|  |
| --- |
| **CHEM-371 ENSTRUMENTAL ANALYSIS LABORATORY**  **Neutralization Titrations by Conductivity Measurement**    **LAB REPORT** |
| **Instructors: Assistant:** |
| **NAME & SURNAME: DATE:**  **ID: Section ( )** |
| **THE PURPOSE OF THE EXPERIMENT:**  **PROCEDURE:**  **DATA AND CALCULATIONS:**   1. Titration of strong acid (20 ml and 0.018 M HCl) by strong base (0.2 M NaOH).  |  |  | | --- | --- | | Added base ( mL) | Measured conductivity (µs) | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |  |  | | --- | |  |  1. Titration of weak acid ( 20 mL and 0,016 M HAc, Ka = 1x10-5) by strong base ( 0.2 M NaOH)  |  |  | | --- | --- | | Added base ( mL) | Measured conductivity (µs) | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |  1. **Titration of unknown acid mixture (0,018 M HCl, 0,016 M HAc and mixture total volume = 33 mL) by strong base (0,2 M NaOH)**  |  |  | | --- | --- | | Added base ( mL) | Measured conductivity (µs) | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |  1. **Titration curve by the 1th titration ( VNaOH versus conductivity)**   milimetrik kağıt ile ilgili görsel sonucu   1. **Titration curve by the 2nd titration (VNaOH versus conductivity)**   milimetrik kağıt ile ilgili görsel sonucu   1. **Titration curve by the 3rd titration (VNaOH versus conductivity)**   milimetrik kağıt ile ilgili görsel sonucu  **CALCULATIONS:**  **RESULTS AND DISCUSSION**   1. **For the 1st Experiment(**Titration of strong acid by strong base**)**   Equivalence point (theoretical): …………….  End point (Experimental): …………………..  % Error: …………………………….   1. **For the 2nd Experiment(**Titration of weak acid by strong base**)**   Equivalence point (theoretical): …………….  End point (Experimental): …………………..  % Error: …………………………….    **CONCLUSION:** |