

Experiment No.(4) Calculating the acid value of lipids :

- *The acid value* is defined as the weight of KOH in mg needed to neutralize the organic acids present in 1g of fat.

Materials:

1. Oil 12%.
2. Solvent for oil (CCl₄ or Chloroform).
3. Phenolphthalein 10 mg/L in alcohol.
4. Potassium hydroxide KOH 0.1 N.

Procedure:

1. Add 2 ml of 12% oil in conical flask and add 2 drops of phenolphthalein indicator.
2. Titrate the mixture of oil and indicator with KOH until the light pink color appears (26-30 minutes).

Note:

0.1N KOH contains 5.6 g/L or 5.6 mg/mL potassium hydroxide

No. of milligrams of KOH = 5.6 * mL (KOH)

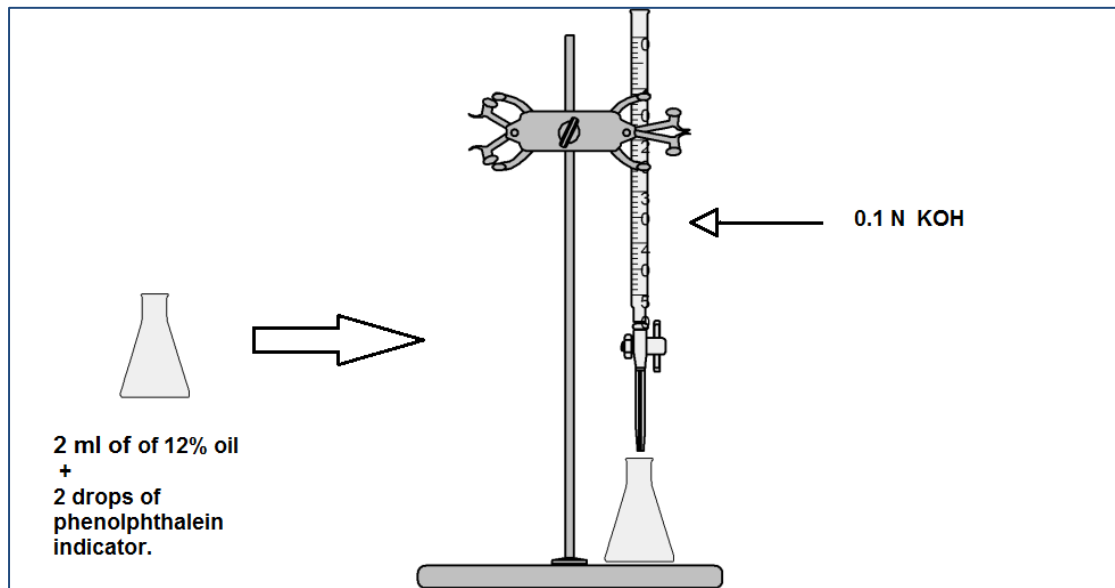


Figure 4. Calculating the acid value of lipids.