

Lab-report #3

Date: 97-10-10 Time: 12.50-14.20

Acid-base titration:

Work to be done:

- To determine the volume of one solution that will react with a carefully measured volume of another solution.

Chemicals and apparatus:

- Burette
- Erlenmeyer flask
- HCl, 0,1M
- NaOH, unknown concentration.

Lab:

First: Fill a buret with an acid (HCl) and remove the air in the tip.

Then: Measure 25 cm³ NaOH in an Erlenmeyer flask. Add three drops BTB.

And: Begin to titrate by adding the acid.

Result: After 30 ml HCl the blue base changes color to green ⇒ the solution is neutral.

Reaction:
$$\frac{1}{1} = \frac{30 * 10^{-3} * 0.1}{25 * 10^{-3} * x}$$
$$x = 0.12$$

Conclusion: The concentration of the NaOH was 0.12M.