

# Dynamic Solvent Effects in the Degenerate Isomerization of a Hexafluoroacetone Anil Studied by High-Pressure $^{19}\text{F}$ NMR

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The rate of the degenerate isomerization of *N*-hexafluoroisopropylidene-*N',N'*-dimethyl-*p*-phenylenediamine was measured by high-pressure  $^{19}\text{F}$  NMR spectroscopy in a viscous hydrocarbon, 2,4-dicyclohexyl-2-methylpentane. Pressure-induced retardations that cannot be rationalized within the framework of the transition state theory (TST) were observed, and it was concluded that the reaction was cast into the TST-invalid nonequilibrium conditions by high pressure.

**Key words:** High-pressure  $^{19}\text{F}$  NMR; High-pressure Kinetics; Hexafluoroacetone Anil; Degenerate Isomerization; Dynamic Solvent Effect.