

Experiment No.(6) Biuret's test:

- Biuret test is Specific for Proteins.
- The biuret reagent (copper sulfate in a strong base) reacts with peptide bonds in proteins to form a violet complex known as the "Biuret complex".
- *Two peptide bonds* are at least required for the formation of this complex; *this is why amino acids give negative results* with Biuret test.

Materials:

1. Protein solution (albumin) .
2. Biuret reagent (1 mL of 10% sodium hydroxide solution and 2-3 drops of 1% copper sulfate solution) .

Procedure:

1. Add (1 mL) of protein solution into a test tube.
2. Add 1 mL of 10% sodium hydroxide solution.
3. Add 2-3 drops of 1% copper sulfate solution.
4. Mix well; a **violet color is obtained with albumin**, while no change in the original blue color of the reagent when reacting with amino acids.

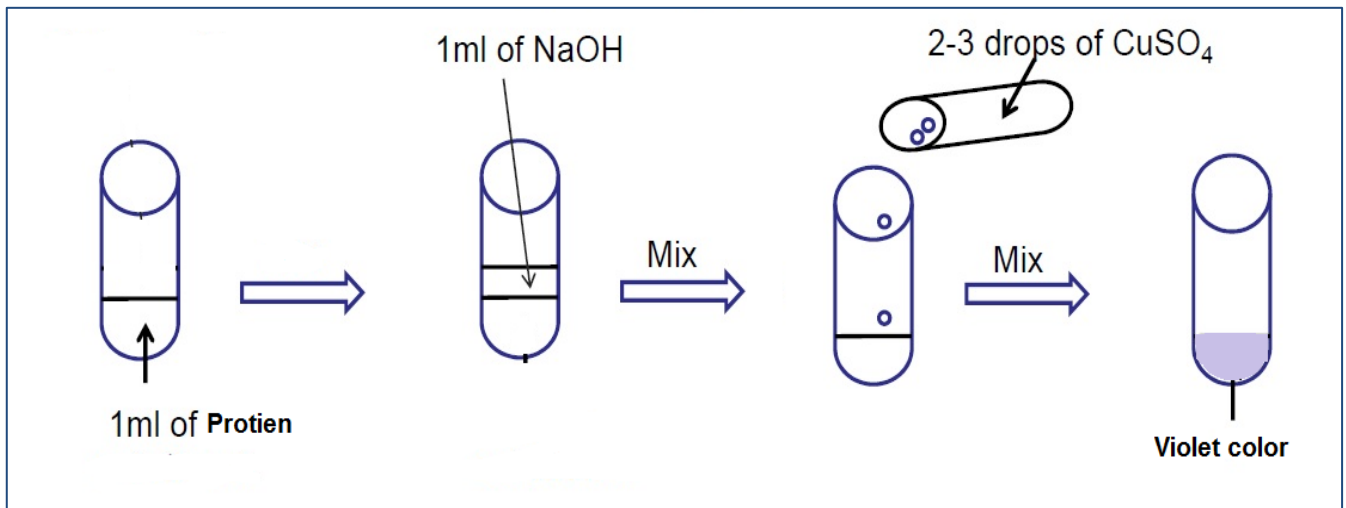


Figure 11. Procedure to Biuret's test.