Differential Scanning Calorimetry (DSC) under High Pressure on 10-TPEB

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The phase behaviour of a new liquid crystal, belonging to the series 1-[4-*n*-alkyl-biphenyl]-2-[4-isothio-cyanato-phenyl]ethane (*n*TPEB), $n = 10$, has been investigated with differential scanning calorimetry at ambient and high pressure. The phase behaviour depends on the thermal treatment. Phase transition temperatures have been determined as a function of pressure up to 300 MPa. No pressure-induced or pressure-limited phases are observed in this pressure range. Enthalpy- and volume-changes accompanying the phase transitions have been calculated using the Clausius-Clapeyron equation.