

INTERMOLECULAR INTERACTION IN BINARY LIQUID MIXTURE BY ULTRASONIC MEASUREMENTS

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ABSTRACT

Ultrasonic velocity (V), density (ρ) and viscosity (η) measurements for binary liquid mixture of thiophene and 1-propanol at 305.15, 310.15 and 315.15K are determined at atmospheric pressure some thermoacoustical parameters like isentropic compressibility (β_s), molar volume (V_m), specific acoustic impedance (Z), intermolecular free length (L_f) and their excess values have been calculated from the experimental data. The results have been used qualitatively to explain the molecular interaction between the components of these binary liquid mixtures.

KEYWORDS : Ultrasonic Velocity, Density, Viscosity, Acoustic Parameters, Thiophene, 1-propanol