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Polarity and conformational analysis of secondary phosphine selenides

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Abstract

The polarities of bis(2-phenylethyl) and bis(2-phenylpropyl) phosphine selenides were determined and conformational analysis of these phosphine selenides was carried out by the method of dipole moments, IR spectroscopy, and quantum chemical calculations. They exist as an equilibrium of several conformers, and the preferred conformers have gauche orientation of the P = Se and Csp3 - Csp3 bonds. © 2013 Copyright Taylor and Francis Group, LLC.

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Keywords

conformational analysis, dipole moments, Phosphine selenides, quantum chemical calculations