

UV Spectrophotometry and Validation of Diphenhydramine HCl.

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Abstract: Simple, accurate, cost effective and reproducible spectrophotometric method has been developed for the estimation of Diphenhydramine Hydrochloride in soft gelatin capsule dosage form. For UV spectrophotometric method, maximum absorption was found at λ_{max} 258nm. The percentage recovery of Diphenhydramine Hydrochloride ranged from (98.97 ± 0.2989) in capsule dosage form. The developed method was validated as per ICH guidelines with respect to linearity, accuracy (recovery), precision and specificity. Beers law was obeyed in the concentration range of 10-100 μ g/ml having line equation $y = 0.016x + 0.018$ with correlation coefficient of 0.9934. By treating the data statistically and by recovery study, results of study were validated.

Keywords: Spectroscopy, Validation, Diphenhydramine Hydrochloride, etc.

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