

Dielectric Behaviour of Some Pure Normal Alcohols and their Binary Mixtures

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The pure 1-alkanols C_4 to C_{12} and seven of their short/long chain binary equimolar mixtures are investigated by static and dynamic dielectric measurements up to 36 GHz at 20, 30 and 40 °C. The apparent dipole moment and the relaxation parameters from a three Debye term analysis of the spectra are discussed. The mixtures are found to behave like a one component alcohol of mean chain length. An odd-even effect is revealed by comparison of mixtures containing C_{11} with those containing C_{12} as long chain mixture component.

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