

Regio- and Stereoselective Addition of Imides to Ethyl 3-Phenyl-2-propynoate in the Presence of Triphenylphosphine. Single Crystal X-Ray Structure of Ethyl (Z)-2-(1,3-Dioxo-1,3,3a,4,7,7a-hexahydro-2H-isoindol-2-yl)-3-phenyl-2-propenoate

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A one-pot synthesis of sterically congested *N*-vinyl imides in fairly high yields by the reaction of ethyl 3-phenyl-2-propynoate, imides and triphenylphosphine is reported. The structures of these compounds were confirmed by IR, ¹H, and ¹³C NMR spectroscopy, and by a single crystal X-ray structure determination. The structural analysis of the products indicated that the reaction is regio- and stereoselective.

Key words: Phosphorus Ylide, Ethyl 3-Phenyl-2-propynoate, Vinyltriphenylphosphonium Salts, Crystal Structure, *N*-Vinyl Imide