Data and Results Entry Form-6

**EXPERIMENT-6: DETERMINATION OF FERROUS ION (Fe2+) IN A SUPPLIED SOLUTION OF IRON SALT BY STANDARD POTASSIUM DICHROMATE (K2Cr2O7**)**SOLUTION.**

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

**EXPERIMENTAL DATA:**

*The strength of K2Cr2O7 solution* =  (N)

**Table:** *Determination of the amount of iron in Mohr’s salt solution using standard K2Cr2O7 solution.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***No. of reading*** | ***Vol. of Mohr’s salt solution ( in mL)*** | ***Vol. of K2Cr2O7***  ***(burette reading) (in mL)*** | | | ***Mean (in mL)* (V)** |
| ***Initial*** | ***Final*** | ***Difference*** |
| 1 | 10 | 0.00 | 5.00 |  |  |
| 2 | 10 | 5.00 | 9.90 |  |
| 3 | 10 | 9.90 | 15.00 |  |
| 4 | 10 | 15.00 | 20.10 |  |

**CALCULATIONS:** 1 mL 1N K2Cr2O7  ≡ 0.05584 gm of Fe2+

*Amount of iron in 10 mL of iron salt solution* = 0.05584 × V × S gm

=

*Amount of iron in 500 mLof iron salt solution* = 0.05584 × V × S × 50 gm

**=**

*Observe value of Fe2+ (in 500mL solution)* =

*Known value of Fe2+ (in 500mL solution)* =

**RESULTS:**

*The amount of ferrous ions in 500 mL of iron salt solution is ………………….gm*

**PERCENTAGE OF ERROR:**

 =