

The Viscous Properties of Diols.

II. 1,2- and 1,5-Pentanediol in Water and 1-Pentanol Solutions

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Viscosity measurements were performed for 1,2-pentanediol, $\text{CH}_3(\text{CH}_2)_2\text{CH}(\text{OH})\text{CH}_2(\text{OH})$, and 1,5-pentanediol, $\text{HO}(\text{CH}_2)_5\text{OH}$, dissolved in water and 1-pentanol, in the whole range of concentration (x). The viscosity excess (η^{E}) of the solutions studied is negative with the exception of concentrated mixtures of the diols with water, where strong anomalies in the $\eta^{\text{E}}(x)$ dependence are observed.

Key words: Pentanediol; Water; Pentanol; Solutions; Viscosity Excess; Activation Energy; Supramolecular Ordering.