

Titration Procedure

1. Designate one buret as the acid buret and one as the base buret.
2. Rinse Burets
 - a) first with H₂O
 - b) second with several mL of acid in the acid buret and several mL of base in base buret
3. Fill each buret. Make sure you fill the acid buret with the acid and the base buret with the base.
4. Drain some acid and base into a beaker to fill each of the buret tips. (Check for air bubbles in the tips)
5. Take the initial reading of the acid and base burets and record in the data table.
6. Drain approximately 10 mL of the acid into your titrating flask/beaker. Remove all drops from the buret tip by touching it to the side of the flask.
7. Add the indicator to the acid in your titrating flask.
8. Transfer the titrating flask to the base buret and begin titration drop wise .
9. Stir or shake the flask continuously; occasionally washing the sides of the flask with a small amount of distilled water from a squeeze wash bottle.
10. Titrate until the “end - point” is reached----the point at which a single drop of base will cause the indicator color either to change or vanish.
11. If you overrun the “end - point”, add some additional acid from the acid buret to regain the original color. Carefully titrate again until a single drop of base causes the indicator color either to change or vanish.
12. Record the final reading of both your acid and base burets.
13. From the known concentration and volumes, calculate the concentration of the unknown (acid in this case) and record in your data table.

$$C_A V_A = C_B V_B \qquad C_A = \frac{C_B V_B}{V_A}$$

14. Run at least four (4) good trials to obtain an average molarity for the unknown.