Triphenylphosphine-promoted C-Vinylation of 4-Hydroxyquinolines

Bita Mohtat, Semiramis Nahavandiana, Zohre Najafi Azara, Hoorieh Djahaniani, and Zinatossadat Hossainic

a Department of Chemistry, Karaj Branch, Islamic Azad University, Karaj, I. R. Iran
b Department of Chemistry, East Tehran Branch, Islamic Azad University, Qiamdasht, Tehran, I. R. Iran
c Department of Chemistry, Qaemshahr Branch, Islamic Azad University, Mazandaran, I. R. Iran

Reprint requests to Dr. Bita Mohtat. Fax: +98 21 22 92 16 10. E-mail: b.mohtat@jooyan.org

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The reaction of dialkyl acetylenedicarboxylates with 4-hydroxyquinoline in the presence of triphenylphosphine (20 mol-%) produces dialkyl (Z)- and (E)-2-(4-hydroxyquinolin-3-yl)-2-butenedioates in good yields. When the reaction was performed with 2-methyl-4-hydroxyquinoline, similar (E)- and (Z)-isomers were obtained.

Key words: Acetylenic Ester, C-Vinylation, 4-Hydroxyquinoline, 2-Methyl-4-hydroxyquinoline, Triphenylphosphine