

Phosphoryl- and thiophosphoryl-functionalized enamino ketones. Polarity and conformational analysis

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Abstract

© 2015 Pleiades Publishing, Ltd. The polarity and conformational behavior of some phosphorus-containing enamino ketones have been determined by the dipole moment method, IR spectroscopy, and quantum chemical calculations. 3-[-[(Diphenylphosphoryl)methyl]phenylamino]-1-phenylprop-2-en-1-one has been found to exist as the single Z isomer. 3-[2-(Diphenylphosphoryl)phenylamino]-1-phenylprop-2-en-1-one and 3-[2-(diphenylphosphorothioyl) phenylamino]-1-phenylprop-2-en-1-one exist in equilibrium between the Z and E isomers, the latter prevailing.

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