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# Thermo-acoustic analysis of binary mixture of methylparaben in methanol at 30°C

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Density ( $\rho$ ), viscosity ( $\eta$ ), and ultrasonic velocity ( $U$ ) measurements have been carried out for the binary mixture of methylparaben with methanol as a function of weight fraction of methylparaben. All the measurements carried out at 30°C. Various derived thermo-acoustic parameters viz., acoustic impedance ( $Z$ ), adiabatic compressibility ( $\beta$ ), molecular free length ( $L_f$ ) and molar volume ( $V_m$ ) were evaluated from the experimental data. Derived parameters have been interpreted in terms of molecular interaction among the molecular species of the binary mixture.

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## Topics

[Acoustic parameters](#), [Acoustic modeling, simulation and analysis](#), [Ultrasonic phenomena](#), [Acoustic phenomena](#), [Thermodynamic properties](#), [Organic compounds](#)

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