

Spectrofluorimetric Study of Fenopfen and Its Complexes with Cyclodextrins

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Formation of inclusion complexes between fenopfen and α - and β -cyclodextrins in acidic and basic media was studied applying fluorescence spectrometry. The influence of experimental conditions, including concentration of cyclodextrins and pH, was investigated in detail. From the changes in fluorescence spectra it was concluded that both α - and β -cyclodextrins form 1:1 inclusion complexes with fenopfen. The corresponding formation constants were calculated. β -cyclodextrin was found to exhibit stronger affinity towards uncharged fenopfen and enhanced its fluorescence emission. Determination limit of fenopfen in aqueous solutions in the presence of β -cyclodextrin was also improved.