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Conformational Analysis of 4-Methyl-2-trimethylsil-xy-1,3,2- dioxaphosphinane

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Abstract

Conformational analysis of 4-methyl-2-trimethylsiloxy-1,3,2- dioxaphosphinane was performed by the dipole moment method and quantum-chemical calculations. The 1,3,2-dioxaphosphinane heteroring was found to adopt a chair conformation with equatorial orientation of the 4-methyl group and axial orientation of the irregular trimethylsiloxy substituent. The conformational equilibrium involves non-eclipsed gauche and trans conformers (the latter prevailing) interconvertible through rotation about the exocyclic P-O bond. © Pleiades Publishing, Ltd., 2012.

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