


RESEARCH ARTICLE | MAY 08 2018

# Dielectric and conformational studies of hydrogen bonded 2-ethoxyethanol and ethyl methyl ketone system

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*AIP Conf. Proc.* 1953, 050038 (2018)

<https://doi.org/10.1063/1.5032693>

The Dielectric constant, density and refractive index of binary mixture of 2-ethoxy ethanol (2-EE) with ethyl methyl ketone (EMK) including those of the pure liquids were measured for 11 concentrations at 25°C temperature. The experimental data is used to calculate the Excess molar volume, Excess dielectric constant, Kirkwood correlation factor and Bruggemann factor. The excess parameters results were fitted to the Redlich-Kister type polynomial equation to derive its fitting coefficient. The Kirkwood correlation factor of the mixture has been discussed to yield information about solute solvent interaction. The Bruggeman plot shows a deviation from linearity. The FT-IR spectra of pure and their binary mixtures are also studied.

Topics

[Dielectric properties](#), [Optical properties](#), [Chemical elements](#)

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