Dielectric Relaxation of Diethylsulfoxide

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The dielectric loss spectrum of the title substance has been measured in its pure liquid state between 10 MHz and 72 GHz at 20 °C. In comparison to the Debye function, it is slightly broadened towards the high frequency side. The maximum corresponds to a relaxation time of 51 ps. In view of the molecular size and viscosity, this is relatively long and thus indicative of associative intermolecular effects as in the case of the homologous compound dimethylsulfoxide.

Key words: Association; Dielectric Relaxation; Liquids.