



Spectrophotometric determination of Furosimide in pharmaceutical formulations by charge transfer complex method

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Abstract:The simple and sensitive spectrophotometric method for the determination of furosimide reacts with 1ml of DDQ (2, 3 -dichloro -5, 6-dicylano-1, 4-benzoquinone) by charge -transfer complex method. In this method the drug furosimide as n-electron donors with acceptor 2, 3 dichloro-5, 6- dicyano 1,4- benzoquinone (DDQ) to form reddish pink color charge-transfer complexes. This reaction is instantaneous and quantitative. The drug maximum absorbance at 450 nm and Beer's law limit was obeyed at 20-160 µg/ml. The optical characteristics of the proposed method such as molar absorptivity, sandell's sensitivity, slope and intercept were 2.0847 L.mole⁻¹cm⁻¹ , 0.00208 µg.cm⁻²,0.0059 and 0.0061 for furosimiderespectively.The developed method was found to be simple, specific, robust, accurate and precise for the determination of furosimide.

Key words:furosimide, chloroform, methanol, DDQ and UV-Spectrophotometric method.

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