



Solubility of Some Basic Drugs in Dioxane + Water Mixtures at 298.2 K

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SUMMARY. Solubility of four basic drugs i.e. atenolol, clonazepam, diazepam and lamotrigine in dioxane + water mixtures at 298.2 K were determined. The solubilities of atenolol, clonazepam, diazepam, and lamotrigine were increased with addition of dioxane, reached the maximum value for three drugs, and then decreased with further increase in dioxane, but the maximum solubility of diazepam was in neat dioxane. The solubility data was predicted using previously proposed model which is a combination of the Jouyban-Acree model and Abraham solvation parameters with 31.7 % prediction error.

KEY WORDS: Dioxane, Jouyban-Acree model, Prediction, Solubility, Water.

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