

Heteropolyacid-catalyzed chemoselective oxidation of benzil derivatives to carboxylic esters by dioxygen.

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Abstract

Benzil derivs. are catalytically oxidized by the heteropolyacids of general formula $H_{3+n}PMo_{12-n}V_nO_{40} \cdot xH_2O$ (HPA-n, $n = 1-4$, $x = 30-36$) with dioxygen under mild conditions. High yields and excellent selectivity of mono- and dicarboxylic esters were obtained in the presence of primary alcs. or diols.