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The Study of Secondary Forces of Myo-Inositol In 10% Ethanol-Water by Volumetric and Viscometric Methods at Different Temperatures

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Abstract: Densities (ρ) and viscosities (η) of myo-inositol have been measured in 10% ethanol-water solution at different temperatures. From the density, the apparent molar volume (Φ v) and partial molar volume (Φ v) were calculated. The viscosity coefficient B and A were calculated from the viscosity data using Jones-Dole equation at all the studied temperatures. From viscosity coefficient constant B and partial molar volume, association number (B/Φ_v^o) of solute was calculated. From derived parameters, results were attributed with solute-solute and solute-solvent interactions.

Keywords: Apparent molar volume, Partial molar volume, Jone-Dole equation, myo-inositol, association number

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