oxalic acid (burette reading) (in mL)*** | | | ***Mean (in mL)*** |
| Initial | Final | Difference |
| 1 | 10 | 0.00 | 8.50 |  |  |
| 2 | 10 | 8.50 | 17.20 |  |  |
| 3 | 10 | 17.20 | 25.80 |  |  |

*The strength of supplied NaOH solution*:

VNaOH x NNaOH = VOxalic acid x NOxalic acid

**Table 2**: *Standardization of supplied HCl solution against standard NaOH­ solution by acid-base titration.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***No. of reading*** | ***Vol. of NaOH ( in mL)*** | ***Vol. of HCl (burette reading) (in mL)*** | | | ***Mean (in mL)*** |
| ***Initial*** | ***Final*** | ***Difference*** |
| 1 | 10 | 0.00 | 9.70 |  |  |
| 2 | 10 | 9.70 | 19.50 |  |
| 3 | 10 | 19.50 | 29.30 |  |

**CALCULATIONS:**

(A) *The strength of supplied dil. HCl solution*:

VNaOH x NNaOH = Vdil. HCl x Ndil. HCl to be determined

(B) *The strength of conc. HCl solution*:

Vdil. HCl x Ndil. HCl determined = Vconc. HCl taken x Nconc. HCl to be determined

**(1000 mL) (10 mL)**

**RESULTS:** (A) The *strength of supplied dil. HCl solution is ………….(N),*

(B) The *strength of conc. HCl solution is …………..(N).*