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Analytical Method Development and Validation of Ketoconazole by UV Spectroscopy

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Abstract: A UV spectroscopic method which is simple, accurate and rapid is developed for the determination of ketoconazole in pharmaceutical formulations as active substance in tablets. The absorption maxima of ketoconazole solutions in ethanol are recorded at 257 nm. The linearity for ketoconazole in ethanol with correlation coefficient values higher than 0.999 is found. The intra– and inter– day assay is within 2% relative standard deviation. The obtained results for tablets are in good agreement with their respective product, label claims. The developed method can be successfully applied for the purpose routine analysis of ketoconazole in pharmaceutical formulations. Ketoconazole is a drug used in the management and treatment of fungal infections. It is in the imidazole antifungal class of medications.

Keywords: ketoconazal, UV Spectroscopy, Multicomponent Analysis



