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# Hydrotropy – A Solubility Enhancement Tool for the Estimation of Cefdinir in its Suspension Dosage Form by UV-Spectroscopy

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**Abstract :** Present work describes development and validation of a simple, novel, accurate, precise, economical and reproducible spectrophotometric method in ultraviolet region for the assay of Cefdinir in suspension formulation using sodium bicarbonate and distilled water (1:9) as hydrotropic solvent. Cefdinir exhibits absorption maxima at 287nm in hydrotropic solvent. Beer's law was found to be obeyed in the concentration range of 2.5-17.5 $\mu$ g/ml. The developed method was validated as per the ICH guidelines. The calibration plot was linear over the concentration range investigated (2.5–17.5 $\mu$ g/ml) for Cefdinir in hydrotropic solvent with correlation coefficient,  $r^2$ , 0.99903. The method is accurate, precise and economical. In this proposed method, there was no interference from common pharmaceutical excipients. The proposed method is therefore successfully used for the routine analysis of the Cefdinir in its suspension dosage form.

**Keywords :** Cefdinir, Hydrotropy, UV-Spectroscopic method, Validation, ICH.

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