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Standardization of NaOH Solution Procedure

1. Place about 120 mg of oxalic acid dehydrate in 10 ml flask. Record mass. Add 5ml distilled water and shake. Fill with water up to mark on flask. Calculate molarity.
2. Obtain 25 ml of .1M NaOH
3. Obtain 2mL microburet delivery pipet and rinse with sodium hydroxide, then fill with sodium hydroxide and note the level.
4. Move exactly 100 uL of the oxalic acid into a 10 ml Erlenmeyer flask. Add 2 ml of distilled water, and then add 1 small drop of phenolphthalein indicator.
5. Dropwise, add sodium hydroxide from a buret to the oxalic acid in the flask. Swirl as each drop is added, wait till the color changes for at least 30 seconds.
6. Note final buret level on the data sheet, calculate NaOH concentration.
7. Repeat the process using volumes of 110 and 120 uL of oxalic acid solution.
8. Place 1.2g of oxalic acid hydrate in a 100mL volumetric flask. Add about 50 mL of distilled water and shake the flask. Fill to the mark and calculate molarity.
9. Obtain 400mL of .1M NaOH
10. Obtain a a 50 mL buret and rinse twice with NaOH, refill with NaOh and note the level.
11. Pipet 20 ml oxalic acid into a 125ml Erlenmeyer flask. Add 20 ml of distilled water, add 2-3 drops of phenolphthalein solution.
12. Add NaOH from the buret until the indicator changes color.
13. Note final buret level, calculate NaOH concentration.
14. Repeat with 18 and 19 ml proportions o oxalic acid until your results are precise to 1%.