

Studies of Viscosity and Thermodynamic Parameters of Substituted Benzimidazolyl Derivatives in Binary Solvent Mixture

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Abstract: *Viscosity experimental data for binary solvent mixtures including substituted benzimidazolyl derivatives have been examined. The investigation was conducted for temperature variation as well as variations in solute concentration in binary solvents. Similar to other transport properties, viscosity measurement offers insight into the interactions between solutes and solvents. In a similar manner, thermodynamic parameters such as free energy change (ΔG), enthalpy change (ΔH), and entropy change (ΔS) have been assessed using relative viscosity and density at various temperatures. Viscosity and thermodynamic parameters have been determined to understand molecular interaction.*

Keywords: Thermodynamic parameters, molecules interaction, viscosity, Enthalpy change, Entropy change