

Dielectric Studies of 4-*n*-Hexyloxy-4'-Cyanobiphenyl (6OCB) at Elevated Pressure*

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The principal dielectric permittivity components in the nematic phase of 4-*n*-hexyloxy-4'-cyanobiphenyl (6OCB) were measured as functions of temperature at ambient pressure and as functions of pressure up to 100 MPa at several constant temperatures. The dielectric anisotropy is analyzed in the frame of the Maier-Meier equations. The pressure dependence of the order parameter is deduced. Preliminary results for the activation volume and activation enthalpy from the pressure and temperature dependences of the longitudinal relaxation times are obtained.

Key words: Nematic Liquid Crystal; 6OCB; Dielectric Anisotropy; Order Parameter; High Pressure.