2nd Sept, 2019

Experiment 05:

Data Collection:

|  |  |  |  |
| --- | --- | --- | --- |
| Reading No. | Initial Burette  Reading / | Final Burette  Reading / | Difference / |
| 01 |  |  |  |
| 02 |  |  |  |
| 03 |  |  |  |

Calculation:

Average

of

of

solution has of

solution has of

Percentage Error

Experiment No. 5

Name of Experiment: Estimate of Copper Contained in a Supplied Solution by Iodometric Method

Theory:

In the iodometric method, a solution containing and starch, which absorbed the , is titrated with a standardized thiosulphate solution. This causes a colour change, that is used to identify the end point.

Apparatus Required:

Burette, Pipette, Conical Flask

Procedure:

1. of the copper salt solution was taken in a conical flask with a pipette.
2. A few drops of were added. A pale greenish precipitate appeared.
3. A few drops of was added to dissolve the precipitate.
4. Roughly of a solution was added.
5. The liberated iodine was titrated against the standard thiosulphate solution, until the brown colour changed to light yellow.
6. or of starch solution was added and the titration was continued until the blue colour began to fade.
7. A few drops of solution were added and the titration was continued until the blue colour was just discharged. The final burette reading was noted.
8. The steps were repeated until the results were deemed to be fairly accurate. The average of the best results was used in calculations.
9. The amount of in of the supplied solution was calculated using the following information:

of

of

Data:

|  |  |  |  |
| --- | --- | --- | --- |
| Reading No. | Initial Burette  Reading / | Final Burette  Reading / | Difference / |
| 01 |  |  |  |
| 02 |  |  |  |
| 03 |  |  |  |

Average

Calculations:

of

of

of

solution of

solution

of

Percentage Error

Results:

of the supplied solution contained of copper.

Discussion:

All the apparatus was thoroughly cleaned before usage. The results obtained are fairly accurate as the percentage error is small.