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Specifics of the physicochemical properties of tetramethylurea

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Abstract

The rotational and translational mobility of tetramethylurea molecules over the temperature range 15-60°C was studied using the NMR relaxation and proton spin-echo methods. The activation energies for these motions were calculated. The density, viscosity, isothermal compressibility, and cubic expansivity were determined. A thermogravimetric analysis of the substance was performed. The physicochemical properties of tetramethylurea were compared to those of urea, its other methyl-substituted derivatives, and dimethylformamide. Copyright © 2005 by Pleiades Publishing, Inc.
