

An Effective Nitrilimine Cycloaddition for the Synthesis of 1,3,5-Trisubstituted 1,2,4-Triazoles from Oximes with Hydrazonoyl Hydrochlorides

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Abstract

An effective 1,3-dipolar cycloaddition for the synthesis of 1,3,5-trisubstituted 1,2,4-triazole derivatives was developed by reacting oximes with hydrazonoyl hydrochlorides using triethylamine as a base. The desired 1,3,5-trisubstituted 1,2,4-triazoles were obtained in good yields and the reaction was applicable to aliphatic, cyclic aliphatic, aromatic and heterocyclic oxime substrates.

Key words

1,2,4-triazoles - hydrazonoyl hydrochloride - nitrilimine - 1,3-dipolar cycloaddition - oximes