

Synthesis and Acylation for Enaminoketohydrazides Derived from 2,2-Dialkyl-2,3-dihydrobenzo[*f*]isoquinolines

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Received September 13, 2018; revised February 10, 2019; accepted February 20, 2019

Abstract—The reaction of 6,6-dialkyl-5,6-dihydrobenzo[*f*]pyrrolo[2,1-*a*]isoquinoline-8,9-diones with hydrazine is used to prepare enaminoketohydrazides of the 2,2-dialkyl-2,3-dihydrobenzo[*f*]isoquinoline series, which are polyfunctional reagents. The acylation of the synthesized hydrazides with two equivalents of acylating reagents, such as benzoyl chloride, phenyl isocyanate, phenyl isothiocyanate, and allyl isothiocyanate, involves exclusively the terminal NH₂ group of the hydrazide fragment. The acylation with two equivalents of acetyl chloride leads to the substitution of both hydrogen atoms at the terminal NH₂ group; the structure of the resulting *N,N*-diacyl derivative is proved by X-ray diffraction analysis.

Keywords: 2,2-dialkyl-2,3-dihydrobenzo[*f*]isoquinoline enaminoketohydrazides, acylation, terminal NH₂ acylation, benzoyl chloride, isocyanates, isothiocyanates, *N,N*-diacyl derivative.

DOI: 10.1134/S1070428019050087