Paper Chromatography

Paper Chromatography is designed to develop a mixture in the mobile phase and to separate it into individual components, using a sheet of filter paper. This method is applicable to Identification tests and Purity tests.

Procedure Unless otherwise specified, proceed as directed below.

Draw a line with a pencil across a sheet of the filter paper for chromatography specified in the individual monograph at a distance about 40 mm from one end of the filter paper. Spot the specified quantity of the test solution and the control solution on the line with a micropipet or capillary tube, and air-dry. The distance between the centers of the spots of the test solution and the control solution must be about 25 mm. Suspend the paper vertically from the stopper with a thread or wire in a developing container of about 500 mm in height, which contains the specified developing solvent and the inside of which is already saturated with the vapor of the solvent, taking care to avoid contact with the walls. Immerse the paper 10 mm from the bottom of it into the developing solvent, seal the container, and allow to stand. When the solvent front has ascended from the sample spot to the specified position, remove the paper from the container, and air-dry. Observe and compare the location, color, etc. of each spot obtained from the test solution and the control solution by the specified method.