

## عنوان مقاله:

Preparation of sterically congested 1,3,4-oxadiazole derivatives from Nisocyaniminotriphenylphosphorane, aromatic acids, cyclopentanone and primary amines

## محل انتشار:

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## خلاصه مقاله:

Reactions of N-isocyaniminotriphenylphosphorane with cyclopentanone have been studied in the presence of aromatic carboxylic acids and primary amines. The reactions were proceeded smoothly at room temperature under neutral conditions in order to afford sterically congested 1,3,4-oxadiazole derivatives by an intramolecular Aza-Wittig cyclization in CH<sub>2</sub>Cl<sub>2</sub> in excellent yields. The structures of the products were deduced from their IR, Mass, <sup>1</sup>H NMR, and <sup>13</sup>C NMR spectra. The reaction proceeds smoothly and cleanly under mild conditions and no side reactions were observed. The method offers a mild, simple, and efficient route for the preparation of fully substituted 1,3,4-oxadiazoles from cyclopentanone, primary amines, Nisocyaniminotriphenylphosphorane and aromatic carboxylic acids. Easy work-up, high yields and fairly mild reaction conditions make it a useful procedure in comparison to the modern synthetic methodologies.

## کلمات کلیدی:

N-isocyaniminotriphenylphosphorane; cyclopentanone; aromatic carboxylic acids; primary amines; 1,3,4-oxadiazole

## لینک ثابت مقاله در پایگاه سیویلیکا:

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