Reformatsky Reaction of Methyl 1-Bromocycloalkane-1-carboxylates with Phenyl- and Benzoylhydrazones Derived from Aromatic Aldehydes

V. V. Shchepin, N. F. Kirillov, and V. S. Melekhin

Perm State University, ul. Bukireva 15, Perm, 614990 Russia

Received September 21, 2005

Abstract—Reformatsky reagents obtained from methyl 1-bromocyclohexane- and 1-bromocyclopentane-1-carboxylates reacted with aromatic aldehyde phenyl- and benzoylhydrazones to give 3-aryl-2-phenylamino-2-azaspiro[3.5]nonan-, 3-aryl-2-phenylamino-2-azaspiro[3.4]octan-, 3-aryl-2-benzoylamino-2-azaspiro[3.5]nonan-, and 3-aryl-2-benzoylamino-2-azaspiro[3.4]octan-1-ones, respectively. The reaction of furan-2-carbal-dehyde phenylhydrazone with methyl 1-bromocyclohexane-1-carboxylate and zinc led to the formation of 4-(2-furyl)-2-phenyl-2,3-diazaspiro[4.5]decan-1-one.

DOI: 10.1134/S1070428006100150