Indirect Spectrophotometric Methods for the Determination of Tadalafil

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***Abstract*— Two spectrophotometric methods were developed for the determination Tadalafil in pharmaceutical preparations. The methods are based on the oxidation reaction with known excess amount of Ce(IV) and estimation of the unreacted amount using Indigo carmine dye (Method A) and in Methylene blue dye (Method B). the factors affecting the reaction conditions were studied and the absorbance of absorbance of the oxidation reaction products were monitored at 610 and 600 nm for methods A and B respectively. Beer's law is obeyed in the concentration ranges 11–50 and 10–55 ppm, the limits of detection and quantification are reported. The proposed method was applied to the determination of the drug in pharmaceutical formulations and the results demonstrated that the method is equally accurate, precise and reproducible as the official methods. The validity of method was established by recovery studies with satisfactory results.**

Key words: Tadalafil, Spectrophotometry, Ce(IV), pharmaceutical

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