

Determination of bilirubin in urine

The determination of bilirubin in urine with paper chromatography is based on the **Azo coupling reaction**, which is provided by the conjugated bilirubin with a stable diazonium salt (e.g. 2,6-dichloride benzenediazonium tetrafluoroborate). The result is a pink/red color. with the simultaneous presence of a high urobilinogen concentration the color changes to orange. In this case is recommended to evaluate the coloration after two minutes since the indication area was dipped. Lower or false negative results can be caused by a high concentration of ascorbic acid. Urine samples ought to be protected from direct sun rays, because they can provoke bilirubin's oxidation and consequently a false lower or negative finding.

In the urine is analyzed only the conjugated bilirubin as the unconjugated bilirubin cannot be expelled in it.