

## Spectrophotometric Determination of Doxazosin Mesylate in Bulk and in Tablet Formulations via Schiff's Base Reaction

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A simple, sensitive and accurate spectrophotometric method for the determination of Doxazosin mesylate (DOX) in bulk and tablet formulations was developed. Chromogenic reagent 4-Dimethyl amino benzaldehyde (4DMAB) reacts with primary amine of DOX by Schiff's base reaction forming a light yellow color product (4DMAB-DOX derivative) in methanol at pH-5, which can be measured at  $\lambda_{\max}$  399 nm. Under the optimum conditions Beer's law was obeyed in the concentration range of 6.25-100  $\mu\text{gml}^{-1}$ , with the coefficient of determination found to be  $R^2=0.998$  and recovery 100.04%. The accuracy of the method was satisfactory; the RSD values did not exceed more than 2%. Interference of other ingredients and additives were not observed. The proposed method was successfully applied for the routine analysis of DOX in bulk and in tablet formulations.

### Keywords.

Doxazosin mesylate; Spectrophotometry; 4-(Dimethylamino) benzaldehyde; derivatization

### Biography.

Mr Zahid Ali Zounr has completed his MSc degree in [Forensic Medicine](#) at University of Medical & Health Sciences Jamshoro, Pakistan. Department of Forensic Medicine Jamshoro Liaquat and [Medical Technologist](#). He has research interest in [Pharmaceutical Analysis](#).

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