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Excess Properties of Alcohol - Water Systems at 298.15 K

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<u>Abstract:</u> Dielectric constants \varepsilon, viscosities η, refractive indices n and densities d have been measured over the entire mole fraction range for the water - methyl, ethyl, n-propyl alcohol binary systems at 298.15 K. From the experimental data excess dielectric constants \varepsilon<sup>E</sup>, excess viscosities  $η^E$  and Kirkwood correlation factors  $g_k$  have been calculated and studied. Their behaviour suggests the existence of intermolecular interactions and plotted curves show that excess dielectric constant and  $g_k$  values decrease with the increasing of carbon atom number, while excess viscosity increases.



**Key Words:** Dielectric constant, viscosity, excess properties, Kirkwood correlation factor

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