Viscosity measurements were performed for solutions of $\text{CH}_3\text{CH}_2\text{CH(OH)}\text{CH}_2\text{(OH)}$ and $\text{HO(CH}_2\text{)}_4\text{OH}$, in water and 1-pentanol, at 10 – 50 $^\circ$C. The activation energy and viscosity excess were derived from the data. A peculiarity in the concentration dependence of the viscosity excess on was observed for both diols dissolved in water.

**Key words:** Shear Viscosity; Butanediol; Water; Pentanol; Solutions; Viscosity Excess; Activation Energy.